



Sudesh K. Gambhir
 Vice President, Technical Services
 P.O. Box 968, Mail Drop PE04
 Richland, WA 99352-0968
 Ph. 509-377-8313 F. 509-377-2354
 sgambhir@energy-northwest.com

September 18, 2007
 GO2-07-141

10 CFR 50.55a

U. S. Nuclear Regulatory Commission
 ATTN: Document Control Desk
 Washington, D.C. 20555-0001



COLUMBIA GENERATING STATION, DOCKET NO. 50-397
INSERVICE INSPECTION SUMMARY REPORT FOR REFUELING
OUTAGE R-18

Sudesh K. Gambhir
 Vice President, Technical Services
 P.O. Box 968, Mail Drop PE04
 Richland, WA 99352-0968
 Ph. 509-377-8313 F. 509-377-2354
 sgambhir@energy-northwest.com

Dear Sir or Madam:

The Columbia Generating Station Inservice Inspection Summary Report for the R-18 Maintenance and Refueling Outage is enclosed. This report is submitted in accordance with Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Article IWA-6240. Pursuant to ASME Code Section XI, Article IWA-6230, the NIS-1 Owner's Data Report for Inservice Inspection and NIS-2 Owner's Reports for repairs and replacements are included.

There are no regulatory commitments contained in this letter or its enclosure. If you have any questions or desire additional information regarding this matter, please contact Mr. G.V. Cullen at (509) 377-6105.

Respectfully,

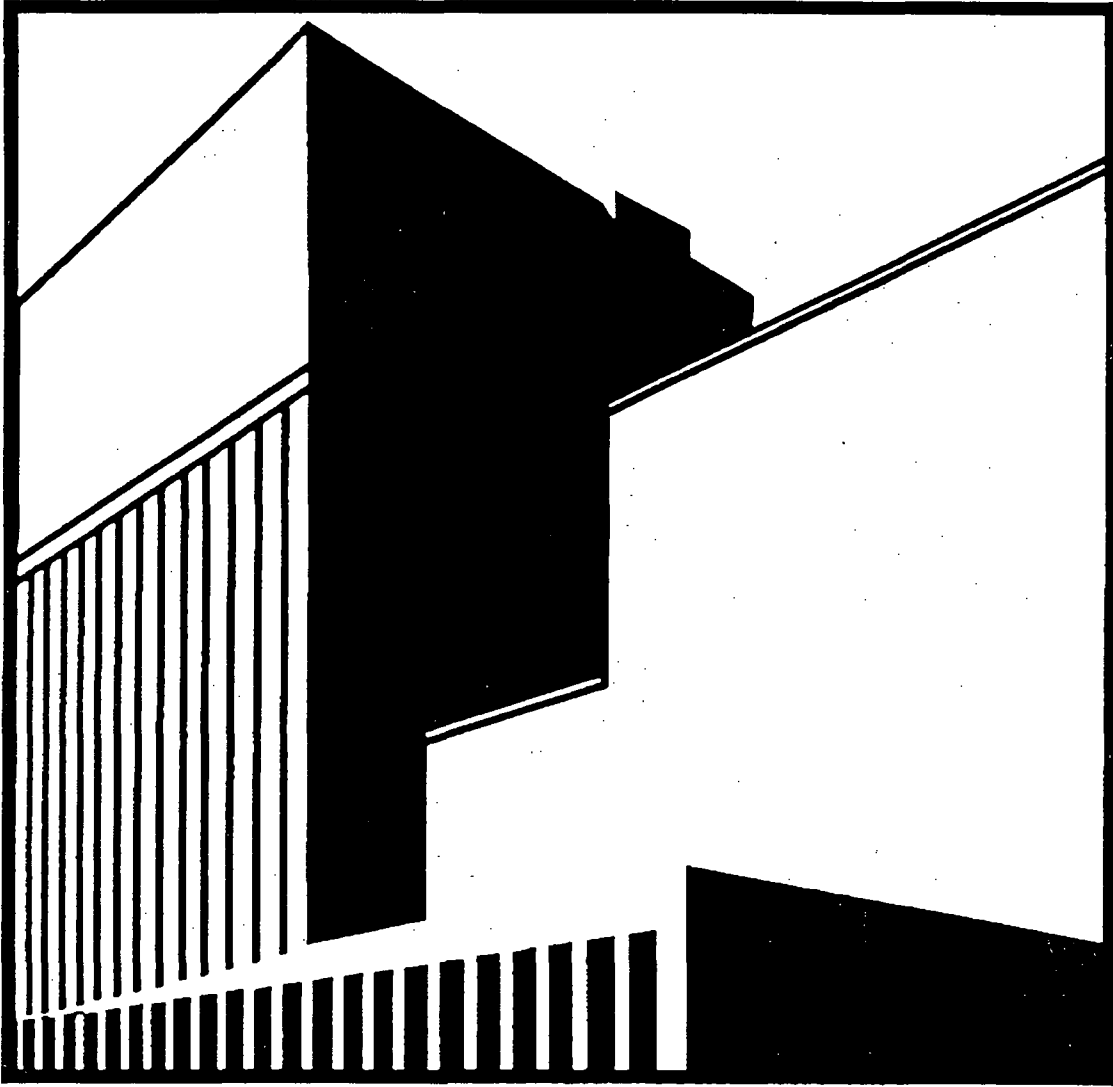
SK Gambhir
 Vice President, Technical Services
 Enclosure: Columbia Generating Station ISI Summary Report

cc: EE Collins, Jr. – NRC RIV
 CF Lyon – NRC NRR
 NRC Senior Resident Inspector/988C
 RN Sherman – BPA/1399
 WA Horin – Winston & Strawn

Respectfully,

Dear Sir or Madam:

A 047
 NRR



COLUMBIA GENERATING STATION
INSERVICE INSPECTION
SUMMARY REPORT
FOR REFUELING OUTAGE
R18

Spring, 2007



**ENERGY
NORTHWEST**

INSERVICE INSPECTION SUMMARY REPORT
 FOR
 THIRD INSPECTION INTERVAL
 FIRST INSPECTION PERIOD
 REFUELING OUTAGE R18

OWNER: Energy Northwest
 Columbia Generating Station
 North Power Plant Loop
 Richland, Washington 99352

PLANT: Columbia Generating Station
 North Power Plant Loop
 Richland, Washington 99352

COMMERCIAL SERVICE DATE: December 13, 1984

CAPACITY: 3486 Megawatts Thermal

REACTOR PRESSURE VESSEL: Manufacturer: CBIN
 Serial Number: T-45
 State No.: 29936-84W
 National Board No.: CBIN-8

Prepared By: *T. Ramsey* 8/21/07
 ISI Engineer Date

Dwain Sump 8/21/07
 Repair Replacement Program Lead Engineer Date

Reviewed & *Paul White* 8/22/07
 Concurred NDE Lead Date

By: *R. Schubert (for T. Egan)* 8/22/07
 ISI Engineer's Supervisor Date

Concurrence *Joe C. Hair* 8/22/07
 Authorized Nuclear Inservice Inspector Date

SUMMARY

Columbia Generating Station has completed American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME) Section XI examinations for the eighteenth (18) refueling outage.

This report summarizes the results of inservice inspection (ISI) activities of ASME Section III, Code Class 1 and 2 components performed at Columbia Generating Station between June 12, 2005 and June 25, 2007. Westinghouse (W) and Energy Northwest personnel performed the examinations. During this period, Columbia Generating Station completed its eighteenth scheduled refueling outage, R18. This outage is the first refueling outage of the third inspection interval. This report includes a copy of the NIS-1 Owner's Report of Inservice Inspection for this refueling outage in Appendix A and copies of the NIS-2 Owner's Reports of Repair or Replacement in Appendix B.

Documentation supporting this summary report is located in the Columbia Generating Station files (DIC 1100).

The ISI examinations are specified in ASME Section XI and required by 10CFR50.55a.

SNUBBER TESTING (ISI PROGRAM PLAN SECTION 6.2)

An initial sample of thirty-seven (37) snubbers was selected from the Columbia Generating Station general population of 351 safety-related snubbers. These snubbers were randomly selected by computer subroutine that is part of the ISI System database. The selected snubbers were then reviewed to determine if the sample was representative, as required by Licensee Controlled Specification Basis SR 1.7.3.1.e.

Testing of snubbers was performed using portable test devices called "Validators", supplied by the snubber manufacturer. All testing results were acceptable. The snubbers tested are listed on the NIS-1 Owner's Report of Inservice Inspection form in Appendix A.

REPAIRS AND REPLACEMENTS ACTIVITIES

Eight (8) significant ASME Section XI repair and replacement activities were performed during the R18 as listed below. A listing and NIS-2 Owner's Reports for these and other ASME Section XI repair and replacement work accomplished and closed out between June 12, 2005 and June 25, 2007 are provided in Appendix B.

1) Main Steam Relief Valves (MSRV's)

Refurbished five (5) main steam relief valves. These main steam relief valves were refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs. Replaced six (6) main steam relief valves as follows:

Replaced existing relief valve MS-RV-1A with spare S/N N63790-03-0050
 Replaced existing relief valve MS-RV-1B with spare S/N N63790-03-0139

Replaced existing relief valve MS-RV-2B with spare S/N N63790-03-0134
 Replaced existing relief valve MS-RV-3B with spare S/N N63790-03-0138
 Replaced existing relief valve MS-RV-4A with spare S/N N63790-03-0135
 Replaced existing relief valve MS-RV-4B with spare S/N N63790-03-0126

2) Main Steam Isolation Valves (MSIV's)

Refurbished two (2) main steam isolation valves MS-V-28B and MS-V-28C by replacing main disc and pilot disc for each one.

3) Relief Valves

Replaced miscellaneous relief valves such as CSP-RV-52, FPC-RV-21B, FPC-RV-117A, FPC-RV-117B, RHR-RV-1A, RHR-RV-1B, RHR-RV-30, RHR-RV-88C, SLC-RV-29A and SLC-RV-29B.

4) Valves

Replaced miscellaneous valves such as MS-V-20, SW-V-165A, SW-V-165B, SW-V-170A, SW-V-170B, SW-V-224B, SW-V-822B and SW-V-823B.

5) Control Rod Drive (CRD) Assemblies

Performed the following work on the Control Rod Drive (CRD) assemblies:

Overhauled twenty nine (29) Control Rod Drive (CRD) assemblies. Replaced twenty nine (29) Control Rod Drive (CRD) assemblies at the following reactor pressure vessel (RPV) core locations:

- RPV Core Location 46-07
- RPV Core Location 38-11
- RPV Core Location 30-15
- RPV Core Location 30-23
- RPV Core Location 26-15
- RPV Core Location 22-15
- RPV Core Location 22-11
- RPV Core Location 10-11
- RPV Core Location 06-15
- RPV Core Location 02-19
- RPV Core Location 18-23
- RPV Core Location 22-27
- RPV Core Location 10-27
- RPV Core Location 02-35
- RPV Core Location 06-39
- RPV Core Location 10-35
- RPV Core Location 10-39
- RPV Core Location 14-35
- RPV Core Location 18-39
- RPV Core Location 06-47

RPV Core Location 22-47
 RPV Core Location 30-43
 RPV Core Location 42-39
 RPV Core Location 50-23
 RPV Core Location 50-15
 RPV Core Location 34-35
 RPV Core Location 26-35
 RPV Core Location 18-35
 RPV Core Location 34-19

Installed replacement cap screws for all twenty nine (29) Control Rod Drive (CRD) assemblies bolted flanged connections at the above listed reactor pressure vessel (RPV) core locations - Eight (8) cap screws for each bolted flanged connection.

6) Local Power Range Monitoring (LPRM)

Replaced six (6) Local Power Range Monitoring (LPRM) at the following reactor pressure vessel (RPV) core locations:

RPV Core Location 40-09
 RPV Core Location 16-49
 RPV Core Location 40-17
 RPV Core Location 32-25
 RPV Core Location 48-41
 RPV Core Location 16-09

7) Pumps

Replaced pump SW-P-1B and pump HPCS-P-1.

8) Containment Atmospheric Control (CAC)

Deactivated Containment Atmospheric Control (CAC) system. CAC system deactivation work was performed as follows:

Installed plugs for Penetrations X-102, X-103, X-104 and X-105 (C-X-102 -> C-X-105) to deactivate CAC system
 Installed plugs for Penetrations X-96, X-97, X-98 and X-99 (C-X-96 -> C-X-99) to deactivate CAC system
 Installed blind flange CAC-BF-3A to deactivate CAC system
 Installed blind flange CAC-BF-3B to deactivate CAC system
 Installed blind flanges SW-BF-1A and SW-BF-2A to deactivate CAC system

APPENDIX A

NIS-1 Owner's Report for Inservice Inspection

FORM NIS-1 (Back)

- 8. Examination Dates 6/12/2005 to 6/25/2007
- 9. Inspection Period Identification: Inspection Period 1(12/13/2005 – 12/12/2009)
- 10. Inspection Interval Identification Inspection Interval 3 (12/13/2005 – 12/12/2015)
- 11. Applicable Edition of Section XI 2001 Addenda 2003
- 12. Date / Revision of Inspection Plan : December 2005 Revision 0
- 13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning the status of work required for Inspection Plan See Attachment 1
- 14. Abstract of Results of Examinations and Tests. See Attachment 1
- 15. Abstract of Corrective Measures. See Attachment 1

We certify that a) the statements made in this report are correct, b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) NA Expiration Date NA

Date 8/20/2007 Signed Energy Northwest By TM Erwin
Owner TM Erwin

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Washington and employed by Hartford Steam Boiler of CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/12/2005 to 6/25/2007, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, tests, and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496W
Joe C Hair (Inspector's Signature) Nat'l. Board (incl. endorsements), State, Province, and No.}

Date 8/21/07

NIS-1 FORM Continued

1. Owner Energy Northwest, Columbia Generating Station, North Power Plant Loop, Richland, WA 99338
 2. Plant Columbia Generating Station, North power Plant Loop, Richland, WA 99338
 3. Plant Unit NA 4. Owner Certificate of Authorization (if required) NA
 5. Commercial Service Date 12/13/1984 6. National Board Number for Unit CBIN-8

ATTACHMENT 1

13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning the status of work required for Inspection Plan

The following table summarizes the snubber test results for this reporting period. Testing was per relief request 3ISI-07. All snubber functional tests were acceptable. None of the tested snubbers require testing at the next refueling outage. Testing results are documented in plant procedure TSP-SNUBBER-R702 work order 01107615.

Snubbers Tested During Refuel R18			
Snubber Mark Number	Position (1)	Description	Serial No.
EDR-905N	UA	PSA-1 SNUBBER	594
FPC-918N	UA	PSA-1 SNUBBER	114
HPCS-47	S	PSA-3 SNUBBER	485
HPCS-924N	E	PSA-3 SNUBBER	3924
MS-1368-13	UA	PSA-1/2 SNUBBER	2470
MS-147	N	PSA-35 SNUBBER	6543
MS-162	BM	PSA-10 SNUBBER	9825
MS-27	TP	PSA-10 SNUBBER	681
MS-4448-413	UA	PSA-1/4 SNUBBER	280
MS-56	TP	PSA-35 SNUBBER	6209
MSRV-2B-3	UA	PSA-35 SNUBBER	10729
MSRV-2C-8	UA	PSA-10 SNUBBER	9905
MSRV-3B-2	UA	PSA-10 SNUBBER	316
MSRV-3D-4	UA	PSA-10 SNUBBER	9576
RCIC-100	E	PSA-1/2 SNUBBER	2536
RCIC-1490-13	UA	PSA-1/2 SNUBBER	2523
RFW-151	UA	PSA-35 SNUBBER	10732
RHR-23	E	PSA-1/4 SNUBBER	6221
RHR-276	N	PSA-3 SNUBBER	2575
RHR-359	UA	PSA-3 SNUBBER	2346
RHR-388	E	PSA-10 SNUBBER	1489
RHR-405	UA	PSA-3 SNUBBER	4420
RHR-465	N	PSA-3 SNUBBER	1069
RHR-492	N	PSA-3 SNUBBER	3942
RHR-50	BM	PSA-3 SNB/STRUT	479
RHR-563	N	PSA-1 SNUBBER	361
RHR-901N	S	PSA-3 SNUBBER	491
RHR-907N	UA	PSA-35 SNUBBER	6234
RHR-913N	UA	PSA-3 SNUBBER	4430
RHR-915N	UA	PSA-10 SNUBBER	108
RHR-SA-53	UA	PSA-10 SNUBBER	113
RHR-SA-56	UA	PSA-10 SNUBBER	707
RRC-1C-900N	BM	PSA-1 SNUBBER	617
RWCU-1C-7	UA	PSA-3 SNUBBER	2595
SGT-19	UA	PSA-3 SNUBBER	3880
SW-29	NE	PSA-10 SNUBBER	4869
SW-29	NW	PSA-10 SNUBBER	4859
PSI Tests			
MS-162	BM	PSA-10 SNUBBER	8766
MS-162	TP	PSA-10 SNUBBER	7121
MS-91	E	PSA-3 SNUBBER	9891
MS-91	W	PSA-3 SNUBBER	9881
MS-954N	UA	PSA-3 SNUBBER	12281
MS-177	S	PSA-3 SNUBBER	10641

NIS-1 FORM Continued

1. Owner Energy Northwest, Columbia Generating Station, North Power Plant Loop, Richland, WA 99338
 2. Plant Columbia Generating Station, North power Plant Loop, Richland, WA 99338
 3. Plant Unit NA 4. Owner Certificate of Authorization (if required) NA
 5. Commercial Service Date 12/13/1984 6. National Board Number for Unit CBIN-8

ATTACHMENT 1

Snubbers Tested During Refuel R18			
Snubber Mark Number	Position (1)	Description	Serial No.
MS-27	TP	PSA-10 SNUBBER	8860
MS-27	BM	PSA-10 SNUBBER	8769
MS-1368-13	UA	PSA-1/2 SNUBBER	16711
MSRV-3B-2	UA	PSA-10 SNUBBER	9841
RRC-SA-4	UA	PSA-100 SNUBBER	1254
Notes to snubber functional testing			
(1) KEY			
BM	Bottom	NE Northeast	SE Southeast
E	East	NW Northwest	S South
N	North	SW Southwest	TP Top
			UA Single snubber
			W West

Approximately 21% (128 examinations) of the examinations required by Program B Tables IWB/IWC 2412-1 have been completed. Approximately 13% (132 examinations) of the overall required scope has been completed.

The following Code Cases were implemented: N-460; N-552; N613-1; and N-663

The following table presents a summary of the Code Class 1 and 2 pressure retaining components and their supports that were examined or tested during this reporting period.

Identification No	Description	Diagram No	Pg	Exam or Test Type	Report No.	Date	Results (1)	PSI (2)
Exam Category B-A								
Item Number B1.21								
Code Class 1								
AH	Top Head Dollar Plate	RPV-102		VOL	R18-RPV-01	5/29/07	A(a)	
Exam Category B-D								
Item Number B3.100								
Code Class 1								
N7-IR	Top Head Spare Nozzle Inner Radius	RPV-102		VOL	R18-UT-210-01	5/25/07	A(7)	
Item Number B1.90								
N7	Top Head Spare Nozzle To Head	RPV-102		VOL	R18-UT6-01	5/25/07	A(6)	
Exam Category B-G-2								
Item Number BB7.70								
Code Class 1								
MS-V-28B-BLT	Valve Bolting	MS-102	02	VT-1	3MSV-009	5/29/07	A	PSI
MS-V-28C-BLT	Valve Bolting	MS-103	02	VT-1	3MSV-010	5/29/07	A	PSI
CRD HOUSING PSI BLT	CRD Housing BLT	RPV-102		VT-1	3RPV-001	5/8/07	A	PSI

NIS-1 FORM Continued

1. Owner Energy Northwest, Columbia Generating Station, North Power Plant Loop, Richland, WA 99338

2. Plant Columbia Generating Station, North power Plant Loop, Richland, WA 99338

Plant Unit NA 4. Owner Certificate of Authorization (if required) NA

Commercial Service Date 12/13/1984 6. National Board Number for Unit CBIN-8

ATTACHMENT 1

Identification No	Description	Diagram No	Pg	Exam or Test Type	Report No.	Date	Results (1)	PSI (2)
Exam Category B-J								
Item Number B9.11								
Code Class 1								
24RFW(1)A-1	Valve To Pipe	RFW-101	01	VOL	R18-UT1-33	6/5/07	A(5)	
24RFW(1)A-2	Pipe To Valve	RFW-101	01	VOL	R18-UT1-36	6/5/07	A(5)	
24RFW(1)A-4	Penetration To Valve	RFW-101	01	VOL	R18-UT1-27	5/31/07	A(5)	
24RFW(1)B-1	Valve To Pipe	RFW-102	01	VOL	R18-UT1-35	6/5/07	A(5)	
5RFW(1)B-2	Sleeve To WOL	RFW-102	01	VOL	R18-UT1-32	6/4/07	A(5)	
24RFW(1)B-2	Pipe To Valve	RFW-102	01	VOL	R18-UT1-37	6/5/07	A(5)	
6RFW(1)1-1	Valve To Pipe	RFW-103		VOL	R18-UT1-39	6/7/07	A(5)	
6RFW(1)1-2	Pipe To Ell	RFW-103		VOL	R18-UT1-40	6/7/07	A(5)	
4RFW(1)A-1	Tee To Pipe	RFW-103		VOL	R18-UT1-29	6/4/07	A(5)	
4RFW(1)A-2	Pipe To Ell	RFW-103		VOL	R18-UT1-30	6/4/07	A(5)	
4RFW(1)A-3	Ell To Sleeve	RFW-103		VOL	R18-UT1-31	6/4/07	A(5)	
12RHR(1)A-11	Pipe To Ell	RHR-105		VOL	R18-UT1-28	5/31/07	A(5)	
20RRC(6)-1	Red Tee To Pipe	RRC-105		VOL	R18-UT2-10	6/4/07	A(5)	
20RRC(6)-2	Pipe To Ell	RRC-105		VOL	R18-UT2-11	6/4/07	A(5)	
20RRC(6)-3	Ell To Pipe	RRC-105		VOL	R18-UT2-12	6/4/07	A(5)	
20RRC(6)-4	Pipe To Ell	RRC-105		VOL	R18-UT2-13	6/4/07	A(5)	
12RRC(7)A-1	Valve To Pipe	RRC-106		VOL	R18-UT2-02	5/31/07	A(5)	
12RRC(7)A-2	Pipe To Ell	RRC-106		VOL	R18-UT2-03	5/31/07	A(5)	
12RRC(7)A-3	Ell To Pipe	RRC-106		VOL	R18-UT2-04	5/31/07	A(5)	
12RRC(7)A-4	Pipe To Ell	RRC-106		VOL	R18-UT2-05	5/31/07	A(5)	
12RRC(7)B-3	Ell To Pipe	RRC-107		VOL	R18-UT2-08	6/1/07	A(5)	
12RRC(7)B-4	Pipe To Ell	RRC-107		VOL	R18-UT2-07	6/1/07	A(5)	
4RRC(4)B-9	Pipe To Ell	RRC-109		VOL	R18-UT2-01	6/2/07	A(5)	
4RRC(4)B-11	Pipe - Valve SE	RRC-109		VOL	R18-UT2-06	6/2/07	A(5)	
Item Number B9.31								
24RRC(1)A-13/4RRC(8)-4S	Pipe To SWL	RRC-101	02	VOL	R18-UT2-14	6/6/07	A	
24RRC(1)A-20/12CAP	Pipe To SWL	RRC-101	02	VOL	R18-UT2-09	6/3/07	A	
Exam Category B-M-2								
Item Number B12.50								
Code Class 1								
MS-V-28B-BDY	Group I Valve	MS-102	02	VT-3	3MSV-008	5/26/07	A(b)	
MS-V-28C-BDY	Group I Valve	MS-103	02	VT-3	3MSV-007	5/26/07	A	
Exam Category B-P								
Item Number B15.10								
Code Class 1								
Test method was system leakage test IWA-5211(a)								
HPCS-PB-101(L)	Leak. Pres Boundary	HPCS-101		VT-2	0110966106	6/16/07	A	
LPCS-PB-101(L)	Leak. Pres Boundary	LPCS-101		VT-2	0110966106	6/16/07	A	
MS-PB-101(L)	Leak. Pres Boundary	MS-101		VT-2	0110966106	6/16/07	A	
MS-PB-102(L)	Leak. Pres Boundary	MS-102		VT-2	0110966106	6/16/07	A	
MS-PB-103(L)	Leak. Pres Boundary	MS-103		VT-2	0110966106	6/16/07	A	
MS-PB-104(L)	Leak. Pres Boundary	MS-104		VT-2	0110966106	6/16/07	A	

NIS-1 FORM Continued

1. Owner Energy Northwest, Columbia Generating Station, North Power Plant Loop, Richland, WA 99338
 2. Plant Columbia Generating Station, North power Plant Loop, Richland, WA 99338
 3. Plant Unit NA 4. Owner Certificate of Authorization (if required) NA
 5. Commercial Service Date 12/13/1984 6. National Board Number for Unit CBIN-8

ATTACHMENT 1

Identification No	Description	Diagram No	Pg	Exam or Test Type	Report No.	Date	Results (1)	PSI (2)
MS-PB-105(L)	Leak. Pres Boundary	MS-105		VT-2	0110966106	6/16/07	A	
MS-PB-106(L)	Leak. Pres Boundary	MS-106		VT-2	0110966106	6/16/07	A	
RCIC-PB-101(L)	Leak. Pres Boundary	RCIC-101		VT-2	0110966106	6/16/07	A	
RCIC-PB-102(L)	Leak. Pres Boundary	RCIC-102		VT-2	0110966106	6/16/07	A	
RFW-PB-101(L)	Leak. Pres Boundary	RFW-101		VT-2	0110966106	6/16/07	A	
RFW-PB-102(L)	Leak. Pres Boundary	RFW-102		VT-2	0110966106	6/16/07	A	
RFW-PB-103(L)	Leak. Pres Boundary	RFW-103		VT-2	0110966106	6/16/07	A	
RHR-PB-101(L)	Leak. Pres Boundary	RHR-101		VT-2	0110966106	6/16/07	A	
RHR-PB-102(L)	Leak. Pres Boundary	RHR-102		VT-2	0110966106	6/16/07	A	
RHR-PB-103(L)	Leak. Pres Boundary	RHR-103		VT-2	0110966106	6/16/07	A	
RHR-PB-104(L)	Leak. Pres Boundary	RHR-104		VT-2	0110966106	6/16/07	A	
RHR-PB-105(L)	Leak. Pres Boundary	RHR-105		VT-2	0110966106	6/16/07	A	
RHR-PB-106(L)	Leak. Pres Boundary	RHR-106		VT-2	0110966106	6/16/07	A	
RPV-PB-101(L)	Leak. Pres Boundary	RPV-101		VT-2	0110966106	6/16/07	A	
RPV-PB-102(L)	Leak. Pres Boundary	RPV-102		VT-2	0110966106	6/16/07	A	
RRC-PB-101(L)	Leak. Pres Boundary	RRC-101		VT-2	0110966106	6/16/07	A	
RRC-PB-102(L)	Leak. Pres Boundary	RRC-102		VT-2	0110966106	6/16/07	A	
RRC-PB-103(L)	Leak. Pres Boundary	RRC-103		VT-2	0110966106	6/16/07	A	
RRC-PB-104(L)	Leak. Pres Boundary	RRC-104		VT-2	0110966106	6/16/07	A	
RRC-PB-105(L)	Leak. Pres Boundary	RRC-105		VT-2	0110966106	6/16/07	A	
RRC-PB-106(L)	Leak. Pres Boundary	RRC-106		VT-2	0110966106	6/16/07	A	
RRC-PB-107(L)	Leak. Pres Boundary	RRC-107		VT-2	0110966106	6/16/07	A	
RRC-PB-108(L)	Leak. Pres Boundary	RRC-108		VT-2	0110966106	6/16/07	A	
RRC-PB-109(L)	Leak. Pres Boundary	RRC-109		VT-2	0110966106	6/16/07	A	
RRC-PB-110(L)	Leak. Pres Boundary	RRC-110		VT-2	0110966106	6/16/07	A	
RRC-PB-111(L)	Leak. Pres Boundary	RRC-111		VT-2	0110966106	6/16/07	A	
RWCU-PB-101(L)	Leak. Pres Boundary	RWCU-101		VT-2	0110966106	6/16/07	A	
SLC-PB-101(L)	Leak. Pres Boundary	SLC-101		VT-2	0110966106	6/16/07	A	
Exam Category C-C								
Item Number C3.20								
Code Class 2								
MS-89(W)	4 Welded Lugs	MS-201	04	SUR	3MSM-001	5/16/07	A	
RHR-138(W)	4 Welded Lugs	RHR-205	04	SUR	3RHM-001	5/10/07	A	
Exam Category C-F-2								
Item Number C5.51								
Code Class 2								
6CRD(12)A-3	Ell To Ell	CRD-201	01	VOL	R18-UT1-02	5/11/07	A(5)	
6CRD(12)A-18	Pipe To Ell	CRD-201	02	VOL	R18-UT1-03	5/11/07	A(5)	PSI
12HPCS(1)-1B	Flange To Red	HPCS-202	01	VOL	R18-UT1-46	6/21/07	A(5)	PSI
16HPCS(1)-1A	Red To Ell	HPCS-202	01	VOL	R18-UT1-45	6/17/07	A(5)	
10HPCS(9)-1	Tee To Pipe	HPCS-202	03	VOL	R18-UT1-01	5/11/07	A(5)	
30MS(1)A-8	Ell To Pipe	MS-201	02	VOL	R18-UT1-21	5/17/07	A(5)	
30MS(1)A-13	Ell To Pipe	MS-201	02	VOL	R18-UT1-22	5/17/07	A(5)	
6MS(1)A-1	WOL To Pipe	MS-201	04	VOL	R18-UT1-26	5/17/07	A(5)	
6MS(1)A-2	Pipe To Cap	MS-201	04	VOL	R18-UT1-25	5/17/07	A(5)	
30MS(1)B-19	Pipe To Ell	MS-202	03	VOL	R18-UT1-23	5/19/07	A(5)	
30MS(1)B-20	Ell To Pipe	MS-202	03	VOL	R18-UT1-24	5/19/07	A(5)	

NIS-1 FORM Continued

1. Owner Energy Northwest, Columbia Generating Station, North Power Plant Loop, Richland, WA 99338

2. Plant Columbia Generating Station, North power Plant Loop, Richland, WA 99338

Plant Unit NA 4. Owner Certificate of Authorization (if required) NA

Commercial Service Date 12/13/1984 6. National Board Number for Unit CBIN-8

ATTACHMENT 1

Identification No	Description	Diagram No	Pg	Exam or Test Type	Report No.	Date	Results (1)	PSI (2)
30MS(1)B-27	Pipe To Ell	MS-202	04	VOL	R18-UT1-19	5/19/07	A(5)	
30MS(1)B-28	Ell To Pipe	MS-202	04	VOL	R18-UT1-20	5/19/07	A(5)	
6RCIC(1)-46	Nozzle To Pipe	RCIC-205	01	VOL	R18-UT1-05	5/16/07	A(5)	
6RCIC(1)-111	Pipe To Valve	RCIC-205	6A	VOL	R18-UT1-04	5/11/07	A(5)	
14RHR(1)A-2	Pipe To Ell	RHR-201	01	VOL	R18-UT1-08	5/15/07	A(5)	
14RHR(1)A-3	Ell To Pipe	RHR-201	01	VOL	R18-UT1-07	5/15/07	A(5)	
18RHR(1)A-1	Reducer To Pipe	RHR-201	01	VOL	R18-UT1-06	5/15/07	A(5)	
18RHR(1)A-8	Pipe To Tee	RHR-201	01	VOL	R18-UT1-11	5/15/07	A(5)	
18RHR(1)A-14	Pipe To Ell	RHR-201	02	VOL	R18-UT1-09	5/17/07	A(5)	
18RHR(1)A-15	Ell To Pipe	RHR-201	02	VOL	R18-UT1-10	5/15/07	A(5)	
18RHR(1)A-24	Ell To Pipe	RHR-201	03	VOL	R18-UT1-16	5/16/07	A(5)	
18RHR(1)A-25	Pipe To Ell	RHR-201	03	VOL	R18-UT1-12	5/16/07	A(5)	
18RHR(1)A-30	Ell To Pipe	RHR-201	03	VOL	R18-UT1-13	5/16/07	A(5)	
18RHR(11)A-8	Pipe To Ell	RHR-201	05	VOL	R18-UT1-15	5/16/07	A(5)	
18RHR(11)A-9	Ell To Pipe	RHR-201	05	VOL	R18-UT1-14	5/16/07	A(5)	
18RHR(1)A-60	Pipe To Ell	RHR-201	08	VOL	R18-UT1-18	5/14/07	A(5)	
18RHR(1)A-61	Ell To Pipe	RHR-201	08	VOL	R18-UT1-17	5/16/07	A(5)	

Item Number C5.81

30MS(1)B-24/6MS(1)-4	WOL To Pipe	MS-202	04	SUR	3MSM-002	5/14/07	A	
----------------------	-------------	--------	----	-----	----------	---------	---	--

Exam Category C-G
Item Number C6.10
Code Class 2

HPCS-P-1C-1	Pump Casing Circ. Weld	HPCS-206	01	VT-1	3HPV-001	5/27/07	A(4)	
HPCS-P-1C-2	Pump Casing Circ. Weld	HPCS-206	01	VT-1	3HPV-001	5/27/07	A(4)	
HPCS-P-1C-3	Pump Casing Circ. Weld	HPCS-206	01	VT-1	3HPV-001	5/27/07	A(4)	
HPCS-P-1C-4A	Pump Casing Circ. Weld	HPCS-206	01	SUR	3HPM-001	5/11/07	A	PSI
HPCS-P-1C-5A	Pump Casing Circ. Weld	HPCS-206	01	SUR	3HPM-001	5/11/07	A	PSI
HPCS-P-1C-6A	Pump Casing Circ. Weld	HPCS-206	01	SUR	3HPM-001	5/11/07	A	PSI
HPCS-P-1N-1	Pump Nozzle Weld	HPCS-206	01	VT-1	3HPV-001	5/27/07	A(4)	
HPCS-P-1N-2	Pump Nozzle Weld	HPCS-206	01	VT-1	3HPV-001	5/27/07	A(4)	
HPCS-P-1N-3A	Pump Nozzle Weld	HPCS-206	01	SUR	3HPM-001	5/11/07	A	PSI
HPCS-P-1L-1	Pump Casing Long. Weld	HPCS-206	01	VT-1	3HPV-001	5/27/07	A(4)	
HPCS-P-1L-2	Pump Casing Long. Weld	HPCS-206	01	VT-1	3HPV-001	5/27/07	A(4)	
HPCS-P-1L-3	Pump Casing Long. Weld	HPCS-206	01	VT-1	3HPV-001	5/27/07	A(4)	

Exam Category C-H
Item Number C7.10
Code Class 2

Test method was system leakage test IWA-5211(a)

SLC-PB-201(H)	Hydro Pres Boundary	NA		VT-2	01103801	9/27/05	A(3)	
RHR-PB-207(H)	Hydro Pres Boundary	RHR-207		VT-2	2RHV-027	10/17/05	A(3)	
RHR-PB-208(H)	Hydro Pres Boundary	RHR-208	02	VT-2	2RHV-027	10/17/05	A(3)	

NIS-1 FORM Continued

1. Owner Energy Northwest, Columbia Generating Station, North Power Plant Loop, Richland, WA 99338
 2. Plant Columbia Generating Station, North power Plant Loop, Richland, WA 99338
 3. Plant Unit NA 4. Owner Certificate of Authorization (if required) NA
 5. Commercial Service Date 12/13/1984 6. National Board Number for Unit CBIN-8

ATTACHMENT 1

Identification No	Description	Diagram No	Pg	Exam or Test Type	Report No.	Date	Results (1)	PSI (2)
RHR-PB-209(H)	Hydro Pres Boundary	RHR-209		VT-2	2RHV-027	10/17/05	A(3)	
RHR-PB-201(H)	Hydro Pres Boundary	RHR-201		VT-2	01103795	11/1/05	A(3)	
RHR-PB-202(H)	Hydro Pres Boundary	RHR-202		VT-2	01103795	11/1/05	A(3)	
RHR-PB-203(H)	Hydro Pres Boundary	RHR-203		VT-2	01103795	11/1/05	A(3)	
RHR-PB-204(H)	Hydro Pres Boundary	RHR-204	02	VT-2	01103795	11/1/05	A(3)	
RHR-PB-206(H)	Hydro Pres Boundary	RHR-206		VT-2	01103795	11/1/05	A(3)	
RHR-PB-210(H)	Hydro Pres Boundary	RHR-210		VT-2	01103805	11/15/05	A(3)	
RHR-PB-211(H)	Hydro Pres Boundary	RHR-211		VT-2	01103805	11/15/05	A(3)	
LPCS-PB-201(H)	Hydro Pres Boundary	LPCS-201		VT-2	2LPV-008	11/30/05	A(3)	
LPCS-PB-202(H)	Hydro Pres Boundary	LPCS-202		VT-2	2LPV-008	11/30/05	A(3)	
Exam Category F-A								
Item Number F1.10A								
Code Class 1								
HPCS-911N	Strut	HPCS-101	01	VT-3	3HV-044	5/31/07	A	
MS-SA-1	Strut	MS-101	02	VT-3	3HV-031	5/28/07	A	
MS-SA-2	Strut	MS-101	02	VT-3	3HV-032	5/28/07	A	
SLC-4475-122	Strut	SLC-101	05	VT-3	3HV-042	5/29/07	A	
Item Number F1.10C								
MS-HB-2	Spring	MS-102	01	VT-3	3HV-057	6/3/07	A	
MS-1368-11	Spring	MS-105	02	VT-3	3HV-048	6/1/07	A	
RFW-175	Spring	RFW-102	05	VT-3	3HV-041	5/29/07	A	
RHR-431	Spring	RHR-104		VT-3	3HV-058	6/4/07	A(c)	
RHR-510	Spring	RHR-105		VT-3	3HV-035	5/28/07	A	
Item Number F1.10D								
RCIC-1C-9	PSA-10 Snubber	RCIC-101	01	VT-3	3HV-043	5/29/07	A	
RHR-SA-33	PSA-10 Snubber	RHR-105		VT-3	3HV-033	5/28/07	A	
RHR-SA-34	PSA-35 Snubber	RHR-105		VT-3	3HV-034	5/28/07	A	
Item Number F1.20A								
Code Class 2								
G319	Rigid	CRD-201	01	VT-3	3HV-017	5/2/07	A	
G323	Rigid	CRD-201	01	VT-3	3HV-016	5/2/07	A	
G503	Rigid	CRD-201	02	VT-3	3HV-012	5/2/07	A	
G506	Rigid	CRD-201	03	VT-3	3HV-014	5/2/07	A	
G603	Rigid	CRD-202	01	VT-3	3HV-010	5/2/07	A	
G426	Rigid	CRD-202	01	VT-3	3HV-013	5/2/07	A	
G604	Rigid	CRD-202	01	VT-3	3HV-011	5/2/07	A	
HPCS-13	Anchor	HPCS-202	02	VT-3	3HV-002	4/27/07	A	
HPCS-15	Anchor	HPCS-202	02	VT-3	3HV-003	4/27/07	A	
RHR-365	Strut	RHR-201	06	VT-3	3HV-027	5/9/07	A	
RHR-366	Strut	RHR-201	06	VT-3	3HV-028	5/9/07	A	
RHR-238	Anchor	RHR-201	08	VT-3	3HV-025	5/10/07	A	
RHR-230	Box	RHR-207	11	VT-3	3HV-008	5/1/07	A	

NIS-1 FORM Continued

1. Owner Energy Northwest, Columbia Generating Station, North Power Plant Loop, Richland, WA 99338
 2. Plant Columbia Generating Station, North power Plant Loop, Richland, WA 99338
 3. Plant Unit NA 4. Owner Certificate of Authorization (if required) NA
 5. Commercial Service Date 12/13/1984 6. National Board Number for Unit CBIN-8

ATTACHMENT 1

Identification No	Description	Diagram No	Pg	Exam or Test Type	Report No.	Date	Results (1)	PSI (2)
Item Number F1.20C								
HPCS-44	Spring	HPCS-202	03	VT-3	3HV-001	4/27/07	A	
MS-89	Spring	MS-201	04	VT-3	3HV-030	5/16/07	A	
RHR-157	Spring	RHR-201	01	VT-3	3HV-019	5/8/07	A	
RHR-354	Spring	RHR-201	05	VT-3	3HV-026	5/9/07	A	
RHR-367	Spring	RHR-201	06	VT-3	3HV-029	5/9/07	A	
RHR-138	Spring	RHR-205	04	VT-3	3HV-024	5/10/07	A	
RHR-117	Spring	RHR-209	01	VT-3	3HV-007	5/1/07	A	
RHR-118	Spring	RHR-209	02	VT-3	3HV-009	5/1/07	A	
Item Number F1.40A Code Class 2								
SDV-A(CS)	SDV Base	CRD-201	03	VT-3	3HV-015	5/2/07	A	
HPCS-P-1(CS)	Pump Base	HPCS-201	02	VT-3	3HV-004	4/27/07	A	
LPCS-P-1(CS)	Pump Base	LPCS-201	02	VT-3	3HV-023	5/7/07	A	
RCIC-P-1(CS)	Pump Base	RCIC-204	04	VT-3	3HV-020	5/8/07	A	
RHR-P-2A(CS)	RHR Pump Base	RHR-213		VT-3	3HV-018	5/8/07	A	
SLC-TK-1(CS)	SLC Tank Support	SLC-101	06	VT-3	3HV-021	5/7/07	A	
Item Number F1.40A Code Class 1								
RPV STAB 45	Stabilizer	RPV-101		VT-3	3HV-051	6/2/07	A	
RPV STAB 135	Stabilizer	RPV-101		VT-3	3HV-051	6/2/07	A	
RPV STAB 225	Stabilizer	RPV-101		VT-3	3HV-051	6/2/07	A	
RPV STAB 315	Stabilizer	RPV-101		VT-3	3HV-050	6/2/07	A(d)	
RPV STAB 0	Stabilizer	RPV-101		VT-3	3HV-051	6/2/07	A	
RPV STAB 90	Stabilizer	RPV-101		VT-3	3HV-051	6/2/07	A	
RPV STAB 180	Stabilizer	RPV-101		VT-3	3HV-051	6/2/07	A	
RPV STAB 270	Stabilizer	RPV-101		VT-3	3HV-051	6/2/07	A	
RPV(CS)	Skirt & Base Plate	RPV-101		VT-3	3HV-052	6/2/07	A	
RRC-RB-1	Strut	RRC-103		VT-3	3HV-036	5/29/07	A	
RRC-SB-3	PSA-100 Snubber	RRC-103		VT-3	3HV-037	5/29/07	A	
RRC-SB-4	PSA-100 Snubber	RRC-103		VT-3	3HV-038	5/29/07	A	
RRC-SB-5	PSA-100 Snubber	RRC-103		VT-3	3HV-039	5/29/07	A	
RRC-SB-6	PSA-100 Snubber	RRC-103		VT-3	3HV-040	5/29/07	A	

Notes to Section 13 "Abstract of Examinations and Tests"

1. A = Acceptable R = Rejectable
2. PSI = Preservice Inspection
3. This examination was completed during the second inspection interval after the previous NIS-1 form was issued.
4. Alternate examination per relief request 3ISI-04.
5. Implemented Code Case N-663.
6. Implemented Code Case N-613-1.
7. Implemented Code Case N-552

Notes a, b, c, and d are discussed in Section 14.

NIS-1 FORM Continued

1. Owner Energy Northwest, Columbia Generating Station, North Power Plant Loop, Richland, WA 99338
2. Plant Columbia Generating Station, North power Plant Loop, Richland, WA 99338
3. Plant Unit NA 4. Owner Certificate of Authorization (if required) NA
5. Commercial Service Date 12/13/1984 6. National Board Number for Unit CBIN-8

ATTACHMENT 1

14. Abstract of Results of Examinations and Tests.

- Note a. Weld AH has UT indication exceeding IWB-3510-1 allowable flaw size. The flaw is acceptable per IWB-3112(b). A review of the fabrication record RT film and reader sheet determined that the flaw was a slag/gas inclusion and was acceptable during construction. No corrective measures are required.
- Note b. Valve MS-V-28B visual examination found unacceptable indication on flange surface. The indication was evaluated and it was determined that it would have no impact on the valve pressure boundary integrity, the function of the flange joint, or sealing capability given the location of the indication. It was accepted as is. No corrective measures are required.
- Note c. Spring support RHR-431 spring can setting was greater than 5% out of tolerance. An engineering evaluation determined that the condition of spring support RHR-431 is acceptable. No corrective action is required.
- Note d. RPV stabilizer at 315 degree (RPV STAB 315) had one of the ½ inch bolts holding the installed shims in place sheared. An engineering evaluation determined that the condition of RPV STAB 315 is acceptable

15. Abstract of Corrective Measures.

No corrective measures were required to be taken during this reporting period.

APPENDIX B

NIS-2 OWNER'S REPORTS

This appendix summarizes ASME Section XI repair or replacement work performed between June 12, 2005 and June 25, 2007. The status of the NIS-2 Owner's Report is stated for each repair and replacement work performed.

PLAN NO	WOT NO	COMPONENT NUMBER AND WORK DESCRIPTION	CODE COMPONENT
2-1898 *	01081799 02	Prefabed - Modified vent connection with valve HPCS-V-79	Piping
2-1898 *	01081799 01	Installed - Modified vent connection with valve HPCS-V-79	Piping
2-1902	01082081 01	Replaced mechanical seal for pump RRC-P-1A	Pump
2-1936 *	01099108 01	Replaced valve RHR-V-633	Piping
2-1937	01092578 01	Replaced studs and nuts for joints associated with WMA-CC-51A1	Piping
2-1938	01095162 01	Replaced relief valve RCC-RV-34A	Piping
2-1942	01036576 01	Replaced base and disc for relief valve S/N 98-09537 (FPC-RV-117A)	Relief Valve
2-1961	01093311 01	Replaced relief valve FPC-RV-117A	Piping
2-1964	01095149 01	Replaced bolts and nuts for roof manway for tank COND-TK-1A	Tank
2-1967	01095149 02	Replaced bolts and nuts for roof manway for tank COND-TK-1B	Tank
2-1970	01100444 01	Replaced studs and nuts for pump SW-P-1B to SW-EJ-1B bolted joint	Piping
2-1978	01105348 01	Replaced valve SW-V-224B	Piping
2-1980	01105349 01	Replaced valve SW-V-822B	Piping
2-1981	01098654 01	Replaced valve SW-V-823B	Piping
2-1988	01036578 01	Replaced disc for RCC-RV-34A, S/N 98-09538	Relief Valve
2-1994	01100444 01	Installed pipe clamps for motor cooling water piping assembly for SW-P-1B	Pump
2-1995	01093310 01	Replaced relief valve FPC-RV-117B	Piping
2-2013	01100444 01	Replaced pump SW-P-1B	Piping
2-2015 *	01082730 01	Replaced pipe nipple associated with valves SW-V-938 and SW-V-939	Piping
2-2016	01092975 02	Replaced piping down stream of valve FPC-FCV-15B	Piping
2-2017	01107104 11	Installed disc travel stop for valve FPC-V-140	Valve
2-2018 *	01111863 02	Performed On-line leak seal (Furmanite) for heat exchanger RWCU-HX-1C	Heat Exchanger
2-2020	01102048 01	Made body to bonnet seal weld for valve FDR-V-477	Valve
2-2021	01113083 01	Replaced valve SW-V-106B	Piping
2-2022	01108824 03	Replaced Local Power Range Monitoring (LPRM) for core location 40-09	RPV
2-2023	01108824 04	Replaced Local Power Range Monitoring (LPRM) for core location 16-49	RPV
2-2024	01108824 05	Replaced Local Power Range Monitoring (LPRM) for core location 40-17	RPV
2-2025	01108824 06	Replaced Local Power Range Monitoring (LPRM) for core location 32-25	RPV
2-2026	01108824 07	Replaced Local Power Range Monitoring (LPRM) for core location 48-41	RPV
2-2027	01108824 08	Replaced Local Power Range Monitoring (LPRM) for core location 16-09	RPV
2-2028 *	01115245 02	Prefabed - Replaced valves MS-V-605 and MS-V-638	Piping
2-2028 *	01115245 01	Installed - Replaced valves MS-V-605 and MS-V-638	Piping
2-2030	01113400 01	Replaced body to bonnet studs and nuts for valve RHR-V-71C	Valve
2-2031	01117600 01	Replaced mechanical seal for pump RRC-P-1B	Pump
2-2032	01113596 01	Replaced relief valve SLC-RV-29A	Piping
2-2033	01113692 01	Replaced relief valve SLC-RV-29B	Piping
2-2034	01087862 03	Assembled pilot disc (stem disc) and main disc (piston disc) for MS-V-28B	Valve
2-2036	01087862 02	Replaced parts for valve MS-V-28B	Valve
2-2037	01087861 03	Assembled pilot disc (stem disc) and main disc (piston disc) for MS-V-28C	Valve
2-2039	01087861 02	Replaced parts for valve MS-V-28C	Valve
2-2041	01015850 01	Replaced relief valve FPC-RV-21B	Piping
2-2042	01114075 01	Replaced studs and nuts for pump HPCS-P-2	Pump
2-2042	01114075 01	Replaced studs and nuts for pump HPCS-P-2 to SW-EJ-2 bolted joint	Piping
2-2043 *	01113835 06	Replaced stem disc assembly and back seat for valve RCIC-V-54	Valve
2-2045	01110875 01	Replaced relief valve RHR-RV-1A (Replacement valve S/N N60597-00-0019)	Piping
2-2046	01135657 01	Replaced rear snubber for valve CVB-V-1ST	Valve
2-2047	01110164 01	Replaced relief valve RHR-RV-1B (Replacement valve S/N N60597-00-0003)	Piping
2-2048	01107615 30	Replaced load pin for support RWCU-1C-9PS	Support
2-2050	01111870 01	Installed new design diaphragm and new cover plate for RWCU-HX-1C	Heat Exchanger
2-2051	01109660 01	Replaced parts for valve SLC-V-4A	Valve
2-2052	01096747 01	Replaced studs and nuts for bolted flanged joint for valve FPV-V-6B	Piping
2-2053	01121684 08	Prefabed - Modified supports MS-1000N and MS-1009N	Piping
2-2053	01121684 01	Installed - Modified supports MS-1000N and MS-1009N	Piping
2-2054	01102206 01	Replaced valve FPC-V-108	Piping

PLAN NO	WOT NO	COMPONENT NUMBER AND WORK DESCRIPTION	CODE COMPONENT
2-2055 *	01126764 02	Replaced valve RRC-V-19	Piping
2-2056 *	01111490 89	Replaced pipe adjacent to HPCS-V-40, HPCS-P-1	Piping
2-2058 *	01106306 01	Replaced valve IR-V-IR-81/V4 (IR-81-V-2C)	Tubing
2-2059	01101865 01	Replaced valve MS-V-20	Piping
2-2059-R1	01101865 01	Complete cut and reweld - Replaced valve MS-V-20	Piping
2-2060 *	01116054 01	Replaced piping/tubing material for CAS supply to valve MS-V-28A	Piping/Tubing
2-2061 *	01116057 01	Replaced piping/tubing material for CAS supply to valve MS-V-28B	Piping/Tubing
2-2062 *	01116056 01	Replaced piping/tubing material for CAS supply to valve MS-V-28C	Piping/Tubing
2-2063 *	01116055 01	Replaced piping/tubing material for CAS supply to valve MS-V-28D	Piping/Tubing
2-2064	01128522 01	Fabricated plugs for penetrations - Plan No 2-2065 and Plan No 2-2066	Containment
2-2065	01119589 03	Installed plugs for Penetrations X-102, X-103, X-104 and X-105 (C-X-102 -> C-X-105)	Containment
2-2066	01119589 02	Installed plugs for Penetrations X-96, X-97, X-98 and X-99 (C-X-96 -> C-X-99)	Containment
2-2067	01119589 06	Installed blind flange CAC-BF-3A to deactivate CAC system	Piping
2-2068	01119589 07	Installed blind flange CAC-BF-3B to deactivate CAC system	Piping
2-2069	01119589 12	Installed blind flanges SW-BF-1A and SW-BF-2A to deactivate CAC system	Piping
2-2071 *	01124108 01	Replaced valve SW-V-845	Piping
2-2072	01135780 01	Replaced nuts and bolts for drywell head C-DH-1	Containment
2-2074 *	01097891 01	Machined surface defects on disc seating surface for valve CSP-V-800/12	Valve
2-2079	01119600 02	Replaced studs and nuts for RCC piping system associated with RCC-V-88C	Piping
2-2083 *	01111490 13	Replaced seal piping material attached to new pump HPCS-P-1 discharge flange	Pump
2-2084 *	01136466 01	Replaced piping associated with valve SW-V-706B	Piping
2-2085	01107360 09	Machined existing hinge pins for valve FPC-V-112A	Valve
2-2086 *	01130099 02	Fabricated solid bar spacers (MSLC) - Plan No 2-2086 -> Plan No 2-2090	Piping
2-2087 *	01130099 03	Installed solid bar spacer (MSLC) associated with PI-V-X18A/MS-V-67A	Piping
2-2088 *	01130099 04	Installed solid bar spacer (MSLC) associated with PI-V-X18B/MS-V-67B	Piping
2-2089 *	01130099 05	Installed solid bar spacer (MSLC) associated with PI-V-X18C/MS-V-67C	Piping
2-2090 *	01130099 06	Installed solid bar spacer (MSLC) associated with PI-V-X18D/MS-V-67D	Piping
2-2093	PO 313236	Refurbished MSRV S/N N63790-03-0050	Relief Valve
2-2094	PO 313236	Refurbished MSRV S/N N63790-03-0134	Relief Valve
2-2095	PO 313236	Refurbished MSRV S/N N63790-03-0135	Relief Valve
2-2096	PO 313236	Refurbished MSRV S/N N63790-03-0138	Relief Valve
2-2097	PO 313236	Refurbished MSRV S/N N63790-03-0139	Relief Valve
2-2098	01114211 01	Replaced existing relief valve MS-RV-1A with spare S/N N63790-03-0050	Piping
2-2099	01114208 01	Replaced existing relief valve MS-RV-1B with spare S/N N63790-03-0139	Piping
2-2100	01114210 01	Replaced existing relief valve MS-RV-2B with spare S/N N63790-03-0134	Piping
2-2101	01114207 01	Replaced existing relief valve MS-RV-3B with spare S/N N63790-03-0138	Piping
2-2102	01114209 01	Replaced existing relief valve MS-RV-4A with spare S/N N63790-03-0135	Piping
2-2103	01114206 01	Replaced existing relief valve MS-RV-4B with spare S/N N63790-03-0126	Piping
2-2104	01107360 12	Machined existing hinge pins for valve FPC-V-112A - See Plan No 2-2085	Valve
2-2105	01111490 13	Replaced pump HPCS-P-1	Pump
2-2106	01111490 13	Replaced studs and nuts for pump HPCS-P-1 discharge flanged joint	Piping
2-2107 *	01111490 40	Prefabed - Replaced suction vent piping material for pump HPCS-P-1	Piping
2-2107 *	01111490 13	Installed - Replaced suction vent piping material for pump HPCS-P-1	Piping
2-2108 *	01111490 40	Prefabed - Replaced seal piping material for pump HPCS-P-1	Piping
2-2108 *	01111490 13	Installed - Replaced seal piping material for pump HPCS-P-1	Piping
2-2109	01111490 40	Prefabed - Replaced seal bleed off piping material for pump HPCS-P-1	Piping
2-2109	01111490 13	Installed - Replaced seal bleed off piping material for pump HPCS-P-1	Piping
2-2110 *	01083642 01	Replaced valve IR-V-IR-81/V5 (IR-81-V-3C)	Tubing
2-2111	01059902 01	Replaced valve SW-V-165A	Piping
2-2112	01059901 01	Replaced valve SW-V-165B	Piping
2-2114	01113399 01	Replaced valve SW-V-170B	Piping
2-2121 *	01119522 02	Prefabed - Replaced valves LPCS-V-707 and LPCS-V-708	Piping
2-2121 *	01119522 01	Installed - Replaced valves LPCS-V-707 and LPCS-V-708	Piping
2-2122 *	01119522 03	Prefabed - Replaced tubing associated with valves LPCS-V-707 and LPCS-V-708	Tubing

PLAN NO	WOT NO	COMPONENT NUMBER AND WORK DESCRIPTION	CODE COMPONENT
2-2122 *	01119522 04	Installed - Replaced tubing associated with valves LPCS-V-707 and LPCS-V-708	Tubing
2-2123 *	01119600 02	Removed and reinstalled RCC cooling water lines to motor for pump RRC-P-1A	Piping
2-2124 *	01121992 01	Replaced valve SW-V-761	Piping
2-2125	01135673 01	Replaced rear snubber for valve CVB-V-1AB	Valve
2-2126	01101865 01	Replaced U bolts for support MS-954N	Support
2-2128	01121684 01	Removed arc strikes on MS lines "C" and "D" near MS-1000N and MS-1009N	Piping
2-2129	01111490 89	Adjusted misalignment in discharge piping to pump HPCS-P-1	Piping
2-2131	01119600 02	Replaced studs and nuts for RCC piping systems associated with RCC-V-17A and SW-FS-N008	Piping
2-2134 *	01098330 01	Replaced valve PSR-V-X77A/1	Piping
2-2136	01105924 07	Replaced nuts and bolts for equipment hatch C-X-15	Containment
2-2137	01108775 01	Replaced studs and nuts for hinge pin cover for valve RFW-V-10B	Valve
2-2140	01110055 10	Replaced relief valve CSP-RV-52	Piping
Not Applicable	01107615 01	Replaced snubber for support MS-162(B)	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support MS-162(T)	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support MS-91(E)	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support MS-91(W)	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support MS-954(N)	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support MS-177(S)	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support MS-27(T)	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support MS-27(B)	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support MS-1368-13	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support MSRV-3B-2	Support/Piping
Not Applicable	01107615 01	Replaced snubber for support RRC-SA-4	Support/Piping
Not Applicable	01108357 13	Overhauled Control Rod Drive (CRD) Serial No A9305	CRD
Not Applicable	01108357 14	Overhauled Control Rod Drive (CRD) Serial No A9303	CRD
Not Applicable	01108357 15	Overhauled Control Rod Drive (CRD) Serial No A9294	CRD
Not Applicable	01108357 16	Overhauled Control Rod Drive (CRD) Serial No A9317	CRD
Not Applicable	01108357 17	Overhauled Control Rod Drive (CRD) Serial No A9308	CRD
Not Applicable	01108357 20	Overhauled Control Rod Drive (CRD) Serial No A9305	CRD
Not Applicable	01108357 24	Overhauled Control Rod Drive (CRD) Serial No A9297	CRD
Not Applicable	01108357 26	Overhauled Control Rod Drive (CRD) Serial No A9417	CRD
Not Applicable	01108357 27	Overhauled Control Rod Drive (CRD) Serial No A9315	CRD
Not Applicable	01108357 32	Overhauled Control Rod Drive (CRD) Serial No A9378	CRD
Not Applicable	01108357 36	Overhauled Control Rod Drive (CRD) Serial No A9406	CRD
Not Applicable	01109670 05	Replaced Control Rod Drive (CRD) at Core Location 10-11	CRD**
Not Applicable	01109670 06	Replaced Control Rod Drive (CRD) at Core Location 06-47	CRD**
Not Applicable	01109670 07	Replaced Control Rod Drive (CRD) at Core Location 22-47	CRD**
Not Applicable	01109670 08	Replaced Control Rod Drive (CRD) at Core Location 06-39	CRD**
Not Applicable	01109670 09	Replaced Control Rod Drive (CRD) at Core Location 10-39	CRD**
Not Applicable	01109670 10	Replaced Control Rod Drive (CRD) at Core Location 10-35	CRD**
Not Applicable	01109670 11	Replaced Control Rod Drive (CRD) at Core Location 18-39	CRD**
Not Applicable	01109670 12	Replaced Control Rod Drive (CRD) at Core Location 02-35	CRD**
Not Applicable	01109670 13	Replaced Control Rod Drive (CRD) at Core Location 18-35	CRD**
Not Applicable	01109670 14	Replaced Control Rod Drive (CRD) at Core Location 26-35	CRD**
Not Applicable	01109670 15	Replaced Control Rod Drive (CRD) at Core Location 22-27	CRD**
Not Applicable	01109670 16	Replaced Control Rod Drive (CRD) at Core Location 10-27	CRD**
Not Applicable	01109670 17	Replaced Control Rod Drive (CRD) at Core Location 26-15	CRD**
Not Applicable	01109670 18	Replaced Control Rod Drive (CRD) at Core Location 18-23	CRD**
Not Applicable	01109670 19	Replaced Control Rod Drive (CRD) at Core Location 14-35	CRD**
Not Applicable	01109670 43	Replaced Control Rod Drive (CRD) at Core Location 02-19	CRD**
Not Applicable	01109670 44	Replaced Control Rod Drive (CRD) at Core Location 30-23	CRD**
Not Applicable	01109670 45	Replaced Control Rod Drive (CRD) at Core Location 34-19	CRD**
Not Applicable	01109670 46	Replaced Control Rod Drive (CRD) at Core Location 06-15	CRD**
Not Applicable	01109670 47	Replaced Control Rod Drive (CRD) at Core Location 30-43	CRD**

PLAN NO	WOT NO	COMPONENT NUMBER AND WORK DESCRIPTION	CODE COMPONENT
Not Applicable	01109670 48	Replaced Control Rod Drive (CRD) at Core Location 22-15	CRD**
Not Applicable	01109670 49	Replaced Control Rod Drive (CRD) at Core Location 30-15	CRD**
Not Applicable	01109670 50	Replaced Control Rod Drive (CRD) at Core Location 34-35	CRD**
Not Applicable	01109670 51	Replaced Control Rod Drive (CRD) at Core Location 50-23	CRD**
Not Applicable	01109670 52	Replaced Control Rod Drive (CRD) at Core Location 22-11	CRD**
Not Applicable	01109670 53	Replaced Control Rod Drive (CRD) at Core Location 50-15	CRD**
Not Applicable	01109670 54	Replaced Control Rod Drive (CRD) at Core Location 38-11	CRD**
Not Applicable	01109670 55	Replaced Control Rod Drive (CRD) at Core Location 46-07	CRD**
Not Applicable	01109670 56	Replaced Control Rod Drive (CRD) at Core Location 42-39	CRD**

NOTES -

- Note 1 * Authorized Nuclear Inservice Inspector's (ANII's) involvement was not required for these ASME Section XI replacement work plans for one (1) inch nominal pipe size (NPS) and smaller (Small Items).
- Note 2 ** Performed VT-1 visual examination on the new cap screws. Replaced all eight (8) cap screws for each core location.



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: High Pressure Core Spray (HPCS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None</p> <p>6. Identification Of Components Repaired Or Replaced And Replacement Components</p> | <p>Date: 08/22/05
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2	WPPSS *	HPCS(1)-4CL2-P2	N/A	N/A	1983	-----	Yes, Code Class 2
HPCS-V-87	921S0430	Borg Warner	N/A	N/A	1993	Replacement	Yes, Code Class 1
HPCS-V-88	921S0435	Borg Warner	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced (modified) existing vent connection down stream of valve HPCS-V-79. The replacement work was performed as follows:

- 1) Removed existing vent connection down stream of valve HPCS-V-79.
- 2) Installed new piping material such as elbows, couplings and pipe.
- 3) Installed new valve HPCS-V-87, Serial No 921S0430.
- 4) Installed new valve HPCS-V-88, Serial No 921S0435.
- 5) Made required socket welds.
- 6) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 7) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.
- 8) Installed new U bolts and jam nuts associated with new support.

NOTES-

- 1) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
- 2) The existing ASME Code Stamped piping system in which the new valve HPCS-V-87, Serial No 921S0430 and valve HPCS-V-88, Serial No 921S0435 were installed is High Pressure Core Spray (HPCS) piping system HPCS(1)-4CL2-P2. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 3) The new valve HPCS-V-87, Serial No 921S0430 and valve HPCS-V-88, Serial No 921S0435 are certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements and ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements. Dual certified valves.
- 4) ASME Section III, Code Class 1 valves for ASME Section III, Code Class 2 application.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F
 Component Design Pressure: Psig Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the following replacement valves:

EPN No	Serial No
HPCS-V-87	921S0430
HPCS-V-88	921S0435

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 8/22/05 Date 8/22/05

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Replacement 1" NPS And Smaller Commissions _____
 Inspector's Signature National Board, State, and Endorsements
 Date _____

Certificate Holder's Serial No. 921S0427
THRU
921S0436

8. Design conditions 3600 psi 100 °F or valve pressure class 1500# (1)
 (pressure) (temperature)
9. Cold working pressure 3600 psi at 100°F
10. Hydrostatic test 5400-5450 psi. Disk differential test pressure 3960-4010 psi

11. Remarks: BACKSEAT MATERIAL: SA-564 TP.630 COND. H-1100

CERT HOLDER'S SN:	BACKSEAT SN:	CERT HOLDER'S SN:	BACKSEAT SN:	CERT HOLDER'S SN:	BACKSEAT SN:
<u>921S0427</u>	<u>225647 SN5</u>	<u>921S0430</u>	<u>225647 SN9</u>	<u>921S0433</u>	<u>225647 SN4</u>
<u>921S0428</u>	<u>225647 SN8</u>	<u>921S0431</u>	<u>225647 SN1</u>	<u>921S0434</u>	<u>225647 SN10</u>
<u>921S0429</u>	<u>225647 SN3</u>	<u>921S0432</u>	<u>225647 SN2</u>	<u>921S0435</u>	<u>225647 SN6</u>
				<u>921S0436</u>	<u>225647 SN7</u>

THESE VALVES WERE MANUFACTURED TO THE 1974 EDITION W75 ADDENDA CODE EFFECTIVITY DATE AND RECONCILED IN OUR DESIGN REPORT NSR 76590 REV. D WHICH WAS APPROVED BY WASHINGTON PUBLIC POWER SUPPLY SYSTEMS.

CERTIFICATION OF DESIGN

Design Specification certified by RICHARD LESLIE SCHLOSSER P.E. State WA Reg. no. 21701
 Design Report certified by RAJ CHAUDHARY P.E. State CA Reg. no. M20608

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1130 Expires JUNE 10, 1993
 Date 3-30-93 Name BW/IP INTERNATIONAL, INC. Signed [Signature]
 (N Certificate Holder) (Authorized Representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by *ARKWRIGHT MUTUAL INS. CO. of NORWOOD, MASS. have inspected the pump, or valve, described in this Data Report on MAR. 31, 1993, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

*FACTORY MUTUAL ENGINEERING ASSOCIATION

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3/31/93 Signed [Signature] Commissions 1275 CA.
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

921S0427
THRU
921S0436

Certificate Holder's Serial No. _____

8. Design conditions 3600 psi 100 °F or valve pressure class 1500# (1)
 (pressure) (temperature)
9. Cold working pressure 3600 psi at 100°F
10. Hydrostatic test 5400-5450 psi. Disk differential test pressure 3960-4010 psi

11. Remarks: BACKSEAT MATERIAL: SA-564 TP.630 COND. H-1100

CERT HOLDER'S SN:	BACKSEAT SN:	CERT HOLDER'S SN:	BACKSEAT SN:	CERT HOLDER'S SN:	BACKSEAT SN:
921S0427	225647 SN5	921S0430	225647 SN9	921S0433	225647 SN4
921S0428	225647 SN8	921S0431	225647 SN1	921S0434	225647 SN10
921S0429	225647 SN3	921S0432	225647 SN2	921S0435	225647 SN6
				921S0436	225647 SN7

THESE VALVES WERE MANUFACTURED TO THE 1974 EDITION W75 ADDENDA CODE EFFECTIVITY DATE AND RECONCILED IN OUR DESIGN REPORT NSR 76590 REV. D WHICH WAS APPROVED BY WASHINGTON PUBLIC POWER SUPPLY SYSTEMS.

CERTIFICATION OF DESIGN

Design Specification certified by RICHARD LESLIE SCHLOSSER P.E. State WA Reg. no. 21701
 Design Report certified by RAJ CHAUDHARY P.E. State CA Reg. no. M20608

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1130 Expires JUNE 10, 1993
 Date 3-30-93 Name EW/IP INTERNATIONAL, INC. Signed [Signature]
 (N Certificate Holder) (Authorized Representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by *ARKWRIGHT MUTUAL INS. CO. of NORWOOD, MASS. have inspected the pump, or valve, described in this Data Report on MAR. 31, 1993, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

*FACTORY MUTUAL ENGINEERING ASSOCIATION

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3/31/93 Signed [Signature] Commissions 1275 CA.
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Reactor Recirculation Cooling (RRC) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 06/26/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RRC-P-1A Mechanical Seal Mechanical Seal	Bingham Bingham Bingham	210099 (B-2-1034) 11N92-3/11N92-4 11N92-2	134 1080/1081 1078	N/A N/A N/A	1974 1983 1983	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing upper mechanical seal for pump RRC-P-1A. The replacement work was performed as follows:

- 1) Removed existing rotating used spare replacement upper mechanical seal, Serial No 11N92-3/11N92-4*.
- 2) Installed rotating used spare replacement upper mechanical seal, Serial No 11N92-2.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing pump RRC-P-1A is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) The rotating used spare replacement upper mechanical seal, Serial No 11N92-2 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with 1971 Addenda requirements.
- 4) * The existing rotating used spare replacement upper mechanical seal was assembled using parts from two (2) seals Serial No 11N92-3 and Serial No 11N92-4.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the rotating used spare replacement upper mechanical seal, Serial No 11N92-2.
 2) * The test pressure and the test temperature on the was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/26/07 Date 6/26/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/5/06 to 7/2/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, N, S, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/2/07

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provisions of the ASME Code Rules

Walter Supt

- 1. (a) Manufactured by Bingham-Willamette Company, Portland, OR 6/26/07
(Name and address of Manufacturer of part)
- (b) Manufactured for Washington Public Power Supply System, Richland, WA
(Name and address of Manufacturer of completed nuclear component)
- 2. Identification-Manufacturer's Serial No. of Part 11N92 - 2 Nat'l Bd. No. 1079
- (a) Constructed According to Drawing No. J1756 Drawing Prepared by Bingham-Willamette Company
- (b) Description of Part Inspected Mechanical Seal Type RV875B-2
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date 1971, Case No. NONE Class 1

3. Remarks To prevent liquids from escaping from pump, PB Parts consist of:
(Brief description of service for which component was designed)

a.) Seal Holder SN 149285-2b.) Gland-Upper Seal SN 1495283-2

Seal Hydrotested at 2575 PSI.

Note: Items 4-18 not applicable. SEALS SN 11N92-2 FOR RRC-P-1A

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date NOV 21 1983 Signed BINGHAM WILLAMETTE COMPANY By *George Will*
PORTLAND OREGON (Manufacturer)

Certificate of Authorization Expires February 28, 1986 Certificate of Authorization No. H-16-55

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at N/A

Stress analysis report on file at N/A

Design specifications certified by N/A Prof. Eng. State _____ Reg. No. _____

Stress analysis report certified by N/A Prof. Eng. State _____ Reg. No. _____

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Oregon and employed by Department of Commerce have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on NOV 21 1983 19____ and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date NOV 21 1983 19____

[Signature] Inspector's Signature Commission NB P-36 0502 National Board, State, Province and No.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 14" x 11", (2) information in items 1-3 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3, "Remarks".

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material T.S. Nominal Thickness in. Corrosion Allowance in. Dia. ft. in. Length ft. in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long H.T. R.T. Efficiency %

Girth H.T. R.T. No. of Courses

6. Heads: (a) Material T.S. (b) Material T.S.
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a)

(b)

If removable, bolts used (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or attach sketch)

7. Jacket Closure: (Describe as gage and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure 1650 psi at 575 °F Drop Weight Charpy Impact (ft-lb at temp. of °F)

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary, Material Dia. Thickness in. Attachment (Welded, Bolted)
(Kind & Spec. No.) (Subject to pressure)

Floating, Material Dia. Thickness in. Attachment

10. Tubes: Material O.D. in. Thickness Inches or gage. Number Type (Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material T.S. Nominal Thickness in. Corrosion Allowance in. Dia. ft. in. Length ft. in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long H.T. R.T. Efficiency %

Girth H.T. R.T. No. of Courses

13. Heads: (a) Material T.S. (b) Material T.S.
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) Top, bottom, ends

(b) Channel

If removable, bolts used (a) (b) (c) Other fastening (Describe or attach sketch)

14. Design pressure psi at °F Drop Weight Charpy Impact (ft-lb at temp. of °F)

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number Size Location

16. Nozzles

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Manholes, No. Size Location

Openings: Handholes, No. Size Location

Threaded, No. Size Location

18. Supports: Skirt Lugs (Number) Legs (Number) Other (Describe) Attached (Where & How)
(Yes or No)

If Postweld Heat-Treated.



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Residual Heat Removal (RHR) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 12/15/05
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2B RHR-V-633 RHR-V-633	WPPSS* Borg Warner** Flowsolve**	RHR(1)-2B-P1 79966 E660R-1-3	N/A N/A N/A	N/A N/A N/A	1984 1983 2002	----- Replaced Replacement	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced existing valve RHR-V-633. The replacement work was performed as follows:
- 1) Removed existing valve RHR-V-633, Serial No 79966.
 - 2) Installed replacement valve RHR-V-633, Serial No E660R-1-3.
 - 3) Made required socket weld.
 - 4) Performed visual examination on the final socket weld. Visual examination results acceptable.
 - 5) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable.

NOTES-

- 1) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 2) ** Borg Warner valves are now being manufactured by Flowsolve.
- 3) The existing ASME Code Stamped piping system in which the replacement valve RHR-V-633, Serial No E660R-1-3 was installed is Residual Heat Removal (RHR) piping system RHR(1)-2B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement valve RHR-V-633, Serial No E660R-1-3 is certified to comply with ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda requirements.
- 5) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F
 Component Design Pressure: Psig Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve RHR-V-633, Serial No E660R-1-3.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 12/16/05 Date 12/16/05

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements
 Date _____

E660R-1-1 Through E660R-1-6
Certificate Holder's Serial No.

8. Design conditions 3705 psi 100 °F or valve pressure class 1500 (1)
(pressure) (temperature)

9. Cold working pressure 3705 psi at 100°F

10. Hydrostatic test 5575 psi. Disk differential test pressure 4076 psi

11. Remarks: 3/4"-1500#- Y-Globe Valves.
Material: Backseat: SA564-630-1100: HT Code: 52872.

CERTIFICATION OF DESIGN

Design Specification certified by Richard L. Schlosser P.E. State WA Reg. no. 21701
Design Report certified by Ronald S. Farrell P.E. State PA Reg. no. 035216-E

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N1712 Expires 04/15/04
Date 11/05/02 Name Flowserve Corporation Signed RR Decker
(N Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Pennsylvania and employed by One Beacon America Ins. Co. of Boston, MA. have inspected the pump, or valve, described in this Data Report on 12-6-01 to 11-6-02 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11-6-02 Signed [Signature] Commissions Pennsylvania 2392
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)



(1) For manually operated valves only.

289-10116

11-10-02



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Date: 07/22/06

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. **Plant:** Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Service Water (SW) System

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(1)-2 SW(21)-2	WPPSS* WPPSS*	SW(1)-2-P1 SW(21)-2-P1	N/A N/A	N/A N/A	1983 1983	See Item 7 Below See Item 7 Below	Yes, Code Class 3 Yes, Code Class 3

7. **Description Of Work Performed:** Replaced studs and nuts for joints associated with WMA-CC-51A1. The replacement work was performed as follows:

DWG No SW-298-1.3 Upper Joint

- 1) Removed existing studs and nuts from the upper joint associated with WMA-CC-51A1.
- 2) Installed replacement studs and nuts for the upper joint associated with WMA-CC-51A1.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

Dwg No SW-305-6 Upper Joint

- 1) Removed existing studs and nuts from the upper joint associated with WMA-CC-51A1.
- 2) Installed replacement studs and nuts for the upper joint associated with WMA-CC-51A1.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

Dwg No SW-305-6 Lower Joint

- 1) Removed existing studs and nuts from the lower joint associated with WMA-CC-51A1.
- 2) Installed replacement studs and nuts for the lower joint associated with WMA-CC-51A1.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 148 Psig Test Temperature: 68° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/22/06 Date 7/22/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/20/06 to 7/22/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 12723W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/22/06



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Reactor Closed Cooling (RCC) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
- 6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 12/15/05
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCC(5)-2 RCC-RV-34A	WPPSS * Lonergan	RCC(5)-2-P1 137916-2-1	N/A N/A	N/A N/A	1983 1994	----- Replaced	Yes, Code Class 3 Yes, Code Class 3
RCC-RV-34A	Anderson Greenwood	98-09538	N/A	N/A	1999	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing relief valve RCC-RV-34A. The replacement work was performed as follows:
- 1) Removed existing relief valve RCC-RV-34A, Serial No 137916-2-1.
 - 2) Installed replacement relief valve RCC-RV-34A, Serial No 98-09538.
 - 3) Reinstalled existing studs and nuts for the relief valve joint.

NOTES -

- 1) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
- 2) The existing ASME Code Stamped piping system applicable to the replacement relief valve RCC-RV-34A, Serial No 98-09538 is Reactor Closed Cooling (RCC) piping system RCC(5)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 3) The replacement relief valve RCC-RV-34A, Serial No 98-09538 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements.
- 4) Lonergan relief valves are now being manufactured by Anderson Greenwood.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F
 Component Design Pressure: Psig Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NV-1 Code Data Report for the replacement valve RCC-RV-34A, Serial No 98-09538.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
 Type Code Symbol Stamp: Not Applicable
 Certificate of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 12/16/05 Date 12/16/05

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/30/05 to 1/3/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
 By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Gordon Westfall Commissions NB# 10767 A, B, N, I, NS / WA# 10767 W
 Inspector's Signature National Board, State, and Endorsements
 Date Jan 3 / 06

FOR

Certificate Holder's Serial No. 98-09538

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of TX and employed by C.U.I.C. of Boston, MA have inspected the valve described in this Data Report on 1-26-99, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1-26-99 Signed [Signature] Commissions Tex 803
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Fuel Pool Cooling (FPC) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda, Code Case: None
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 01/11/06
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
98-09537*** Disc	Anderson*	98-09537	N/A	N/A	1999	See Item 7 Below Removed Installed Removed Installed	Yes, Code Class 3
Disc	Anderson*	N/A	N/A	N/A	1999		No, Code Class 3
Base Assembly	Anderson**	N98729-32-0006	N/A	N/A	2002		Yes, Code Class 2
Base Assembly	Anderson*	N/A	N/A	N/A	1999		No, Code Class 3
	Anderson**	K99408-31-0002	N/A	N/A	2002		Yes, Code Class 2

7. Description Of Work Performed: Replaced parts for relief valve Serial No 98-09537 (FPC-RV-117A). The replacement work was performed as follows:

- 1) Removed existing disc from the relief valve.
- 2) Installed replacement disc Serial No N98729-32-0006 in the relief valve.
- 3) Removed existing base assembly from the relief valve.
- 4) Installed replacement base assembly Serial No K99408-31-0002 in the relief valve.

NOTES -

- 1) * Anderson = Anderson, Greenwood And Company.
- 2) ** Anderson = Anderson Greenwood Crosby. Anderson, Greenwood And Company parts are now being manufactured by Anderson Greenwood Crosby.
- 3) *** Relief valve Serial No 98-09537 is dedicated spare for relief valve FPC-RV-117A.
- 4) The spare relief valve Serial No 98-09537 (FPC-RV-117A) is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements. The replacement disc Serial No N98729-32-0006 and replacement base assembly Serial No K99408-31-0002 installed in the relief valve are also certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements.
- 5) ASME Section III, Code Class 2 disc and base assembly parts for ASME Section III, Code Class 3 application.
- 6) Reconciliation for ASME Section XI 1989 Edition with no Addenda to ASME Section XI 2001 Edition with 2003 Addenda is as follows:
ASME Section XI Work Plan
The ASME Section XI Plan No 2-1942 was issued during 2nd ISI interval (before December 12, 2005) to comply with Article IWA-4000 of ASME Section XI, 1989 Edition with no Addenda requirements. This work plan implemented during 3rd ISI interval (after December 13, 2005) has been reviewed and it has been determined that the work plan will satisfy the applicable requirements of Article IWA-4000 such as IWA-4150, IWA-4220, etc of ASME Section XI, 2001 Edition with 2003 Addenda.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Reports for the following replacement relief valve parts:

Part Description	Serial No
Disc	N98729-32-0006
Base Assembly	K99408-31-0002

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 1/11/06 Date 1/11/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9/29/05 to 1/12/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

London Westfall Commissions NB#1067 B.N.I.A.NS / WA#10167 W
 Inspector's Signature National Board, State, and Endorsements

Date Jan 17, 2006

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

Delap Supt 1/10/06

As required by the Provisions of the ASME Code, Section III, Division 1 - Not to Exceed One Day's Production

1. Manufactured and certified by Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093
(Name and Address of N Certificate Holder)
2. Manufactured for ENERGY NORTHWEST
(Name and Address of Purchaser or Owner)
3. Location of Installation COLUMBIA GENERATING STATION
(Name and Address)
4. Type SAEK99408 REV.0 BELOW BELOW - 2002
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 WINTER 1971 2 -
(edition) (addenda date) (class) (Code Case No.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) - Revision - Date -
(no.)
7. Remarks BASE MATERIAL - SA479 TYPE 316 - TENSILE - 75,000
STUB END MATERIAL - SA479 TYPE 316 - TENSILE - 75,000
FLANGE MATERIAL - SA105 - TENSILE - 70,000
8. Nom. thickness (in.) - Min. design thickness (in.) - Dia. ID (ft & in.) - Length overall (ft & in.) -
9. When applicable, Certificate Holders' data reports are attached for each item of this report.

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) K99408-31-0001	--	(26)	
(2) K99408-31-0002	--	(27)	
(3) K99408-31-0003	--	(28)	
(4)		(29)	
(5)		(30)	
(6) BASES IN K99408-31-0002		(31)	
(7)		(32)	
(8) FOR VALVE S/N 48-09537		(33)	
(9)		(34)	
(10) (FPC-KV-107A)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure - psi. Temp. - ° F Hydro. test pressure 425 at temp. 70 °
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial No. K99408-31-0001

CERTIFICATE OF DESIGN

Design specifications certified by D.MURPHY P.E. State WA Reg. no. 12542
(when applicable)

Design report* certified by _____ P.E. State _____ Reg. no. _____
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) BASE ASSEMBLIES
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1877 Expires Sep. 30, 2004
Anderson Greenwood Crosby

Date 20-MAR-02 Signed Wrentham, MA by D.E. TUS
(NPT Certificate Holder) (Authorized Representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the
State or Province of Massachusetts and employed by Factory Mutual Insurance Co.
of Johnston, Rhode Island have inspected these items described in this Data Report on
March 20, 20 02 and state that to the best of my knowledge and belief, the Certificate Holder
has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has
been authorized for stamping on the date shown above.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning
the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any
manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 3-20, 20 02

Signed [Signature]
(Authorized Inspector)

Commissions MA-1418
(Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*

Dudup Singh
11/01

As required by the Provisions of the ASME Code, Section III, Division 1 - Not to Exceed One Day's Production

- 1. Manufactured and certified by Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093
(Name and Address of N Certificate Holder)
- 2. Manufactured for ENERGY NORTHWEST
(Name and Address of Purchaser or Owner)
- 3. Location of Installation SNAKE RIVER WAREHOUSE COMPLEX
(Name and Address)
- 4. Type EN97547 REV.A SA479 TYPE 316 75,000 --- 2002
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
- 5. ASME Code, Section III, Division 1: 1971 WINTER 1971 2 ---
(edition) (addenda date) (class) (Code Case N)
- 6. Fabricated in accordance with Const. Spec. (Div. 2 only) --- Revision --- Date ---
(no.)
- 7. Remarks DISC SIN N98729-32-0006 FOR VALVE SIN 98-0952
(FPC-RV-117A)
- 8. Nom. thickness (in.) --- Min. design thickness (in.) --- Dia. ID (ft & in.) --- Length overall (ft & in.) ---
- 9. When applicable, Certificate Holders' data reports are attached for each item of this report.

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) N98729-32-0004	---	(26)	---
(2) N98729-32-0005	---	(27)	---
(3) N98729-32-0006	---	(28)	---
(4)	---	(29)	---
(5)	---	(30)	---
(6)	---	(31)	---
(7)	---	(32)	---
(8)	---	(33)	---
(9)	---	(34)	---
(10)	---	(35)	---
(11)	---	(36)	---
(12)	---	(37)	---
(13)	---	(38)	---
(14)	---	(39)	---
(15)	---	(40)	---
(16)	---	(41)	---
(17)	---	(42)	---
(18)	---	(43)	---
(19)	---	(44)	---
(20)	---	(45)	---
(21)	---	(46)	---
(22)	---	(47)	---
(23)	---	(48)	---
(24)	---	(49)	---
(25)	---	(50)	---

10. Design pressure --- psi. Temp. --- ° F Hydro. test pressure 5400 at temp. 70
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.
This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

Certificate Holder's Serial No. N98729-32-0004

CERTIFICATE OF DESIGN

Design specifications certified by D.MURPHY P.E. State WA Reg. no. 12542
(when applicable)

Design report* certified by _____ P.E. State _____ Reg. no. _____
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Discs
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1877 Expires Sep. 30, 2004
Anderson Greenwood Crosby
Date 2-AUG-02 Signed Wrentham, MA by D. E. Tuttle
(NPT Certificate Holder) (Authorized Representative)

CERTIFICATE OF INSPECTION

the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the
State or Province of Massachusetts and employed by Factory Mutual Insurance Co.
Johnston, Rhode Island have inspected these items described in this Data Report on
August 2, 20 02 and state that to the best of my knowledge and belief, the Certificate Holder
fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has
been authorized for stamping on the date shown above.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning
the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any
manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

8-02, 20 02
[Signature] Commissions MA-1418
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

SATISFACTORY UNSATISFACTORY _____
Mark Bell III 9/4/02
RECIPIENT INSPECTOR / LEVEL / DATE
7/10/71



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Fuel Pool Cooling (FPC) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 02/01/06
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
FPC(1)-1 FPC-RV-117A FPC-RV-117A	WPPSS* Lonergan Anderson Greenwood	FPC(1)-1-P1 137916-1-1 98-09537	N/A N/A N/A	N/A N/A N/A	1983 1994 1999	See Item 7 Below Removed Installed	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing valve FPC-RV-117A. The replacement work was performed as follows:
- 1) Removed existing valve FPC-RV-117A, Serial No 137916-1-1.
 - 2) Installed replacement relief valve FPC-RV-117A, Serial No 98-09537.
 - 3) Reinstalled existing studs and nuts for the relief valve joints.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
- 3) The existing ASME Code Stamped piping system applicable to the replacement relief valve FPC-RV-117A, Serial No 98-09537 is Fuel Pool Cooling (FPC) piping system FPC(1)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement relief valve FPC-RV-117A, Serial No 98-09537 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements.
- 5) Lonergan relief valves are now being manufactured by Anderson Greenwood.
- 6) Reconciliation for ASME Section XI 1989 Edition with no Addenda to ASME Section XI 2001 Edition with 2003 Addenda is as follows:
ASME Section XI Work Plan
The ASME Section XI Plan No 2-1961 was issued during 2nd ISI interval (before December 12, 2005) to comply with Article IWA-4000 of ASME Section XI, 1989 Edition with no Addenda requirements. This work plan implemented during 3rd ISI interval (after December 13, 2005) has been reviewed and it has been determined that the work plan will satisfy the applicable requirements of Article IWA-4000 such as IWA-4150, IWA-4220, etc of ASME Section XI, 2001 Edition with 2003 Addenda.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NV-1 Code Data Report for the replacement valve FPC-RV-117A, Serial No 98-09537.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 2/1/06 Date 2/1/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/24/05 to 2/6/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB # 10767 B.N.I.S., A / WA # 10767 W
Inspector's Signature National Board, State, and Endorsements
Date Feb. 6/06

Certificate Holder's Serial No. 98-09537

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of TX and employed by C.U.I.C. of Boston, MA have inspected the valve described in this Data Report on

1-26-99, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1-26-99 Signed [Signature] Commissions Tex 803
(Authorized Inspector) [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Condensate (COND) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None</p> <p>6. Identification Of Components Repaired Or Replaced And Replacement Components</p> | <p>Date: 12/16/05
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
COND-TK-1A	Chicago Bridge	S-1125	4091	N/A	1975	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced bolts and nuts for roof manway for tank COND-TK-1A. The replacement work was performed as follows:

- 1) Installed twenty (20) bolts for roof manway.
- 2) Installed twenty (20) nuts for roof manway.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] None [X]
Test Pressure: Psig Test Temperature: °F
Component Design Pressure: Psig Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 12/16/05 Date 12/16/05

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/13/05 to 1/3/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB# 10767 A,B,N,I,N,S & WA# 10767W
Inspector's Signature National Board, State, and Endorsements

Date Jan 3, 2006



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

- 1. Owner:** Energy Northwest **Date:** 12/16/05
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Condensate (COND) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
COND-TK-1B	Chicago Bridge	S-1126	4092	N/A	1975	Replacement	Yes, Code Class 3

- 7. Description Of Work Performed:** Replaced bolts and nuts for roof manway for tank COND-TK-1B. The replacement work was performed as follows:
 1) Installed twenty (20) bolts for roof manway.
 2) Installed twenty (20) nuts for roof manway.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None

Test Pressure: Psig

Test Temperature: °F

Component Design Pressure: Psig

Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Date 12/16/05

Date 12/16/05

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/13/05 to 1/3/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Andru Mitchell
Inspector's Signature

Commissions NB# 10767 D.N., I, A, NS WA# 10767W
National Board, State, and Endorsements

Date Jan 3/2006



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Service Water (SW) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 12/30/05
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(2)-2-UG	WPPSS*	SW(2)-2-UG-P1	N/A	N/A	1983	-----	Yes, Code Class 3

- 7. Description Of Work Performed:** Replaced existing studs and nuts for pump SW-P-1B to expansion joint SW-EJ-1B bolted joint. The replacement work was performed as follows:
- 1) Removed existing twenty four (24) studs SW-P-1B to expansion joint SW-EJ-1B bolted joint.
 - 2) Removed existing forty eight (48) studs SW-P-1B to expansion joint SW-EJ-1B bolted joint.
 - 3) Installed replacement twenty four (24) studs SW-P-1B to expansion joint SW-EJ-1B bolted joint.
 - 4) Installed replacement forty eight (48) studs SW-P-1B to expansion joint SW-EJ-1B bolted joint.
 - 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Report.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) Reconciliation for ASME Section XI 1989 Edition with no Addenda to ASME Section XI 2001 Edition with 2003 Addenda is as follows:
 - ASME Section XI Work Plan
 The ASME Section XI Plan No 2-1970 was issued during 2nd ISI interval (before December 12, 2005) to comply with Article IWA-7000 of ASME Section XI, 1989 Edition with no Addenda requirements. This work plan implemented during 3rd ISI interval (after December 13, 2005) has been reviewed and it has been determined that the work plan will satisfy the applicable requirements of Article IWA-4000 such as IWA-4150, IWA-4220, etc of ASME Section XI, 2001 Edition with 2003 Addenda.
 - ASME Section XI Pressure Test
 The pressure test was performed to the requirements of ASME Section XI, 2001 Edition with 2003 Addenda and PPM 8.7.3A, Rev 4



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 213 Psig Test Temperature: 37° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 1/3/06 Date 1/3/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/3/05 to 1/9/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB# 10767 B.N.I., A.S./WA #10767W
 Inspector's Signature National Board, State, and Endorsements
 Date 1/9/06



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest **Date:** 12/30/05
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 2
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Energy Northwest
(b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(2)-2 SW-V-224B SW-V-224B	WPPSS* Hirata Valve Borg Warner	SW(2)-2-P1 N0364C 31329	N/A 2134 N/A	N/A N/A N/A	1983 1980 1978	----- Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing valve SW-V-224B. The replacement work was performed as follows:
- 1) Removed existing valve SW-V-224B, Serial No N0364C.
 - 2) Installed replacement piping pipe.
 - 3) Installed replacement valve SW-V-224B, Serial No 31329.
 - 4) Completed the root pass on circumferential butt welds. See Note 3.
 - 5) Performed visual examination on the root pass of circumferential butt welds. Visual examination results acceptable.
 - 6) Performed magnetic particle (MT) examination on the root pass of circumferential butt welds. Magnetic particle (MT) examination results acceptable. See Note 3.
 - 7) Completed circumferential butt welds. See Note 3.
 - 8) Performed visual examination on circumferential butt welds. Visual examination results acceptable
 - 9) Performed magnetic particle (MT) examination on the final circumferential butt welds. Magnetic particle (MT) examination results acceptable. See Note 3.
 - 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The magnetic particle (MT) examination on the root pass of circumferential butt welds and final circumferential butt welds was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1. The Code Case N-416-1 requirements were implemented since the ASME Section XI Plan No 2-1978 was issued during 2nd ISI interval (before December 12, 2005).



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 213 Psig Test Temperature: 37° F
 Component Design Pressure: 309 Psig Temperature: 150° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NR-1 and NPV-1 Code Data Report for the replacement valve SW-V-224B, Serial No 31329.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 1/3/06 Date 1/3/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/6/05 to 1/6/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB# 10767 B.A.N.I.N.S / WA# 10767
 Inspector's Signature National Board, State, and Endorsements

Date 1/6/06



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Service Water (SW) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1</p> <p>6. Identification Of Components Repaired Or Replaced And Replacement Components</p> | <p>Date: 12/30/05
 Sheet: 2 Of 2
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(2)-2 SW-V-224B SW-V-224B	WPPSS* Hirata Valve Borg Warner	SW(2)-2-P1 N0364C 31329	N/A 2134 N/A	N/A N/A N/A	1983 1980 1978	----- Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 2

7. Description Of Work Performed:

Continuation From Sheet 1 of 2

NOTES-

- 4) The existing ASME Code Stamped piping system in which the replacement valve SW-V-224B, Serial No 31329 was installed is Service Water (SW) piping system SW(2)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement valve SW-V-224B, Serial No 31329 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1976 Addenda requirements.
- 6) ASME Section III, Code Class 2 valve for ASME Section III, Code Class 3 application.
- 7) Reconciliation for ASME Section XI 1989 Edition with no Addenda to ASME Section XI 2001 Edition with 2003 Addenda is as follows:
 - ASME Section XI Work Plan**
 The ASME Section XI Plan No 2-1978 was issued during 2nd ISI interval (before December 12, 2005) to comply with Article IWA-7000 of ASME Section XI, 1989 Edition with no Addenda requirements. The implementation work for ASME Section XI Plan No 2-1978 commenced prior to December 13, 2005 dead line for the 3rd ISI interval.
 In view of the above, reconciliation to the applicable requirements of Article IWA-4000 of ASME Section XI, 2001 Edition with 2003 Addenda is not required.
 - ASME Section XI Pressure Test**
 The pressure test was performed to the requirements of ASME Section XI, 2001 Edition with 2003 Addenda and PPM 8.7.3A, Rev 4.

Flowsolve replaced asbestos packing with graphite. Material identification was verified

11. Description of work: _____
(use of properly identified additional sheet(s) or sketch(es) is acceptable)
as compared to the original documentation package.* Pressure boundary parts and stem were inspected
Valves were assembled and hydro tested to code and specification requirements.

No pressure boundary material was replaced. No welding was performed.

12. Remarks: *Valve S/N 31331 was supplied with 2F14 Studs. Original package indicates this S/N had studs with heat code 2E22. The documentation package includes CMTR's for both.

M.K. Dunkelberger		CERTIFICATE OF COMPLIANCE	
I, _____, certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement activities described above conforms to Section XI of the ASME Code and the National Board Inspection Code "NR" rules.			
National Board Certificate of Authorization No. _____		NR-44	to use the "NR" stamp expires July 10 2007
NR Certificate Holder <u>Flowsolve Corporation</u>			
Date <u>Dec. 1, 2005</u>	Signed <u>M.K. Dunkelberger</u>	Supv. QA Engineering	
	<small>(authorized representative)</small>		<small>(title)</small>
J. Tull		CERTIFICATE OF INSPECTION	
I, _____, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of <u>North Carolina</u> and employed by <u>HSB CT</u> of <u>Hartford, CT</u> have inspected the repair, modification or replacement described in this report on <u>12-2, 2005</u> and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "NR" rules.			
By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.			
Date <u>12-2, 2005</u>	Signed <u>J. Tull</u>	Commissions <u>NC#1421</u>	
	<small>(inspector)</small>		<small>(National Board (incl. endorsements), jurisdiction, and no.)</small>

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
(As Required by the Provisions of the ASME Code, Section III, Div. 1)

1. Manufactured by Nuclear Valve Div. of Borg-Warner, 7500 Tyrone Ave., Van Nuys, CA
(Name and Address of Manufacturer)
2. Manufactured for Tennessee Valley Authority, 400 Commerce Ave., Knoxville, Tenn
(Name and Address of Purchaser or Owner)
3. Location of Installation Hartsville Nuclear Plant, Hartsville, Tenn.
(Name and Address)
4. Pump or Valve Gate Nominal Inlet Size 3 Outlet Size 3 Inch
(inch)

	(a) Model No., Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
	(1)	300#	31328 thru 31333	N/A	402HBB1-001	2	N/A
(3)							
(4)							
(5)		VALVE SW-V-220B, S/N 31329					
(6)							
(7)							
(8)							
(9)							
(10)							

5. The valves are designed to handle a fluid media which includes steam, water, condensate, borated water, etc., associated with a PWR and BWR. The temperature-pressure rating of the media is stated below.
(Brief description of service for which equipment was designed)

6. Design Conditions 720 psi 100 °F or Valve Pressure Class 300# (1)
(Pressure) (Temperature)
7. Cold Working Pressure 720 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Body-Codes 3F60 3F63, 3F55, 3F80 3F71, 3F89	SA 216 WCB	Pacific Metals	
Bonnet-Code 2M22 2L95, 2L99, 2L89, 2M21, 2M18	SA 216 WCB	Pacific Metals	
Gate-Code	SA 216 WCB	Vulcan	
(b) Forgings			
N/A			

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Service Water (SW) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1</p> <p>6. Identification Of Components Repaired Or Replaced And Replacement Components</p> | <p>Date: 01/03/06
 Sheet: 1 Of 2
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(2)-2 SW-V-822B SW-V-822B	WPPSS* Hirata Valve Borg Warner	SW(2)-2-P1 70499-7 31331	N/A N/A N/A	N/A N/A N/A	1983 1977 1978	----- Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 2

- 7. Description Of Work Performed:** Replaced existing valve SW-V-822B. The replacement work was performed as follows:
- 1) Removed existing valve SW-V-822B, Serial No 70499-7.
 - 2) Installed replacement piping pipe.
 - 3) Installed replacement valve SW-V-822B, Serial No 31331.
 - 4) Completed the root pass on circumferential butt welds. See Note 3.
 - 5) Performed visual examination on the root pass of circumferential butt welds. Visual examination results acceptable.
 - 6) Performed magnetic particle (MT) examination on the root pass of circumferential butt welds. Magnetic particle (MT) examination results acceptable. See Note 3.
 - 7) Completed circumferential butt welds. See Note 3.
 - 8) Performed visual examination on circumferential butt welds. Visual examination results acceptable
 - 9) Performed magnetic particle (MT) examination on the final circumferential butt welds. Magnetic particle (MT) examination results acceptable. See Note 3.
 - 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The magnetic particle (MT) examination on the root pass of circumferential butt welds and final circumferential butt welds was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1. The Code Case N-416-1 requirements were implemented since the ASME Section XI Plan No 2-1980 was issued during 2nd ISI interval (before December 12, 2005).



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 211 Psig Test Temperature: 36° F
 Component Design Pressure: 309 Psig Temperature: 150° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NR-1 and NPV-1 Code Data Report for the replacement valve SW-V-822B, Serial No 31331.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 1/3/06 Date 1/3/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/5/05 to 1/6/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Quinn White Commissions ND # 10167 A.B.N. I.N.S. / WA # 10167 W
 Inspector's Signature National Board, State, and Endorsements
 Date 1/6/06



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Service Water (SW) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1</p> <p>6. Identification Of Components Repaired Or Replaced And Replacement Components</p> | <p>Date: 01/03/06
 Sheet: 2 Of 2
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(2)-2 SW-V-822B SW-V-822B	WPPSS* Hirata Valve Borg Warner	SW(2)-2-P1 70499-7 31331	N/A N/A N/A	N/A N/A N/A	1983 1977 1978	----- Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 2

7. Description Of Work Performed:

Continuation From Sheet 1 of 2

NOTES -

- 4) The existing ASME Code Stamped piping system in which the replacement valve SW-V-822B, Serial No 31331 was installed is Service Water (SW) piping system SW(2)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement valve SW-V-822B, Serial No 31331 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1976 Addenda requirements.
- 6) ASME Section III, Code Class 2 valve for ASME Section III, Code Class 3 application.
- 7) Reconciliation for ASME Section XI 1989 Edition with no Addenda to ASME Section XI 2001 Edition with 2003 Addenda is as follows:
 - ASME Section XI Work Plan**
 The ASME Section XI Plan No 2-1980 was issued during 2nd ISI interval (before December 12, 2005) to comply with Article IWA-7000 of ASME Section XI, 1989 Edition with no Addenda requirements. The implementation work for ASME Section XI Plan No 2-1980 commenced prior to December 13, 2005 dead line for the 3rd ISI interval.
 In view of the above, reconciliation to the applicable requirements of Article IWA-4000 of ASME Section XI, 2001 Edition with 2003 Addenda is not required.
 - ASME Section XI Pressure Test**
 The pressure test was performed to the requirements of ASME Section XI, 2001 Edition with 2003 Addenda and PPM 8.7.3A, Rev 4.

FORM NR-1 REPORT OF REPAIR MODIFICATION OR REPLACEMENT
 TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

Repair Sup 6
 12/23/05

1. Work performed by Flowserve Corporation S.O. 36662
(name of NR certificate holder) (P.O. no., job no., etc.)
 1900 S. Saunders Street, Raleigh, NC 27603
(address)

2. Owner Energy Northwest
(name)
 Richland, WA 99352
(address)

VALVE SW-V-822B, S/N 31331.

3. Name, address and identification of nuclear power plant
Columbia Generating Station, N. Power Plant Loop
 Richland, WA 99352

4. System Service Water

5. a: Items Which Required Repair, Modification, or Replacement Activities

No	Identification							Construction Code				Activity
	Type of Item	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	
1	Valve Borg Warner		31329	N/A	N/A	N/A	1978	III	74/Sum '76	N/A	2	Repair
2	Valve Borg Warner		31331	N/A	N/A	N/A	1978	III	74/Sum '76	N/A	2	Repair
3	Valve Borg Warner		31336	N/A	N/A	N/A	1978	III	74/Sum '76	N/A	2	Repair
4												
5												
6												
7												
8												
9												
10												
11												
12												

5. b: Items Installed During Replacement Activities

Type of Item	Installed or Replaced 5a Item No.	Identification						Construction Code			
		Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class
N/A											

6. ASME Code Section XI applicable for inservice inspection: 1989 No N/A
(edition) (addenda) (Code Case(s))

7. ASME Code Section XI used for repairs, modifications, or replacements: 1989 No N/A
(edition) (addenda) (Code Case(s))

8. Construction Code used for repairs, modifications, or replacements: 1974 Sum '76 N/A
(edition) (addenda) (Code Case(s))

9. Design responsibilities: Flowserve Corporation

10. Tests conducted: hydrostatic pneumatic design pressure pressure 1125 psi Code Case(s) N/A

Flowsolve replaced asbestos packing with graphite. Material identification was verified

11. Description of work _____
(use of properly identified additional sheet(s) or sketch(es) is acceptable)
as compared to the original documentation package.* Pressure boundary parts and stem were inspected
Valves were assembled and hydro tested to code and specification requirements.

No pressure boundary material was replaced. No welding was performed.

12. Remarks: *Valve S/N 31331 was supplied with 2F14 Studs. Original package indicates this S/N had
studs with heat code 2E22. The documentation package includes CMTR's for both.

M.K. Dunkelberger		CERTIFICATE OF COMPLIANCE	
I, _____, certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement activities described above conforms to Section XI of the ASME Code and the National Board Inspection Code "NR" rules.			
National Board Certificate of Authorization No. <u>NR-44</u>		to use the "NR" stamp expires <u>July 10</u> , <u>2007</u>	
NR Certificate Holder <u>Flowsolve Corporation</u>			
Date <u>Dec. 1, 2005</u>	Signed <u>M.K. Dunkelberger</u> <small>(authorized representative)</small>	Supv. QA Engineering <small>(title)</small>	
J. Tull		CERTIFICATE OF INSPECTION	
I, _____, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of <u>North Carolina</u> and employed by <u>HSB CT</u> of <u>Hartford, CT</u> have inspected the repair, modification or replacement described in this report on <u>12-2, 2005</u> and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "NR" rules.			
By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.			
Date <u>12-2, 2005</u>	Signed <u>J. Tull</u> <small>(Inspector)</small>	Commissions <u>NC#1421</u> <small>(National Board (incl. endorsements), jurisdiction, and no.)</small>	



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Service Water (SW) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1</p> <p>6. Identification Of Components Repaired Or Replaced And Replacement Components</p> | <p>Date: 01/03/06
 Sheet: 1 Of 2
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(2)-2 SW-V-823B SW-V-823B	WPPSS* Hirata Valve Borg Warner	SW(2)-2-P1 N0364D 31336	N/A 2134 N/A	N/A N/A N/A	1983 1980 1978	----- Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 2

- 7. Description Of Work Performed:** Replaced existing valve SW-V-823B. The replacement work was performed as follows:
- 1) Removed existing valve SW-V-823B, Serial No N0364C.
 - 2) Installed replacement piping pipe.
 - 3) Installed replacement valve SW-V-823B, Serial No 31336.
 - 4) Completed the root pass on circumferential butt welds. See Note 3.
 - 5) Performed visual examination on the root pass of circumferential butt welds. Visual examination results acceptable.
 - 6) Performed magnetic particle (MT) examination on the root pass of circumferential butt welds. Magnetic particle (MT) examination results acceptable. See Note 3.
 - 7) Completed circumferential butt welds. See Note 3.
 - 8) Performed visual examination on circumferential butt welds. Visual examination results acceptable
 - 9) Performed magnetic particle (MT) examination on the final circumferential butt welds. Magnetic particle (MT) examination results acceptable. See Note 3.
 - 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The magnetic particle (MT) examination on the root pass of circumferential butt welds and final circumferential butt welds was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1. The Code Case N-416-1 requirements were implemented since the ASME Section XI Plan No 2-1981 was issued during 2nd ISI interval (before December 12, 2005).



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 211 Psig Test Temperature: 36° F
 Component Design Pressure: 309 Psig Temperature: 150° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NR-1 and NPV-1 Code Data Report for the replacement valve SW-V-823B, Serial No 31336.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 1/3/06 Date 1/3/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/6/05 to 1/6/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Andrew Westall Commissions NB #10767 B, N, A, I, NS / WA #10767 W
 Inspector's Signature National Board, State, and Endorsements
 Date 1/6/06



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Service Water (SW) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1</p> <p>6. Identification Of Components Repaired Or Replaced And Replacement Components</p> | <p>Date: 01/03/06
 Sheet: 2 Of 2
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(2)-2 SW-V-823B SW-V-823B	WPPSS* Hirata Valve Borg Warner	SW(2)-2-P1 N0364D 31336	N/A 2134 N/A	N/A N/A N/A	1983 1980 1978	----- Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 2

7. Description Of Work Performed:

Continuation From Sheet 1 of 2

NOTES-

- 4) The existing ASME Code Stamped piping system in which the replacement valve SW-V-823B, Serial No 31336 was installed is Service Water (SW) piping system SW(2)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement valve SW-V-823B, Serial No 31336 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1976 Addenda requirements.
- 6) ASME Section III, Code Class 2 valve for ASME Section III, Code Class 3 application.
- 7) Reconciliation for ASME Section XI 1989 Edition with no Addenda to ASME Section XI 2001 Edition with 2003 Addenda is as follows:
 - ASME Section XI Work Plan**
 The ASME Section XI Plan No 2-1981 was issued during 2nd ISI interval (before December 12, 2005) to comply with Article IWA-7000 of ASME Section XI, 1989 Edition with no Addenda requirements. The implementation work for ASME Section XI Plan No 2-1981 commenced prior to December 13, 2005 dead line for the 3rd ISI interval.
 In view of the above, reconciliation to the applicable requirements of Article IWA-4000 of ASME Section XI, 2001 Edition with 2003 Addenda is not required.
 - ASME Section XI Pressure Test**
 The pressure test was performed to the requirements of ASME Section XI, 2001 Edition with 2003 Addenda and PPM 8.7.3A, Rev 4.

FORM NR-1 REPORT OF REPAIR MODIFICATION OR REPLACEMENT
 TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

Richard Siegel
12/23/05

1. Work performed by Flowserve Corporation S.O. 36662
(name of NR certificate holder) (P.O. no., job no., etc.)
1900 S. Saunders Street, Raleigh, NC 27603

2. Owner Energy Northwest
(address)
Richland, WA 99352
(name)
VALVE SW-V-823B, SIN 31336

3. Name, address and identification of nuclear power plant Columbia Generating Station, N. Power Plant Loop
Richland, WA 99352

4. System Service Water

5. a: Items Which Required Repair, Modification, or Replacement Activities

Identification								Construction Code				Activity
No	Type of Item	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	Repair/Mod/Replace
1	Valve	Borg Warner	31329	N/A	N/A	N/A	1978	III	74/Sum '76	N/A	2	Repair
2	Valve	Borg Warner	31331	N/A	N/A	N/A	1978	III	74/Sum '76	N/A	2	Repair
3	Valve	Borg Warner	31336	N/A	N/A	N/A	1978	III	74/Sum '76	N/A	2	Repair
4												
5												
6												
7												
8												
9												
10												
11												
12												

5. b: Items Installed During Replacement Activities

Identification								Construction Code			
Type of Item	Installed or Replaced 5a Item No.	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class
N/A											

6. ASME Code Section XI applicable for inservice inspection: 1989 No N/A
(edition) (addenda) (Code Case(s))

7. ASME Code Section XI used for repairs, modifications, or replacements: 1989 No N/A
(edition) (addenda) (Code Case(s))

8. Construction Code used for repairs, modifications, or replacements: 1974 Sum '76 N/A
(edition) (addenda) (Code Case(s))

9. Design responsibilities: Flowserve Corporation

10. Tests conducted: hydrostatic pneumatic design pressure pressure 1125 psi Code Case(s) N/A

Flowsolve replaced asbestos packing with graphite. Material identification was verified

11. Description of work _____
(use of properly identified additional sheet(s) or sketch(es) is acceptable)
as compared to the original documentation package.* Pressure boundary parts and stem were inspected
Valves were assembled and hydro tested to code and specification requirements.

No pressure boundary material was replaced. No welding was performed.

12. Remarks: *Valve S/N 31331 was supplied with 2F14 Studs. Original package indicates this S/N had
studs with heat code 2E22. The documentation package includes CMTR's for both.

M.K. Dunkelberger		CERTIFICATE OF COMPLIANCE	
I, _____, certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement activities described above conforms to Section XI of the ASME Code and the National Board Inspection Code "NR" rules.			
National Board Certificate of Authorization No. <u>NR-44</u>		to use the "NR" stamp expires <u>July 10</u> <u>2007</u>	
NR Certificate Holder <u>Flowsolve Corporation</u>			
Date <u>Dec. 1, 2005</u>	Signed <u>M.K. Dunkelberger</u> <small>(authorized representative)</small>	Supv. QA Engineering <small>(title)</small>	
J. Tull		CERTIFICATE OF INSPECTION	
I, _____, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of <u>North Carolina</u> and employed by <u>HSB CT</u> of <u>Hartford, CT</u> have inspected the repair, modification or replacement described in this report on <u>12-2, 2005</u> and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "NR" rules.			
By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.			
Date <u>12-2, 2005</u>	Signed <u>J. Tull</u> <small>(inspector)</small>	Commissions <u>NC # 1421</u> <small>(National Board (incl. endorsements), jurisdiction, and no.)</small>	

PLAN No. 2-1981

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
 As Required by the Provisions of the ASME Code, Section III, Div. 1

Philip Smith

1. Manufactured by Nuclear Valve Div., Borg Warner, 7500 Tyrone Ave., Van Nuys, Calif. 12/23/05.
(Name and Address of N Certificate Holder)
2. Manufactured for Tennessee Valley Authority, 400 Commerce Ave., Knoxville, Tenn.
(Name and Address of Purchaser or Owner)
3. Location of Installation Hartsville Nuclear Plant, Hartsville, Tenn.
(Name and Address)
4. Pump or Valve Gate Valve Nominal Inlet Size 3 (inch) Outlet Size 3 (inch)

(a) Model No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
300#	31334 thru 31339	N/A	402HBB1-001	2	N/A	1978
(1)						
(2)						
(3)						
(4)						
(5)	VALVE SW-V-823B, SIN 31336					
(6)						
(7)						
(8)						
(9)						
(10)						

5. The valves are designed to handle a fluid media which includes steam, water condensate, borated water, etc., associated with a PWR and BWR. The temperature pressure rating of the media is stated below.
(Brief description of service for which equipment was designed)

6. Design Conditions 720 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class 300 (1)
7. Cold Working Pressure 720 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Body-Codes 3F78, 3F84, 3F56, 3F86, 3F82, 3F74	SA 216 WCB	Pacific Metals	*Reworked the Guide & Rewelded using 3M39 Weld Rod and Rehydro Tested.
Bonnet-Codes 2M20, 2M08, 2L92, 2M16, 2M17, 2L94	SA 216 WCB	Pacific Metals	
Gate-Code 3J36	SA 216 WCB	Vulcan Steel	
(b) Forgings			
N/A			

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable

Date: 12/16/05
Sheet: 1 Of 1
Unit: Not Applicable

- 4. **Identification Of System:** Reactor Closed Cooling (RCC) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCC-RV-34A	Anderson Greenwood	98-09538	N/A	N/A	1999	-----	Yes, Code Class 3
Disc	Anderson Greenwood	N/A	N/A	N/A	N/A	Replaced	No, Code Class 3
Disc	Anderson Greenwood	N98729-32-0005	N/A	N/A	2002	Replacement	Yes, Code Class 2

- 7. **Description Of Work Performed:** Replaced disc for relief valve RCC-RV-34A. The replacement work was performed as follows:
 - 1) Removed existing disc from the relief valve.
 - 2) Installed replacement disc in the relief valve.
 - 3) Reassembled the relief valve.

NOTES-

- 1) ASME Section III, Code Class 2 disc for ASME Section III, Code Class 3 application.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F
 Component Design Pressure: Psig Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement disc Serial No N98729-32-0005.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 12/16/05 Date 12/16/05

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/20/05 to 1/3/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Anton Altschell Commissions NB*10767 A,B,N,I,NS / WA*10767W
 Inspector's Signature National Board, State, and Endorsements

Date Jan 3, 2006

Reddy Singh

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL 17/15/05
NUCLEAR PARTS AND APPURTENANCES*

As required by the Provisions of the ASME Code, Section III, Division 1 - Not to Exceed One Day's Production

- 1. Manufactured and certified by Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093
(Name and Address of N Certificate Holder)
- 2. Manufactured for ENERGY NORTHWEST
(Name and Address of Purchaser or Owner)
- 3. Location of Installation SNAKE RIVER WAREHOUSE COMPLES
(Name and Address)
- 4. Type EN97547 REV.A SA479 TYPE 316 75,000 -- 2002
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
- 5. ASME Code, Section III, Division 1: 1971 WINTER 1971 2 --
(edition) (addenda date) (class) (Code Case No.)
- 6. Fabricated in accordance with Const. Spec. (Div. 2 only) -- Revision -- Date --
(no.)
- 7. Remarks _____

8. Nom. thickness (in.) -- Min. design thickness (in.) -- Dia. ID (ft & in.) -- Length overall (ft & in.) --

9. When applicable, Certificate Holders' data reports are attached for each item of this report.

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) <u>N98729-32-0004</u>	<u>--</u>	(26) _____	_____
(2) <u>N98729-32-0005</u>	<u>--</u>	(27) _____	_____
(3) <u>N98729-32-0006</u>	<u>--</u>	(28) _____	_____
(4) _____	_____	(29) _____	_____
(5) _____	_____	(30) _____	_____
(6) <u>VALVE RCC-RV-34A,</u>	_____	(31) _____	_____
(7) _____	_____	(32) _____	_____
(8) <u>DISC SIN N98729-32-0006</u>	_____	(33) _____	_____
(9) _____	_____	(34) _____	_____
(10) _____	_____	(35) _____	_____
(11) _____	_____	(36) _____	_____
(12) _____	_____	(37) _____	_____
(13) _____	_____	(38) _____	_____
(14) _____	_____	(39) _____	_____
(15) _____	_____	(40) _____	_____
(16) _____	_____	(41) _____	_____
(17) _____	_____	(42) _____	_____
(18) _____	_____	(43) _____	_____
(19) _____	_____	(44) _____	_____
(20) _____	_____	(45) _____	_____
(21) _____	_____	(46) _____	_____
(22) _____	_____	(47) _____	_____
(23) _____	_____	(48) _____	_____
(24) _____	_____	(49) _____	_____
(25) _____	_____	(50) _____	_____

10. Design pressure -- psi. Temp. -- ° F Hydro. test pressure 5400 at temp. 70 ° F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in items 2 and 3 on this Data Report included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial No. N98729-32-0004

CERTIFICATE OF DESIGN

Design specifications certified by D.MURPHY P.E. State WA Reg. no. 12542
(when applicable)

Design report* certified by _____ P.E. State _____ Reg. no. _____
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Discs
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1877 Expires Sep. 30, 2004

Anderson Greenwood Crosby

Date 2-AUG-02 Signed Wrentham, MA by D. E. Tuttle
(NPT Certificate Holder) (Authorized Representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Insurance Co. of Johnston, Rhode Island have inspected these items described in this Data Report on August 2, 20 02 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 8-02, 20 02

Signed [Signature]
(Authorized Inspector)

Commissions MA-1418
(Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

SATISFACTORY UNSATISFACTORY _____
Mark Bell III 7/4/02
RECEPTION INSPECTOR / LEVEL / DATE
7/10/02



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest **Date:** 01/03/06
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW-P-1B	Byron Jackson	731-S-0012*	N/A	N/A	1975	-----	Yes, Code Class 3

7. Description Of Work Performed: Install pipe clamps for motor cooling water piping for pump SW-P-1B. The work was performed as follows:

- 1) Removed the pipe clamps from the existing discharge head of pump SW-P-1B, Serial No 731-S-0013*.
- 2) Installed by welding the pipe clamps to the replacement discharge head of pump SW-P-1B, Serial No 731-S-0012*.

NOTES -

- 1) * Serial No 731-S-0012 pump was previously removed from SW-P-1A location and is now installed in SW-P-1B location, Serial No 731-S-0013.
- 2) Reconciliation for ASME Section XI 1989 Edition with no Addenda to ASME Section XI 2001 Edition with 2003 Addenda is as follows:
ASME Section XI Work Plan
The ASME Section XI Plan No 2-1994 was issued during 2nd ISI interval (before December 12, 2005) to comply with Article IWA-4000 of ASME Section XI, 1989 Edition with no Addenda requirements. This work plan implemented during 3rd ISI interval (after December 13, 2005) has been reviewed and it has been determined that the work plan will satisfy the applicable requirements of Article IWA-4000 such as IWA-4150, IWA-4220, etc of ASME Section XI, 2001 Edition with 2003 Addenda.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 1/3/06 Date 1/3/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/3/05 to 1/9/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB# 10767 B.N.I.A.N.S / WA# 10767 W
Inspector's Signature National Board, State, and Endorsements
Date 1/9/06



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Fuel Pool Cooling (FPC) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 04/19/06
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
FPC(1)-1 FPC-RV-117B FPC-RV-117B	WPPSS* Lonergan Anderson Greenwood	FPC(1)-1-P1 137916-1-2 98-09536	N/A N/A N/A	N/A N/A N/A	1983 1994 1999	See Item 7 Below Removed Installed	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 3

- 7. Description Of Work Performed:** Replaced existing valve FPC-RV-117B. The replacement work was performed as follows:
- 1) Removed existing valve FPC-RV-117B, Serial No 137916-1-2.
 - 2) Installed replacement relief valve FPC-RV-117B, Serial No 98-09536.
 - 3) Reinstalled existing studs and nuts for the relief valve joints.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
- 3) The existing ASME Code Stamped piping system applicable to the replacement relief valve FPC-RV-117B, Serial No 98-09536 is Fuel Pool Cooling (FPC) piping system FPC(1)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement relief valve FPC-RV-117B, Serial No 98-09536 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements.
- 5) OEM/OES Lonergan relief valves are now being manufactured by OEM/OES Anderson Greenwood.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NV-1 Code Data Report for the replacement valve FPC-RV-117B, Serial No 98-09536.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 4/19/06 Date 4/19/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/5/06 to 4/26/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Harold Woodall Commissions NB# 10767 B.N.A.I.N.S / WA 10767W
 Inspector's Signature National Board, State, and Endorsements

Date April 26 /06

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES* As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

- 1. Manufactured and certified by ANDERSON, GREENWOOD & CO. 3950 GREENBRIAR, STAFFORD, TX 77477
(name and address of NV Certificate Holder)
- 2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY, P.O. BOX 968, RICHLAND, WA 99352
(name and address of Purchaser)
- 3. Location of installation WNP -2 WHS COMPLEX, WHSE 1 NORTH POWER PLANT LOOP, RICHLAND, WA 99352
(name and address)
- 4. Valve NJL14J-DS121-DG0150
(model no., series no.) Orifice size 0.312 (in.) Nom. inlet size 3/4 (in.) Outlet size 1 (in.)
- 5. ASME Code, Section III, Division 1: 1971 (edition) W-71 (addenda date) 3 (class) NA (Code Case no.)
- 6. Type Spring (spring, pilot or power operated) 150 (set pressure, psig) Fixed (blowdown, psig) 70°F (rated temp.) 225 (hydro. test, psig, inlet) at Ambient of
- 7. Identification 98-09536 (Cert. Holder's serial no.) NA (CRN) N11.1167 R/A (drawing no.) NA (Nat'l. Bd. no.) 1999 (year built)
- 8. Control ring settings NA CBOM N07.0006.002 R/A
- 9. Pressure retaining items: FPC-RV-117B, SIN 98-09536

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body/Bonnet	B824-3	SA216-WCB	70
Bonnet or Yoke Inl Flg.	621YNF	SA105	70
Support Rods Out Flg.	448ZNF	SA105	70
Nozzle - Base	B794-1	SA351-CF8M	75
Disk	B728	SA479-316	75
Spring Washers/Step Spring	B713	SA479-316	75
Adjusting Screws /screw Guide	704019	SA479-316	75
Stem	B762	SA479-316	75
Spring	8E5901	A313-316	*
Bolting - Screw Comp.	B825	SA479-316	75
Other Items - Cap	B722	SA479-316	75
Gag Screw	B765	SA479-316	75

Handwritten signature and note: 4/19/06 Strength

10. Relieving capacity 17.8 GPM (steam or fluid, lb/hr) @ 10% (psi) overpressure as certified by the National Board 1/25/85 (date)

11. Remarks: *Spring is exempt from material requirements of NC-2000 but meets design requirements of NC-3595.

CERTIFICATION OF DESIGN

Design Specification certified by Abbas A. Mostala P.E. State WA Reg. no. 28777
Design Report certified by NA P.E. State NA Reg. no. NA

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

NV Certificate of Authorization No. N-2825 Expires 9/10/99

Date 1/26/99 Name Anderson, Greenwood & Co. Signed Joseph A. Parker
(NV Certificate Holder) (authorized representative)

*Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FOR

Certificate Holder's Serial No. 98-0952

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of TX and employed by C.U.I.C.

of Boston, MA have inspected the valve described in this Data Report on

1-26-99, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1-26-99 Signed [Signature] (Authorized Inspector) Commissions TEX803 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Service Water (SW) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None</p> <p>6. Identification Of Components Repaired Or Replaced And Replacement Components</p> | <p>Date: 01/03/06
 Sheet: 1 Of 3
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(1)-2UG SW-P-1B SW-P-1B	WPPSS* Byron Jackson Byron Jackson	SW(1)-2UG-P1 731-S-0013 731-S-0012	N/A N/A N/A	N/A N/A N/A	1983 1975 1975	----- Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 3

- 7. Description Of Work Performed:** Replaced existing pump SW-P-1B. The replacement work was performed as follows:
- 1) Removed existing pump SW-P-1B, Serial No 731-S-0013.
 - 2) Installed replacement pump SW-P-1B, Serial No 731-S-0012. See Notes 3 and 6.
 - 3) Installed replacement studs, nuts and cap screws for the pump bolted joints.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Report.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) Serial No 731-S-0012 pump was previously removed from SW-P-1A location and is now installed in SW-P-1B location (Serial No 731-S-0013).
- 4) The existing ASME Code Stamped piping system in which the replacement pump SW-P-1B, Serial No 731-S-0012 was installed is Service Water (SW) piping system SW(1)-2UG-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement pump SW-P-1B, Serial No 731-S-0012 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F
 Component Design Pressure: Psig Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See following attached Code Data Reports:

Data Report	Pump Serial No	Part Serial No
NPV-1	731-S-0012 (Replacement pump)	Not Applicable
NPV-1	731-S-0013 (Replaced pump)	Not Applicable
NR-1	731-S-0012 (Pump casing 1 st stage)	Not Applicable

Continued On Sheet 3 of 3

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 1/4/06 Date 1/4/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/3/05 to 1/9/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

John W. McGill Commissions NB*10767 B, N, A, I, N's / WA*10767 W
 Inspector's Signature National Board, State, and Endorsements

Date 1/9/06



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 01/03/06

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 2 Of 3

Unit: Not Applicable

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Service Water (SW) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(1)-2UG	WPPSS*	SW(1)-2UG-P1	N/A	N/A	1983	-----	Yes, Code Class 3
SW-P-1B	Byron Jackson	731-S-0013	N/A	N/A	1975	Replaced	Yes, Code Class 3
SW-P-1B	Byron Jackson	731-S-0012	N/A	N/A	1975	Replacement	Yes, Code Class 3

7. Description Of Work Performed:

Continuation From Sheet 1 of 3

6) The following ASME parts previously removed from pump Serial No 731-S-0012 were refurbished by Flowserve in accordance with Flowserve's National Board Inspection Code (NBIC) "NR" stamp/program:

- Suction Bell
- Series Case
- Series Case
- Top Case
- Bottom Column
- Middle (Intermediate) Column
- Top Column
- Discharge Head
- Stuffing Box

7) Reconciliation for ASME Section XI 1989 Edition with no Addenda to ASME Section XI 2001 Edition with 2003 Addenda is as follows:

ASME Section XI Work Plan

The ASME Section XI Plan No 2-2013 was issued during 2nd ISI interval (before December 12, 2005) to comply with Article IWA-7000 of ASME Section XI, 1989 Edition with no Addenda requirements. The implementation work for ASME Section XI Plan No 2-2013 commenced prior to December 13, 2005 dead line for the 3rd ISI interval.

In view of the above, reconciliation to the applicable requirements of Article IWA-4000 of ASME Section XI, 2001 Edition with 2003 Addenda is not required.



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Service Water (SW) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
- 6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 01/03/06
Sheet: 3 Of 3
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(1)-2UG SW-P-1B SW-P-1B	WPPSS* Byron Jackson Byron Jackson	SW(1)-2UG-P1 731-S-0013 731-S-0012	N/A N/A N/A	N/A N/A N/A	1983 1975 1975	----- Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 3

9. **Remarks** (Applicable Manufacturer's Data Reports to be attached): See following attached Code Data Reports:

Continuation From Sheet 1 of 3 (Back)

<u>Data Report</u>	<u>Pump Serial No</u>	<u>Part Serial No</u>
NR-1	731-S-0012 (Pump casing 2 nd stage)	Not Applicable
NR-1	731-S-0012 (Pump casing 3 rd stage)	Not Applicable
NR-1	731-S-0012 (Pump discharge head)	H-1502
NPP-1	731-S-0012 (Pump discharge head)	H-1502
NR-1	731-S-0012 (Pump middle column)	H-1503
NPP-1	731-S-0012 (Pump middle column)	H-1503
NR-1	731-S-0012 (Pump top column)	H-1506
NPP-1	731-S-0012 (Pump top column)	H-1506
NR-1	731-S-0012 (Pump bottom column)	H-1508
NPP-1	731-S-0012 (Pump bottom column)	H-1508

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code Rules

Rudolph S. G. 12/30/05

BYRON JACKSON PUMP DIVISION

1. Manufactured by BORG WARNER CORPORATION, L. A. CAL. Order No. 731-S-0012
(Name & Address of Manufacturer)

2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM Order No. 2808-23
(Name and Address)

3. Owner WASHINGTON PUBLIC POWER SUPPLY SYSTEM

4. Location of Plant HANFORD RESERVATION OF U. S. ATOMIC ENERGY COMMISSION

5. Pump or Valve Identification VTC-VERTICAL TURBINE CIRCULATED
STANDBY SERVICE WATER PUMP SW-P-1B SIN 731-S-0012 (REPLACEMENT)
(Brief description of service for which equipment was designed)

(a) Drawing No. OUTLINE 2C-5173 REV A SECTIONAL IF-7320 REV A Prepared by RAUL CASTILLO RAUL CASTILLO

(b) National Board No. NONE

RVP - P. P. I. A.
 by: *[Signature]* Date 5-15-05

6. Design Conditions 300 (Pressure) psi 150 °F (Temperature)

7. The material, design, construction, and workmanship complies with ASME Code Section III. Class 3
 Edition 1971, Addenda Date WINTER 1971, Case No. NONE

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
SUCTION BELL	SA 216 GR WCB		110014
TOP CASE	SA 216 GR WCB		109321
SERIES CASE	SA 216 GR WCB		110408
SERIES CASE	SA 216 GR WCB		109096
STUFFING BOX	SA 351 GR CA15		109152
(b) Forgings			

02001037

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items, 1, 2, 5a and 5b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
HEX HEAD CAP SCREWS	SA 193 GR B 7		109131
HEX HEAD CAP SCREWS	SA 193 GR B 7		109132
HEX NUTS	SA 194 GR 2 H		109133
STUDS	SA 193 GR B 7		109200
HEX NUTS	SA 194 GR 2 H		109157
HEX NUTS	SA 194 GR 2 H		109135
(d) Other Parts			
DISCHARGE HEAD	SA 105 GR II		109184
COLUMN TOP	SA 106 GR B		109185
COLUMN BOTTOM	SA 106 GR B		109190
COLUMN MIDDLE	SA 106 GR B		109187

8. Hydrostatic test 450 psi.

CERTIFICATION OF DESIGN

Design information on file at BYRON JACKSON PUMP DIVISION
 Stress analysis report on file at BYRON JACKSON PUMP DIVISION
 Design specifications certified by DAVID MURPHY (1) Prof. Eng. State WASH. Reg. No. 12542
 Stress analysis report certified by DOUGLAS B. NICKERSON (1) Prof. Eng. State CALIF Reg. No. 1314
 (1) Signature not required. List name only.

We certify that the statements made in this report are correct.

Date 26 Sept 19 75 Signed BYRON JACKSON PUMP DIV. By A. Jankovic
(Manufacturer) **DIRECTOR OF QUALITY CONTROL**
 Certificate of Authorization No. N 1130 expires 16 JUNE 1978

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of CALIFORNIA and employed by DIV. OF INDUSTRIAL SAFETY of CALIFORNIA have inspected the equipment described in this Data Report on Sept. 26, 1975, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date Sept. 26, 19 75

E. H. Cahell
(Inspector)

Commissions Calif. 803
(National Board, State, Province and No.)

0101033

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
HEX HEAD CAP SCREWS	SA 193 GR B 7		109131
HEX HEAD CAP SCREWS	SA 193 GR B 7		109132
HEX NUTS	SA 194 GR 2 H		109133
STUDS	SA 193 GR B 7		109200
HEX NUTS	SA 194 GR 2 H		109157
HEX NUTS	SA 194 GR 2 H		109135
(d) Other Parts			
DISCHARGE HEAD	SA 105 GR II		109183
COLUMN TOP	SA 106 GR B		109186
COLUMN BOTTOM	SA 106 GR B		109189
COLUMN MIDDLE	SA 106 GR B		109188

8. Hydrostatic test 450 psi.

CERTIFICATION OF DESIGN

Design information on file at BYRON JACKSON PUMP DIVISION
 Stress analysis report on file at BYRON JACKSON PUMP DIVISION
 Design specifications certified by DAVID MURPHY (1) Prof. Eng. State WASH. Reg. No. 12542
 Stress analysis report certified by DOUGLAS B. NICKERSON (1) Prof. Eng. State CALIF. Reg. No. 1314
 (1) Signature not required. List name only.

We certify that the statements made in this report are correct.

Date 26 Sept 19 75 Signed BYRON JACKSON PUMP DIV. By A. Jackson
 (Manufacturer) DIRECTOR OF QUALITY CONTROL
 Certificate of Authorization No. N 1130 expires 16 JUNE 1978

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of CALIFORNIA and employed by DIV. OF INDUSTRIAL SAFETY of CALIFORNIA have inspected the equipment described in this Data Report on Sept 26, 1975, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.
 By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date Sept 26, 1975

E. H. Coburn (Inspector) Commissions Calif 883 (National Board, State, Province and No.)

0 2 0 0 1 0 3 9

PLAN No. 2-13



Byron Jackson Pump Division

BORG-WARNER CORPORATION

P.O. BOX 2017 TERMINAL ANNEX, LOS ANGELES, CALIFORNIA 90054 • 213/587-6171

Quality Dept
12/30/05

Customer: WASHINGTON PUBLIC POWER
Address: _____

Date: 20 AUGUST, 1975
Subject: 28 K X H 3 stg. VCT
Contract No.: 2808-23
Byron Jackson Job No/s: 731-S-0012

Ref. Drg. No. _____

Gentlemen:

We are transmitting herewith data as listed below, verifying integrity of product

Data Submittal

ROUTE CARD NUMBER	ITEM NO.	PART NAME	DRAWING NO.	MATERIAL	HEAT NO.	Data Submittal												
						CHEM	MECH	HT	FC	RT	PT	MT	UT	HYD	HEL	DECH	DWRD	
110014		SUCTION BELL ✓	312225	ASME SA 216 GR WCB	C 729	X	X	X	X							X	X	X
109321		TOP CASE	221696	ASME SA 216 GR WCB	C 165	X	X	X	X							X	X	X
110408		SERIES CASE ✓	221698	ASME SA 216 GR WCB	D 177	X	X	X	X							X		
109096		SERIES CASE ✓	221698	ASME SA 216 GR WCB	D 190	X	X	X	X							X		
109337		IMPELLER ✓	221893	ASTM B 143 ALLOY 905	AAF-8	X	X											
109336		IMPELLER ✓	221893	ASTM B 143 ALLOY 905	B-2 B J	X	X											
109335		IMPELLER ✓	221893	ASTM B 143 ALLOY 905	AAF-9	X	X											
V-183461		IMPELLER LINER ✓	213331	ASTM B 143 ALLOY 905	----	CERT. OF COMPLIANCE												
109184		DISCHARGE HEAD	509273	ASME SA 515 GR 70 ASME SA 105 GR II	FAB	X	X					X				X		X
109185		COLUMN-TOP	312405	ASME SA 106 GR B	FAB	X	X					X				X		X
109190		COLUMN-BOTTOM	312265	ASME SA 106 GR B	FAB	X	X					X				X		X
109187		COLUMN-MIDDLE	312266	ASME SA 106 GR B	FAB	X	X					X				X		X
109105		SHAFT	312145	ASTM A 276 TP 410 HT	831843	X	X	X										

Yours very truly,

Quality Control Department
Byron Jackson Pump Division

By *Lillian E. Donahoe*
Documentation





PLAN No. 2-2013

Dudip Supb
12/30/05

Nuclear Pump Operations
Charlotte Nuclear Service Center
2801-T Hutchison McDonald Rd
Charlotte, NC 28269

SW-P-1B, SIN 731-S-0012

Date: 30 Nov 2005

Customer: Energy Northwest
Location: Columbia Generating Station
Customer P.O.: 00319666, Revision 004
Flowserve-Charlotte Job No.: CC005-3971
Pump Type: Flowserve - Byron Jackson Model 28KXH - 3 Stage
Service: Standby Service Water Pump
P.O. Line Item 0008 - Special Certification Requirements

Dudip
12/1/05

Note: This Certificate is specific to Line Item 0008 and covers the Assembly and Test Results using the Refurbished Bowls, Line Items 0002, 3 and 4; the Suction Bell, Line Item 0001; and various other customer-supplied parts identified in the Customer Purchase Order referenced above for the refurbishment of pump serial number 731-S-0012.

CERTIFICATE OF COMPLIANCE

This is to certify that the rework performed on pressure retaining items has been performed to the requirements of ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda. The Repair Plan has been implemented with regard to Charlotte's "NR" Nuclear Quality Assurance Program as described in Quality Manual Edition 1, Revision 01, dated 18 July 2005, which meets the Quality Program requirements of Part RA-2300, National Board Inspection Code, NBIC, and ASME Section XI, 1989 Edition.

This is also to certify that the same parts supplied by the customer have been used in the assembly of the refurbished pump serial number 731-S-0012. This statement is substantiated through documentation which is in agreement with the customer purchase order and the repair plan. This supportive documentation, NBU-ICF-02 Parts List, is included in the documentation package supplied with the completed pump. The same performance, hydraulic and running tests conducted on this complete unit, serial number 731-S-0012, was performed in accordance with the original design specification 2808-23, Section 15A, Subsection 5.0, with a submersible depth of no greater than 12 Feet, and with exclusions relating to the test motor as specified in the Customer Purchase Order.

(continued on page 2)

CERTIFICATE OF COMPLIANCE
(continued from page 1)

The results of such testing is depicted through curves indicating Head, Efficiency and Brake Horse Power performance. Also documented is the required submergence as a function of flow, and performance points at design, shutoff and run-out conditions. This performance data was submitted in data and curve format, as applicable, and approved by the customer.


Those Tests identify the following parameters have been met:

1. The pump shutoff or deadhead condition is a maximum of 712Ft, H2O
2. Flowserve has achieved the highest possible Discharge Head at the Design Flow Rate of 10,500 GPM while maintaining a shutoff Head of less than 712Ft
3. There was no change to NPSH requirements for this pump due to having trimmed the casing vanes as per the repair plan
4. The Final Impellers' Diameter has been included on the Pump Performance Curve

Further, in addition to the dynamic balance certificates supplied in the completed documentation package, this is to certify that impellers were individually dynamically balanced to acceptance levels as shown on the related certifications.

This is also to certify that the work performed on all items listed above, has been performed in accordance with the customer requirements, including the approval of non-conformances and/or exceptions; the approved repair plan; and that the materials, parts and components are interchangeable as to fit, form, function with those materials, parts and components being replaced, and that they are equal to or better than original supplied.

David P. Gobbi



Manager, Quality Assurance
Flowserve Corporation
Nuclear Products Operations

FORM NR-1 REPORT OF REPAIR MODIFICATION OR REPLACEMENT
 TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

Richard Smith
 12/30/05

1. Work performed by Flowsolve - Charlotte Nuclear Service Center Job No. CC005-3968
(name of NR certificate holder) (P.O. no., job no., etc.)
2801-T Hutchison McDonald Rd. Charlotte, NC 28269
(address)
2. Owner Energy - Northwest
(name)
North Power Plant Loop, Richland, Wa 99352
(address)
3. Name, address and identification of nuclear power plant Columbia Generating Station
Saake River Warehouse Complex North Power Plant Loop, Richland, Wa 99352
4. System Standby Service Water SW-P-1B, S/N 731-S-0012
5. a: Items Which Required Repair, Modification, or Replacement Activities

No	Identification							Construction Code				Activity
	Type of Item	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	
1	Casing	Byron Jackson	1st Stage	N/A	N/A	731-S-0012	1975	ASME Section III	1971 Winter '71	N/A	3	Repair
2	Casing	Byron Jackson	2nd Stage	N/A	N/A	731-S-0012	1975	ASME Section III	1971 Winter '71	N/A	3	Repair
3	Casing	Byron Jackson	3rd Stage	N/A	N/A	731-S-0012	1975	ASME Section III	1971 Winter '71	N/A	3	Repair
4												
5												
6												
7												
8												
9												
10												
11												
12												

5. b: Items Installed During Replacement Activities

Type of Item	Installed or Replaced 5a Item No.	Identification					Construction Code					
		Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	

6. ASME Code Section XI applicable for inservice inspection: 1989 N/A N/A
(edition) (addenda) (Code Cases(s))
7. ASME Code Section XI used for repairs, modifications, or replacements: 1989 N/A N/A
(edition) (addenda) (Code Cases(s))
8. Construction Code used for repairs, modifications, or replacements: 1971 W / 1971 N/A
(edition) (addenda) (Code Cases(s))
9. Design responsibilities: Flowsolve - Vernon Energy Northwest DELETE 11-29-05 ANI/AC 11/29/05
(signature) (date) (signature) (date)
10. Tests conducted: hydrostatic pneumatic design pressure pressure 450 psi Code Case(s) N/A

11. Description of work: Restore Casings to Original Condition.
(use of properly identified additional sheet(s) or sketch(es) is acceptable)
Through the employment of Special Processes I.e. Welding, Tests and Inspections; Repair of Casings was focused on the Impeller Running Clearance surface. These activities have been completed in accordance with approved Repair Plan and Implemented as per requirements of the Quality Assurance Programs identified in QAM Edition 1. Section SN-26.
Note: Wall Sections Meet Acceptance Criteria.

12. Remarks: This Repair has been part of the overhaul of Pump S/N 731-S-0012

CERTIFICATE OF COMPLIANCE

I, David P. Gobbi, certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement activities described above conforms to Section XI of the ASME Code and the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. NR - 88 to use the "NR" stamp expires 19-Feb 2006

NR Certificate Holder Flowserv - Charlotte Nuclear Services Center

Date Nov 16 2005 Signed David P. Gobbi Manager Of Quality Assurance
(authorized representative) (title)

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of NORTH CAROLINA and employed by HSB CT of HARTFORD, CT have inspected the repair, modification or replacement described in this report on 11/16, 2005 and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date 11/16, 2005 Signed Charles F. Toegel Jr N# 1073
(inspector) (National Board (incl. endorsements), jurisdiction, and no.)

PLAN No. 2-2013

FORM NR-1 REPORT OF REPAIR MODIFICATION OR REPLACEMENT
 TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

Handwritten: Field Rep
12/30/05

1. Work performed by Flowserve - Charlotte Nuclear Service Center Job No. CC005-3968
(name of NR certificate holder) (P.O. no., job no., etc.)
2801-T Hutchison McDonald Rd. Charlotte, NC 28269
(address)
2. Owner Energy - Northwest
(name)
North Power Plant Loop, Richland, Wa 99352
(address)
3. Name, address and identification of nuclear power plant Columbia Generating Station
Snake River Warehouse Complex North Power Plant Loop, Richland, Wa 99352
4. System Standby Service Water SW-P-1B SIN 731-S-0012
5. a: Items Which Required Repair, Modification, or Replacement Activities

No	Identification							Construction Code				Activity
	Type of Item	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	
1	Disc Head	Byron Jackson	731-S-0012	N/A	N/A	H1502	1975	ASME Section III	1971 Winter '71	N/A	3	Repair
2	8" Pipe	Byron Jackson	731-S-0012	N/A	N/A	H1502	1975	ASME Section III	1971 Winter '71	N/A	3	Replacement
3	Flange	Byron Jackson	731-S-0012	N/A	N/A	H1502	1975	ASME Section III	1971 Winter '71	N/A	3	Replacement
4	Piping 1/2"	Byron Jackson	731-S-0012	N/A	N/A	H1502	1975	ASME Section III	1971 Winter '71	N/A	3	Replacement
5	Piping 3/4"	Byron Jackson	731-S-0012	N/A	N/A	H1502	1975	ASME Section III	1971 Winter '71	N/A	3	Replacement
6												
7												
8												
9												
10												
11												
12												

5. b: Items Installed During Replacement Activities

Type of Item	Installed or Replaced 5a Item No.	Identification					Construction Code				
		Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class
8" Pipe	2	US Steel	N/A	N/A	N/A	X85495	2005	ASME III	1971/71	N/A	3
Flange	3	KSG	N/A	N/A	N/A	16060	2005	ASME III	1971/71	N/A	3
Piping	4	Michigan Seamless Tube	N/A	N/A	N/A	2M33358	2005	ASME III	1971/71	N/A	3
Elbow	4	Slidebec Dosco	N/A	N/A	N/A	R735	2005	ASME III	1971/71	N/A	3
Piping	5	Michigan Seamless Tube	N/A	N/A	N/A	2M33358	2005	ASME III	1971/71	N/A	3

Handwritten: R735 11-29-05 ANE Rec 11/29/05

6. ASME Code Section XI applicable for inservice inspection: 1989 N/A N/A
(edition) (addenda) (Code Cases(s))
7. ASME Code Section XI used for repairs, modifications, or replacements: 1989 N/A N/A
(edition) (addenda) (Code Cases(s))
8. Construction Code used for repairs, modifications, or replacements: 1971 W/1971 N/A
(edition) (addenda) (Code Cases(s))
9. Design responsibilities: Flowserve - Vernon / Energy - Northwest DELETE 11-29-05 ANE Rec 11/29/05
10. Tests conducted: hydrostatic pneumatic design pressure pressure 450 psi Code Case(s) N/A

- Repair of Discharge Head**
11. Description of work: _____
(use of properly identified additional sheet(s) or sketch(es) is acceptable)
1. Removal and Replacement of Stuffing Box Fabrication Segments.
 2. Removal and Replacement of Internal Piping - Engineering Change Notice # 53968-01
 3. The Hydro-testing of this Discharge Head included the Hydro Test of the Stuffing Box Extension. This Part is Entered on Discharge head Hydro-test certificate.
 4. There was no rework performed on the Stuffing Box Extension.

12. Remarks: This Repair has been part of the overhaul of Pump S/N 731-S-0012

CERTIFICATE OF COMPLIANCE	
I, <u>David P. Gobbi</u> , certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement activities described above conforms to Section XI of the ASME Code and the National Board Inspection Code "NR" rules.	
National Board Certificate of Authorization No. <u>NR - 88</u>	to use the "NR" stamp expires <u>19-Feb 2006</u>
NR Certificate Holder <u>Flowsolve - Charlotte Nuclear Service Center</u>	
Date <u>Nov 16 2005</u> Signed <u>Dan P. Hohl</u> <small>(name)</small> <small>(authorized representative)</small>	<u>Manager Of Quality Assurance</u> <small>(title)</small>
CERTIFICATE OF INSPECTION	
I, <u>CHARLES F. TOZZELI</u> , holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of <u>NORTH CAROLINA</u> and employed by <u>HSB CT</u> of <u>HARTFORD CT</u> have inspected the repair, modification or replacement described in this report on <u>11/16 2005</u> and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "NR" rules.	
By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.	
Date <u>11/16 2005</u> Signed <u>Charles F. Tozzeli</u> <small>(signature)</small>	Commissions <u>NR# 8462 (A.N.I)</u> <small>(National Board (incl. endorsements), jurisdiction, and no.)</small>



PLAN No. 2-2013

CUSTOMER WASHINGTON PUBLIC POWER
P.O. NO. 2808-23
PROJECT 28 K x H 3 str. VCT

RC NO. 109184
ITEM NO. _____
DRG. NO. 509273
PART NO. DISCHARGE HEAD- FAB.

BYRON JACKSON SER. NO. 731-S-0012

Handwritten signature: R. L. Jordan

Handwritten: SW-P-1B, SN 731-S-0012

FORM NPI-1 DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES*

(As Required by the Provisions of the ASME Code Rules)

ASSOCIATED PIPING & ENGRG. CORP. PAGE 1 OF 2

1. Fabricated by 1707 W. COMPTON BLVD. COMPTON, CALIF. Order No. E-18531-A
(Name and Address of Fabricator)

2. Fabricated for BYRON JACKSON P.O. BOX 2017 TERMINAL ANNEX V173442
LOS ANGELES, CALIF.
(Name and Address)

3. Owner _____ 4. Location of Plant _____

5. Piping System Identification DISCHARGE HEAD #2 S.N. H-1502
(Brief description of intended use, main coolant etc.)

(a) Drawing No. D-18531-24 Prepared by CSO

(b) National Board No. _____

6. The material, design, construction, and workmanship complies with ASME Code Section III, Class III
Edition 1971, Addenda Date WINTER 1971, Case No. _____

Remarks: Manufacturers' Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of this report NONE
(Name of Part - Item number, Manufacturer's name, and identifying stamp)

7. Shop Hydrostatic Test NONE psi.

8. Description of piping inspected DISCHARGE HEAD #2 S.N. H-1502
(include - mark no. - material spec. - nom. pipe size - schedule or thickness - length)

ITEM 1- 38"O.D. x 1/2" THK. x 56" LG. SA-515GR. 70WLD. PIPE; ITEM 2- 8"S/40
SA-106GR. B SMLS. PIPE; ITEM 3 THRU 7- 3/4"S/80PIPE SA-106GR. B;
ITEM 8- 1/2"S/80PIPE SA-106GR. B; ITEM 9- 1/2"S/40PIPE SA-106GR. B;
ITEM 10- 20"-300#R.F.W.N.FLG. SA-105GR. II; ITEM 11 THRU 12- 2 1/2"
PLATE SA-515GR. 70; ITEM 13- 3"PLATE 30"O.D. x 20 1/2" I.D. SA-515
GR. 70; ITEM 14- 14 1/2"O.D. x 7" I.D. x 2 1/2" LG. SA-105GR. II FORGING;
ITEM 15- 3/8"PLATE x 6 3/16" x 6 1/2" LG. SA-515 GR. 70; ITEM 16- 2"PLATE

SA-515GR. 70; ITEM 17- 24"O.D. RING SA-106GR 70; ITEM 18- 1/2"PLATE
CONTINUED ON PAGE 2 OF 2

We certify that the statements made in this report are correct and that the fabrication of the described piping conforms with the requirements of SECTION III of the ASME BOILER AND PRESSURE VESSEL CODE.

Date 1-3-75 Signed ASSOCIATED PIPING & ENGRG. CORP. *R. L. Jordan*
(Fabricator) R. L. JORDAN

Certificate of Authorization Expires OCT. 31, 1975 Certificate of Authorization No. N-528

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of CALIFORNIA and employed by HARTFORD INS/HARTFORD, CONN. have inspected the piping described in this Data Report on 1/3 1975, and state that to the best of my knowledge and belief, the Manufacturer has constructed this piping in accordance with the applicable Subsections of ASME Code, Section III. * * THE HARTFORD STEAM BOILER INSPECTION & INSURANCE CO. By signing this certificate, neither the inspector nor his employer make any warranty, expressed or implied, concerning the piping in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1/3 1975 Commission CALIFORNIA COMM. #1126
Inspector R. L. Jordan National Board, State, Province and No.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1, 2 and 8 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 7, "Remarks".
Printed in U.S.A. (1/73) This form (E02) is obtainable from the ASME, 345 E. 47th St., New York, N.Y. 10017



0 2 0 1 2 9 7

PLAN No. 2-2013

FORM NR-1 REPORT OF REPAIR MODIFICATION OR REPLACEMENT
 TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

Paulip Supb
12/30/05

1. Work performed by Flowsolve - Charlotte Nuclear Service Center Job No. CC005-3968
(name of NR certificate holder) (P.O. no., job no., etc.)
2801-T Hutchison McDonald Rd. Charlotte, NC 28269
(address)

2. Owner Energy - Northwest SW-P-1B, S/N 731-S-0012
(name)
North Power Plant Loop, Richland, Wa 99352
(address)

3. Name, address and identification of nuclear power plant Columbia Generating Station
Snake River Warehouse Complex North Power Plant Loop, Richland, Wa 99352

4. System Standby Service Water

5. a: Items Which Required Repair, Modification, or Replacement Activities

No	Identification							Construction Code				Activity
	Type of Item	Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	
1	Column	Byron Jackson	H1503	N/A	N/A	731-S-0012	1975	ASME Section III	1971 Winter '71	N/A	3	Repair
2	Column	Byron Jackson	H1506	N/A	N/A	731-S-0012	1975	ASME Section III	1971 Winter '71	N/A	3	Repair
3	Column	Byron Jackson	H1506	N/A	N/A	731-S-0012	1975	ASME Section III	1971 Winter '71	N/A	3	Repair
4												
5												
6												
7												
8												
9												
10												
11												
12												

5. b: Items Installed During Replacement Activities

Type of Item	Installed or Replaced 5a Item No.	Identification						Construction Code				
		Mfg. Name	Mfg. Serial No.	Nat'l Bd. No.	Jurisd. No.	Other	Year Built	Name/Section/Division	Edition/Addenda	Code Case(s)	Code Class	

6. ASME Code Section XI applicable for inservice inspection: 1989 N/A N/A
(edition) (addenda) (Code Cases(s))

7. ASME Code Section XI used for repairs, modifications, or replacements: 1989 N/A N/A
(edition) (addenda) (Code Cases(s))

8. Construction Code used for repairs, modifications, or replacements: 1971 W / 1971 N/A
(edition) (addenda) (Code Cases(s))

9. Design responsibilities: Flowsolve - Vernon / Energy Northwest DELETE 11-29-05 ANI Dec 11/29/05

10. Tests conducted: hydrostatic pneumatic design pressure pressure 450 psi Code Case(s) N/A

11. Description of work: Repair of Outer Columns
(use of properly identified additional sheet(s) or sketch(es) is acceptable)

1. Restore Mechanical - fit-up sizes to drawing condition.
 2. Remachine and Re-hydro-test.
 3. Wall Section Checks - Meets Acceptance Criteria

Use of Special processes such as Welding and Non-destructive Examinations was required to implement the customer approved Repair Plan. Repairs were completed in accordance with "NR" Quality Program Edition 1, Rev. 0 Section SN-26.

12. Remarks: This Repair has been part of the overhaul of Pump S/N 731-S-0012

CERTIFICATE OF COMPLIANCE

I, David P. Gobbi, certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement activities described above conforms to Section XI of the ASME Code and the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. NR - 88 to use the "NR" stamp expires 19-Feb, 2006

NR Certificate Holder Flowsolve - Charlotte Nuclear Service Center

Date Nov 16 2005 Signed David P. Gobbi (name) Manager Of Quality Assurance (title)
(authorized representative)

CERTIFICATE OF INSPECTION

I, CHARLES F. TOEGEL, JR. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of NORTH CAROLINA and employed by HSR CT of HARTFORD, CT have inspected the repair, modification or replacement described in this report on 11/16, 2005 and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection. NC# 1073

Date 11/16, 2005 Signed Charles F. Toegel, Jr. (inspector) Commissions NR# B467(A, N, I)
(National Board (incl. endorsements), jurisdiction, and no.)



PLAN No. 2-2013

CUSTOMER WASHINGTON PUBLIC POWER
P.O. NO. 2808-23
PROJECT 28 K X H - 3 stg. VCT.

RC NO. 109187
ITEM NO. _____
DRG. NO. 312266
PART NO. COLUMN MIDDLE

David Sings
12/22/05

BYRON JACKSON SER. NO.
731-S-0012

SW-P-1B, SIN 731-S-0012

FORM NPP-1 DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES*

(As Required by the Provisions of the ASME Code Rules)

ASSOCIATED PIPING & ENG. CORP

PAGE 1 OF 2

1. Fabricated by 1707 W. COMPTON BLVD., COMPTON, CALIF. Order No. F-18531-A
(Name and Address of Fabricator)

2. Fabricated for BYRON JACKSON P.O. BOX 2017 TERMINAL ANNEX V 175442
LOS ANGELES, CALIF.
(Name and Address)

3. Owner _____ 4. Location of Plant _____

5. Piping System Identification DISCHARGE COLUMN #1 S/V H-1503
(Brief description of intended use, main coolant, etc.)

(a) Drawing No. 18531-15 Prepared by CSO

(b) National Board No. _____

6. The material, design, construction, and workmanship complies with ASME Code Section III, Class III

Edition 1971, Addenda Date WINTER 1971, Case No. _____

Remarks: Manufacturers' Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of this report: NONE
(Name of Part - Item number, Manufacturer's name, and identifying stamp)

SEE PAGE 2 OF 2

7. Shop Hydrostatic Test NONE psi.

8. Description of piping inspected DISCHARGE COLUMN #1 S/V H-1503
(Include - mark no. - material spec. - nom. pipe size - schedule or thickness - length

ITEM 1: 22" O.D. x 1/2" WALL x 7'-8 3/4" LG. WLD. PIPE SA515-70, ITEM 2:

8" S/40 SMLS. PIPE SA-106 GR.B, ITEM 3; 3" THK. x 30" O.D. x 20 1/2"

I.D. PLATE SA515-70, ITEM 4; 3 1/4" THK. x 30" O.D. x 20 1/2" I.D. PLATE

SA515-70, ITEM 5; INSTALLATION LUGS PER SK-18531-11 SA515-70,

ITEM 6; 9 1/4" O.D. x 7" I.D. x 4 5/8" FORGING SA-105 GR. II, ITEM 7:

9 1/4" O.D. x 5" I.D. x 9" LG. FORGING SA-105 GR. II, ITEM 8; 24" O.D. x 22"

I.D. SMLS. PIPE SA-106 GR.B, ITEM 9; 3/8" THK. x 5" x 6 3/16" PLATE

SA515-70

We certify that the statements made in this report are correct and that the fabrication of the described piping conforms with the requirements of SECTION III of the ASME BOILER AND PRESSURE VESSEL CODE.

Date 12/12/74 Signed ASSOCIATED PIPING & ENG. CORP. (Fabricator)

Certificate of Authorization Expires OCT 31, 1975 Certificate of Authorization No. 4-528

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of CALIFORNIA and employed by HARTFORD INS./HARTFORD, CONN. have inspected the piping described in this Data Report on 12/12/74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this piping in accordance with the applicable Subsections of ASME Code, Section III - THE HARTFORD STEAM BOILER INSPECTION & INSURANCE CO. By signing this certificate, neither the Inspector nor his employer make any warranty, expressed or implied, concerning the piping in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 12/12/74 Signature _____ Commission CALIFORNIA CONNL #1126
National Board, State, Province and No.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 3 1/2" x 11", (2) information in items 1, 2 and 5 of this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 7, "Remarks".
Printed in U.S.A. - 2-731 This form (E02) is obtainable from the ASME, 345 E. 47th St., New York, N.Y. 10017

0 2 0 0 1 1 7 5

Byron Jackson Pump Division

P.O. BOX 2017 TERMINAL ANNEX, LOS ANGELES, CALIFORNIA 90051 • 213/587-6171

PAGE NO. _____



CUSTOMER WASHINGTON PUBLIC POWER
P.O. NO. 2808-23
PROJECT 28 K X H - 3 str. VCT.

RC NO. 109187
ITEM NO. _____
DRG. NO. 312266
PART NO. COLUMN MIDDLE

BYRON JACKSON SER. NO.
731-S-0012

FORM NPP-1 DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES*

(As Required by the Provisions of the ASME Code Rules)

ASSOCIATED PIPING & ENG. CORP. PAGE 2 OF 2

1. Fabricated by 1707 W. COMPTON BLVD., COMPTON, CALIF. Order No. F-18531-A
(Name and Address of Fabricator)

2. Fabricated for BYRON JACKSON P.O. BOX 2017 TERMINAL ANNEX V173442
(Name and Address) LOS ANGELES, CALIF.

3. Owner _____ 4. Location of Plant _____

5. Piping System Identification DISCHARGE COLUMN #1 S.N. 11-1503
(Brief description of intended use, main coolant etc.)

(a) Drawing No. 18531-15 Prepared by CSO

(b) National Board No. _____

FINAL MACHINING ON PART NO.3 PER SK-18531-4 AND PART NO.4 PER
SK-18531-20 TO BE PERFORMED BY BYRON JACKSON.

0 2 0 1 0 1 1 7 6



Byron Jackson Pump Division

P.O. BOX 2017 TERMINAL ANNEX, LOS ANGELES, CALIFORNIA 90051 • 213/587-8171

PAGE NO. _____



PLAN No. 2-2013

CUSTOMER WASHINGTON PUBLIC POWER
P.O. NO. 2808-23
PROJECT 28 K X H 3 str. VCT.

RC NO. 109185
ITEM NO. _____
DRG. NO. 312405
PART NO. COLUMN - TOP

Richard Smith
12/30/74

BYRON JACKSON SER. NO.
731-S-0012

SW-P-1B, S/N 731-S-0012

FORM NPP-1 DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES*

(As Required by the Provisions of the ASME Code Rules)

ASSOCIATED PIPING & ENGR. CORP.

PAGE 1 OF 2

1. Fabricated by 1707 W. COMPTON BLVD. COMPTON, CALIF. Date No. F-18531-A
(Name and Address of Fabricator)

2. Fabricated for BYRON JACKSON P.O. BOX 2017 TERMINAL ANNEX V173442
(Name and Address) LOS ANGELES, CALIF.

3. Owner _____ 4. Location of Plant _____

5. Piping System Identification DISCHARGE COLUMN #4 S.N. H-1506
(Brief description of intended use, main coolant, etc.)

(a) Drawing No. 18531-18 Prepared by CSO

(b) National Board No. _____

6. The material, design, construction, and workmanship complies with ASME Code Section III, Class III

Edition 1971, Addenda Date WINTER 1971, Case No. _____

Remarks: Manufacturers' Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of this report NONE
(Name of Part - Item number, Manufacturer's name, and Identifying stamp)

SEE PAGE 2 OF 2

7. Shop Hydrostatic Test NONE psi.

8. Description of piping inspected DISCHARGE COLUMN #4 S/N H-1506
(Include - mark no., material spec., nom. pipe size - schedule or thickness - length

ITEM 1; 22"O.D. x 1/2"THK. x 7'-8 3/4"LG. SA515-70, ITEM 2; 8" S/40

SNLS. PIPE A106 GR.B, ITEM 3; 3/4" S/80 PIPE x 10"LG. SA-106 GR.B;

ITEM 4; 3 1/4"THK. x 30"O.D. x 20 1/2" I.D. PLATE SA515-70, ITEM 5;

3"THK. x 30"O.D. x 20 1/2" I.D. PLATE SA515-70, ITEM 6; 9 1/4"O.D. x

7" I.D. x 4 5/8" FORGING SA-105 GR. II, ITEM 7; 9 1/4"O.D. x 5" I.D. x 9"

LG. FORGING SA-105 GR. II, ITEM 8; 3/8"THK. x 6 3/16" x 8" LG. PLATE

SA515-70, ITEM 9; 24"O.D. x 22" I.D. SNLS. PIPE SA-106 GR.B, ITEM 10;

INSTALLATION LUGS PER SK-18531-5 SA515-70

We certify that the statements made in this report are correct and that the fabrication of the described piping conforms with the requirements of SECTION III of the ASME BOILER AND PRESSURE VESSEL CODE.

Date 12/12/74 Signed ASSOCIATED PIPING & ENGR. CORP. *J. J. J.*
(Fabricator)

Certificate of Authorization Expires OCT. 31, 1975 Certificate of Authorization No. N-528

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of CALIFORNIA and employed by HARTFORD INS./HARTFORD CONN. have inspected the piping described in this Data Report on 12/12/74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this piping in accordance with the applicable Subsections of ASME Code, Section III. THE HARTFORD STEAM ROLLER INSPECTION & INSURANCE CO. By signing this certificate, neither the Inspector nor his employer make any warranty, expressed or implied, concerning the piping in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 12/12/74, 1974

C. A. G. S. O. A.
(Inspector)

Commission CALIFORNIA COMM. #1126
National Board, State, Province and No.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) also is 8 1/2" x 11", (2) information in items 1, 2 and 5 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 7, "Remarks".
Printed in U.S.A. (7/73) This form (E62) is obtainable from the ASME, 345 E. 47th St., New York, N.Y. 10017

0 2 0 0 1 2 4 3

Byron Jackson Pump Division

P.O. BOX 2017 TERMINAL ANNEX, LOS ANGELES, CALIFORNIA 90051 • 213/587-6171

PAGE NO. _____



CUSTOMER WASHINGTON PUBLIC POWER
P.O. NO. 2808-23
PROJECT 28 K X H 3 stg. VCT.

RC NO. 109185
ITEM NO. _____
DRG. NO. 312405
PART NO. COLUMN - TOP

BYRON JACKSON SER. NO.
731-S-0012

FORM NPP-1 DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES*

(As Required by the Provisions of the ASME Code Rules)

ASSOCIATED PIPING & ENG. CORP. PAGE 2 OF 2

1. Fabricated by 1707 W. COMPTON BLVD., COMPTON, CALIF. Order No. F-18531-A
(Name and Address of Fabricator)

2. Fabricated for BYRON JACKSON P.O. BOX 2017 TERMINAL ANNEX V173442
LOS ANGELES, CALIF.
(Name and Address of Customer)

3. Owner _____ 4. Location of Plant _____

5. Piping System Identification DISCHARGE COLUMN #4 S.N. H-1506
(Brief description of intended use, main coolant, etc.)

(a) Drawing No. 18531-15 Prepared by CSO

(b) National Board No. _____

'FINAL MACHINING ON PART NO.5 PER SK-18531-4 AND PART NO.4 PER SK-18531-20 TO BE PREFORMED BY BYRON JACKSON.

02 010 1244

210





PLAN No. 2-2013

CUSTOMER WASHINGTON PUBLIC POWER
P.O. NO. 2808-23
PROJECT 28 K X H 3 stg. VCT.

RC NO. 109190
ITEM NO. _____
DRG. NO. 312265
PART NO. COLUMN - BOTTOM
12/30/05

BYRON JACKSON SER. NO. 731-S-0012

SW - P-1 B, SIN 731-S-0012

FORM NPP-1 DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES*

(As Required by the Provisions of the ASME Code Rules)

ASSOCIATED PIPING & ENG. CORP.

PAGE 1 OF 2

1. Fabricated by 1707 W. COMPTON BLVD COMPTON, CALIF Plant No. E-18531-1
(Name and Address of Fabricator)

2. Fabricated for BYRON JACKSON P.O. BOX 2017 TERMINAL ANNEX V175412
(Name and Address) LOS ANGELES, CALIF.

3. Owner _____ 4. Location of Plant _____

5. Piping System Identification DISCHARGE COLUMN #6 S.N. H-1508
(Brief description of intended use, main coolant, etc.)

(a) Drawing No. 18531-22 Prepared by CSO
(b) National Board No. _____

6. The material, design, construction, and workmanship complies with ASME Code Section III, Class III

Edition 1971 Addenda Date WINTER 1971 Case No. _____

Remarks: Manufacturers' Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of this report: NONE
(Name of Part - Item number, Manufacturer's name, and Identifying stamp)

SEE PAGE 2 OF 2

7. Shop Hydrostatic Test NONE psi.

8. Description of piping inspected: DISCHARGE COLUMN #6 S/N H-1508
(Include - size no. - material spec. - nom. pipe size - schedule or thickness - length)

- ITEM 1: 22" O.D. x 1/2" WALL x 6'-8 5/16" LG. WLD. PIPE SA515-70. ITEM 2: 8" 5/40 SHLS. PIPE SA-106 GR. B. ITEM 3: 8" O.D. x 6" I.D. x 4 1/4" LG. FORGING SA-105 GR. II. ITEM 4: 9 5/8" O.D. x 5" I.D. x 9" LG. FORGING SA-105 GR. II. ITEM 5: 22" x 19 1/4" CONE 1/2" WALL SA515-70. ITEM 6: 8 5/8" x 7 1/2" CONE 3/8" WALL. ITEM 7: INSTALLATION LUGS PER SK-18531-1 SA515-70. ITEM 8: 37 1/4" O.D. x 19 1/4" I.D. x 2 1/2" THK. PLATE SA515-70. ITEM 9: 31 1/2" O.D. x 20 1/2" I.D. x 3 1/4" THK. PLATE SA515-70. ITEM 10: 6 3/16" x 8" LG. x 3/8" THK. PLATE. ITEM 11: 22" I.D. x 24" O.D. x 1 3/4" THK. RING SA-106 GR. B.

We certify that the statements made in this report are correct and that the fabrication of the described piping conforms with the requirements of SECTION III of the ASME BOILER AND PRESSURE VESSEL CODE.

Date 12/16/74 Signed ASSOCIATED PIPING, & ENG. CORP. *[Signature]*
(Fabricator)

Certificate of Authorization Expires OCT. 31, 1975 Certificate of Authorization No. Y-528

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and in the State or Province of CALIFORNIA and employed by HARTFORD INS. / HARTFORD, CONN., have inspected the piping described in this Data Report on 12/16/74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this piping in accordance with the applicable Subsections of ASME Code, Section III. THE HARTFORD STEAM BOILER INSPECTION & INSURANCE CO. By signing this certificate, neither the Inspector nor his employer make any warranty, expressed or implied, concerning the piping in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] 12/24
Commissioner CALIFORNIA COM. #1176
National Board, State, Province and No.

* Supplementary sheets in form of lists, sketches or drawings may be used provided (1) size is 4 1/4" x 11", (2) information in items 1, 2 and 3 of this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 7, "Remarks".
Printed in U.S.A. (2-73) This form (E64) is obtainable from the ASME, 319 E. 47th St., New York, N.Y. 10017

0 2 0 0 1 1 3 2



CUSTOMER WASHINGTON PUBLIC POWER
P.O. NO. 2808-23
PROJECT 28 K X H 3 stg. VCT.

RC NO. 109190
ITEM NO. _____
DRG. NO. 312265
PART NO. COLUMN - BOTTOM

BYRON JACKSON SER. NO.
731-S-0012

FORM NPP-1 DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES*

(As Required by the Provisions of the ASME Code Rules)

ASSOCIATED PIPING & ENG. CORP.

PAGE 2 OF 2

1. Fabricated by 1737 W. COMPTON BLVD., COMPTON, CALIF. Order No. F-18531-A

(Name and Address of Fabricator)

2. Fabricated for BYRON JACKSON P.O. BOX 2017 TERMINAL ANNEX V173442

(Name and Address of User) LOS ANGELES, CALIF.

3. Owner _____ 4. Location of Plant _____

5. Piping System Identification DISCHARGE COLUMN #6 S.V. H-1508

(List description of intended use, main coolant, etc.)

(a) Drawing No. 18531-15 Prepared by CSO

(b) National Board No. _____

FINAL MACHINING ON PART NO. 8 PER SK-18531-12 AND PART NO. 9 PER SK-18531-19 TO BE PERFORMED BY BYRON JACKSON.

02 010 1133





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
 (b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
 (c) **Type Code Symbol Stamp:** Not Applicable
 (d) **Certificate Of Authorization No.:** Not Applicable
 (e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Service Water (SW) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
 (c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 05/15/06
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2	WPPSS*	SW(22)-2-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 3

7. Description Of Work: Replaced existing pipe nipples associated with valve SW-V-938 and valve SW-V-939. The replacement work was performed as follows:

- 1) Removed existing pipe nipple associated with valve SW-V-938.
- 2) Installed replacement pipe nipple associated with valve SW-V-938.
- 3) Removed existing pipe nipple associated with valve SW-V-939.
- 4) Installed replacement pipe nipple associated with valve SW-V-939.

NOTES -

- 1) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 2) Reconciliation for ASME Section XI 1989 Edition with no Addenda to ASME Section XI 2001 Edition with 2003 Addenda is as follows:
ASME Section XI Work Plan
 The ASME Section XI Plan No 2-2015 was issued during 2nd ISI interval (before December 12, 2005) to comply with Article IWA-4000 of ASME Section XI, 1989 Edition with no Addenda requirements. This work plan implemented during 3rd ISI interval (after December 13, 2005) has been reviewed and it has been determined that the work plan will satisfy the applicable requirements of Article IWA-4000 such as IWA-4150, IWA-4220, etc of ASME Section XI, 2001 Edition with 2003 Addenda.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 5/15/06 Date 5/15/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements
 Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Fuel Pool Cooling (FPC) System
 (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 10/24/06
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
FPC(2)-1B	WPPSS*	FPC(2)-1B-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 3

- 7. Description Of Work Performed:** Replaced existing piping material downstream valve FPC-FCV-15B. The replacement work was performed as follows:
- 1) Removed existing piping material such as flange WOL, pipe, studs and nuts.
 - 2) Beveled cut pipe ends.
 - 3) Installed replacement piping material such as flange and pipe.
 - 4) Made required circumferential butt welds.
 - 5) Performed visual examination on the circumferential butt welds. Visual examination results acceptable.
 - 6) Performed magnetic particle (MT) examination on the circumferential butt welds. Magnetic particle (MT) examination results acceptable.
 - 7) Installed replacement WOL material.
 - 8) Made required welds.
 - 9) Performed visual examination on the final welds. Visual examination results acceptable.
 - 10) Installed eight (8) replacement studs.
 - 11) Installed sixteen (16) replacement nuts.
 - 12) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 117.5 Psig Test Temperature: 95° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/25/06 to 10/24/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 7486W N.E.W.S.
 Inspector's Signature National Board, State, and Endorsements
 Date 10/27/06



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Fuel Pool Cooling (FPC) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None</p> <p>6. Identification Of Components Repaired Or Replaced And Replacement Components</p> | <p>Date: 12/16/05
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
FPC-V-140	Anchor Darling	3N788	N/A	N/A	1976	Repaired	Yes, Code Class 3

- 7. Description Of Work Performed:** Installed travel stop for valve FPC-V-140. The repair work was performed as follows:
- 1) Fabricate the disc travel stop.
 - 2) Welded the disc travel stop.
 - 3) Performed visual examination on the final weld. Visual examination results acceptable.
 - 4) Performed VT-3 visual examination on the existing studs for the valve body to bonnet joint. VT-3 visual examination results acceptable.
 - 5) Performed VT-3 visual examination on the existing nuts for the valve body to bonnet joint. VT-3 visual examination results acceptable.
 - 6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 100 Psig Test Temperature: 100° F
 Component Design Pressure: 110/275 Psig Temperature: 700/100° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 12/16/05 Date 12/16/05

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/10/05 to 1/3/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB# 10767 B, N, A, E, NS WA# 10767 W
 Inspector's Signature National Board, State, and Endorsements

Date Jan 3/06



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Reactor Water Clean Up (RWCUC) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 01/05/06
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RWCUC-HX-1C	General Electric	23397	54361	N/A	1972	-----	Yes, Code Class 3

- 7. Description Of Work:** Performed on-line leak seal for bolted flange cover plate joint for heat exchanger RWCUC-HX-1C. The work was performed as follows:
- 1) Drilled and tapped twenty four (24) holes on the outer edge of the flange cover plate to install 3/8" shutoff adapters. See Note 1.
 - 2) Installed twenty four (24) 3/8" shutoff adapters in the outer edge of the flange cover plate. See Note 1.
 - 3) Drilled and tapped additional six (6) holes on the outer edge of the flange cover plate to install 3/8" shutoff adapters. See Note 1.
 - 4) Installed additional six (6) 3/8" shutoff adapters in the outer edge of the flange cover plate. See Note 1.
 - 5) Total of thirty (30) holes were drilled and tapped and total of thirty (30) 3/8" shutoff adapters were installed in the outer edge of the flange cover plate. See Note 1.

NOTES -

- 1) The ASME Section XI related work was to drill and tap the holes into the ASME pressure boundary (retaining) material. In accordance with PPM 1.3.30, the purpose of this ASME Section XI work plan was to document the size and location of the holes in the outer edge of the flange cover plate where the shutoff adapters were installed.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 1/5/06 Date 1/5/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements
 Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Floor Drain Radioactive (FDR) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/26/06
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
FDR-V-477	Borg Warner	17865	N/A	N/A	1977	See Item 7 Below	Yes, Code Class 1

- 7. Description Of Work Performed:** Repaired valve FDR-V-477. The repair work was performed as follows:
- 1) Cut valve body to bonnet seal weld.
 - 2) Prepped valve body cut surfaces.
 - 3) Performed liquid penetrant (PT) examination on the valve body prepped surfaces. Liquid penetrant (PT) examination results acceptable.
 - 4) Prepped valve bonnet cut surfaces.
 - 5) Performed liquid penetrant (PT) examination on the valve bonnet prepped surfaces. Liquid penetrant (PT) examination results acceptable.
 - 6) Reinstalled the valve bonnet.
 - 7) Made valve body to bonnet seal weld.
 - 8) Performed visual examination on the final seal weld. Visual examination results acceptable.
 - 9) Performed liquid penetrant (PT) examination on the final seal weld. Liquid penetrant (PT) examination results unacceptable.
 - 10) Removed (locally) unacceptable PT indication by mechanical means.
 - 11) Uniformly blended the excavation into the surrounding surfaces for weld repair.
 - 12) Performed liquid penetrant (PT) examination on the excavation.
 - 13) Weld repaired the excavation.
 - 14) Blended the weld repaired areas with the surrounding weld metal.
 - 15) Performed visual examination on the final weld repaired areas. Visual examination results acceptable.
 - 16) Performed liquid penetrant (PT) examination on the weld repaired areas. Liquid penetrant (PT) examination results acceptable.
 - 17) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 25 Psig Test Temperature: 85.6° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/26/06 Date 7/26/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/1/06 to 7/28/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

W. A. S. S. S. Commissions 12723W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/28/06



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest

Date: 05/15/06

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. **Plant:** Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Service Water (SW) System

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2	WPPSS*	SW(22)-2-P1	N/A	N/A	1983	See Item 7 Below Removed Installed	Yes, Code Class 3
SW-V-106B	Anchor Darling	3N800	N/A	N/A	1976		Yes, Code Class 3
SW-V-106B	Anchor Darling	3N1031	N/A	N/A	1977		Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing valve SW-V-106B. The replacement work was performed as follows:

- 1) Removed existing valve SW-V-106B, Serial No 3N800.
- 2) Installed replacement valve SW-V-106B, Serial No 3N1031.
- 3) Made required circumferential butt welds.
- 4) Performed visual examination on the final circumferential butt welds. Visual examination results acceptable.
- 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement valve SW-V-106B, Serial No 3N1031 was installed is Service Water (SW) piping system SW(22)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement valve SW-V-106B, Serial No 3N1031 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Summer 1972 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
Test Pressure: 210 Psig Test Temperature: 60.8° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve SW-V-106B, Serial No 3N1031.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 5/15/06 Date 5/15/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/13/06 to 3/23/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 7486 W ABN I NS
Inspector's Signature National Board, State, and Endorsements
Date 5/23/06

PLAN No. 2-2021

4513-86-1-20

Radip Supt
5/12/06

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
(As Required by the Provisions of the ASME Code, Section III, Div. 1)

1. Manufactured by ANCHOR/DARLING VALVE CO. HAYWARD, CA.
(Name and Address of Manufacturer)
2. Manufactured for BURNS & ROE, INC. WOODBURY, NEW YORK
(Name and Address of Purchaser or Owner)
3. Location of Installation 1.1 MILES NORTH OF RICHLAND, WASHINGTON
(Name and Address)

4. Pump or Valve VALVE Nominal Inlet Size 2-1/2" Outlet Size 2-1/2"
(inch) (inch)

	(a) Model No., Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
	(1)	GLOBE	3N1031		3473-3	3	
(2)							
(3)		<i>MSN</i>					
(4)							
(5)							
(6)							
(7)		<i>VALVE SW-V-106B, S/N 3N1031</i>					
(8)							
(9)							
(10)							

5. STEAM AND WATER SERVICE IN A COMMERCIAL NUCLEAR POWER PLANT
(Brief description of service for which equipment was designed)

6. Design Conditions 470 psi 700 °F or Valve Pressure Class 300# (1)
(Pressure) (Temperature)

7. Cold Working Pressure 720 psi at 100°F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
BODY HT. 825 SN 20	SA216 WCB	ANCHOR/DARLING	FICK
BONN. HT. 81 SN 13	SA216 WCB	ANCHOR/DARLING	FICK
DISC HT. M1456 SN 3	SA216 WCB	ANCHOR/DARLING	PACIFIC STEEL
SEAT RING HT. 349	SA216 WCB	ANCHOR/DARLING	FICK
<i>HTA</i>	<i>COO</i>		
(b) Forgings			

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

(3/77) This form (E-00037) may be obtained from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

RVP - P. P. I. A.
by: *[Signature]* Date *7-19-06*

0 2 0 0 4 2 0 6 8



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 06/04/07
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Reactor Pressure Vessel (RPV) And Appurtenances
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	8	N/A	1976	See Item 7 Below Removed Installed	Yes, Code Class 1
LPRM	General Electric	J8988	N/A	N/A	1990		Yes, Code Class 1
LPRM	General Electric	01S17457	N/A	N/A	2001		Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced existing Local Power Range Monitoring (LPRM) incore assembly. The replacement work was performed as follows:
 1) Removed existing Local Power Range Monitoring (LPRM) incore assembly Serial No J8988 from the Reactor Pressure Vessel (RPV) Core Location No 40-09.
 2) Installed replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 01S17457 at the Reactor Pressure Vessel (RPV) Core Location No 40-09.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) OEM/OES General Electric (GE) Reuter-Stokes.
- 3) ASME Section III, Code Class 1, 1971 Edition with Summer 1971 Addenda for the Reactor Pressure Vessel (RPV) as documented on N-1A Code Data Report for nuclear vessels.
- 4) ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda for the appurtenances installed for the RPV as documented on N-5 Code Data Report for field installation of nuclear power plant components, components supports and appurtenances such as incore housing, CRD housing, etc.
- 5) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 01S17457.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [X] Test Pressure: Psig Test Temperature: °F
Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 01S17457.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/7/07 Date 6/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/16/06 to 6/8/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 NIBNSC, 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/8/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Relay Supb Pg. 1 of 2

1. Manufactured and certified by GE Reuter-Stokes, Inc., 8499 Darrow Road, Twinsburg, Ohio 44087 *E/B/07*
(name and address of NPT Certificate Holder)

2. Manufactured for Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address of Purchaser)

3. Location of installation Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address)

4. Type: RS-C6-1315-201 N/A N/A N/A 2001
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III, Division 1: 1977 Summer 1977 1 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)

7. Remarks: Certified Design Specification DC24A1257AK
Certified Design Report CDR-C-5320-236
On File at GE Reuter-Stokes, Inc.

8. Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 01S17456	N/A
(2) 01S17457	N/A
(3) 01S17458	N/A
(4)	
(5)	
(6)	
(7)	
(8)	
(9) CORE LOCATION 40-00,	
(10)	
(11)	
(12) S/N 01S17457	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 1250 PSIG psi. Temp. Vessel 575°F. Seal 300°F. Hydro. test pressure 1925 PSIG at temp. 71 °F.
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATION OF DESIGN

Design specifications certified by Michael G. Turek P.E. State OH Reg. no. E-61730
(when applicable)

Design report* certified by Surinder L. Kampani P.E. State OH Reg. no. E-034113
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Assemblies conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2703 Expires September 16, 2003

Date 3/29/01 Name GE Reuter-Stokes, Inc. Signed James V. Holmes
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of OHIO and employed by H.S.B.I. & I. Co. of HARTFORD, CT have inspected these items described in this Data Report on 3-23-2001, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 3-23-2001 Signed Robert Campbell Commissions NB9176A, B, N Ohio 1776
(Authorized Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Reactor Pressure Vessel (RPV) And Appurtenances
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 06/06/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	8	N/A	1976	See Item 7 Below	Yes, Code Class 1
LPRM	General Electric	J8986	N/A	N/A	1990	Removed	Yes, Code Class 1
LPRM	General Electric	04S82806	N/A	N/A	2004	Installed	Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced existing Local Power Range Monitoring (LPRM) incore assembly. The replacement work was performed as follows:
- 1) Removed existing Local Power Range Monitoring (LPRM) incore assembly Serial No J8986 from the Reactor Pressure Vessel (RPV) Core Location No 16-49.
 - 2) Installed replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S82806 at the Reactor Pressure Vessel (RPV) Core Location No 16-49.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) OEM/OES General Electric (GE) Reuter-Stokes.
- 3) ASME Section III, Code Class 1, 1971 Edition with Summer 1971 Addenda for the Reactor Pressure Vessel (RPV) as documented on N-1A Code Data Report for nuclear vessels.
- 4) ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda for the appurtenances installed for the RPV as documented on N-5 Code Data Report for field installation of nuclear power plant components, components supports and appurtenances such as incore housing, CRD housing, etc.
- 5) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S82806.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S82806.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/7/07 Date 6/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 6/8/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/8/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Relay Supb

1. Manufactured and certified by GE Reuter-Stokes, Inc., 8499 Darrow Road, Twinsburg, Ohio 44087
(name and address of NPT Certificate Holder)

2. Manufactured for Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address of Purchaser)

3. Location of installation Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address)

4. Type: RS-C6-1315-201 N/A N/A N/A 2004
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III, Division 1: 1977 Summer 1977 1 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)

7. Remarks: Certified Design Specification DC24A1257AK
Certified Design Report CDR-C-5320-289
On File at GE Reuter-Stokes, Inc.

6/6/07

8. Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report

Part or Appurtenance Serial Number	National Board No. in Numerical Order
1) 04S82806	N/A
2) 04S84389	N/A
3) 04S84390	N/A
4) 04S84391	N/A
(5)	
(6)	
(7)	
(8) CORE LOCATION 16-49	
(9)	
(10)	
(11) S/N 04S82806	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

Design pressure 1250 PSIG psi. Temp. Vessel 575°F. Seal 300°F. Hydro. test pressure 1875 PSIG at temp. 70 ° F.
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATION OF DESIGN

Design specifications certified by Michael G. Turek P.E. State OH Reg. no. E-61730
(when applicable)

Design report* certified by Ahmed I. Sabet P.E. State NY Reg. no. 071638
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Assemblies conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2703 Expires September 16, 2006

Date 9/20/04 Name GE Reuter-Stokes, Inc. Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of OHIO and employed by H.S.B. CT of HARTFORD, CT have inspected these items described in this Data Report on 9-20-04, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 9-20-04 Signed [Signature] Commissions NB7920ANB1-OH
(Authorized Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 06/06/07

Sheet: 1 Of 1

Unit: Not Applicable

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Reactor Pressure Vessel (RPV) And Appurtenances

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	8	N/A	1976	See Item 7 Below Removed Installed	Yes, Code Class 1
LPRM	General Electric	J8987	N/A	N/A	1990		Yes, Code Class 1
LPRM	General Electric	04S84390	N/A	N/A	2004		Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing Local Power Range Monitoring (LPRM) incore assembly. The replacement work was performed as follows:

- 1) Removed existing Local Power Range Monitoring (LPRM) incore assembly Serial No J8987 from the Reactor Pressure Vessel (RPV) Core Location No 40-17.
- 2) Installed replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S84390 at the Reactor Pressure Vessel (RPV) Core Location No 40-17.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) OEM/OES General Electric (GE) Reuter-Stokes.
- 3) ASME Section III, Code Class 1, 1971 Edition with Summer 1971 Addenda for the Reactor Pressure Vessel (RPV) as documented on N-1A Code Data Report for nuclear vessels.
- 4) ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda for the appurtenances installed for the RPV as documented on N-5 Code Data Report for field installation of nuclear power plant components, components supports and appurtenances such as incore housing, CRD housing, etc.
- 5) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S84390.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S84390.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/7/07 Date 6/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 6/8/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/8/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Handwritten signature

1. Manufactured and certified by GE Reuter-Stokes, Inc., 8499 Darrow Road, Twinsburg, Ohio 44087
(name and address of NPT Certificate Holder)
2. Manufactured for Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address of Purchaser)
3. Location of installation Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address)
4. Type: RS-C6-1315-201 N/A N/A N/A 2004
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1977 Summer 1977 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Certified Design Specification DC24A1257AK
Certified Design Report CDR-C-5320-289
On File at GE Reuter-Stokes, Inc.
8. Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report

Part or Appurtenance Serial Number	National Board No. in Numerical Order
	N/A
	N/A
(3)	N/A
(4)	N/A
(5)	
(6)	
(7)	
(8)	CORE LOCATION 40-17
(9)	
(10)	
(11)	S/N 04S84390
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

Design pressure 1250 PSIG psi. Temp. Vessel 575°F. Seal 300°F. Hydro. test pressure 1875 PSIG at temp. 70 ° F.
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATION OF DESIGN

Design specifications certified by Michael G. Turek P.E. State OH Reg. no. E-61730
(when applicable)

Design report* certified by Ahmed I. Sabet P.E. State NY Reg. no. 071638
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Assemblies conforms to the rules of construction of the ASME Code, Section III, Division I.

NPT Certificate of Authorization No. N-2703 Expires September 16, 2006

Date 9/20/04 Name GE Reuter-Stokes, Inc. Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of OHIO and employed by H.S.B. CT of HARTFORD, CT have inspected these items described in this Data Report on 9-20-04, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 9-20-04 Signed [Signature] Commissions NB7920ANB1-04
(Authorized Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Reactor Pressure Vessel (RPV) And Appurtenances</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 06/04/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	8	N/A	1976	See Item 7 Below Removed Installed	Yes, Code Class 1
LPRM	General Electric	J8989	N/A	N/A	1990		Yes, Code Class 1
LPRM	General Electric	01S17458	N/A	N/A	2001		Yes, Code Class 1

7. Description Of Work Performed: Replaced existing Local Power Range Monitoring (LPRM) incore assembly. The replacement work was performed as follows:

- 1) Removed existing Local Power Range Monitoring (LPRM) incore assembly Serial No J8989 from the Reactor Pressure Vessel (RPV) Core Location No 32-25.
- 2) Installed replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 01S17458 at the Reactor Pressure Vessel (RPV) Core Location No 32-25.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) OEM/OES General Electric (GE) Reuter-Stokes.
- 3) ASME Section III, Code Class 1, 1971 Edition with Summer 1971 Addenda for the Reactor Pressure Vessel (RPV) as documented on N-1A Code Data Report for nuclear vessels.
- 4) ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda for the appurtenances installed for the RPV as documented on N-5 Code Data Report for field installation of nuclear power plant components, components supports and appurtenances such as incore housing, CRD housing, etc.
- 5) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 01S17458.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F
 Test Pressure: Psig Test Temperature: °F

9. **Remarks** (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 01S17458.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.
 Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/7/07 Date 6/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 6/8/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I.N.S.C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/8/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

**As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production**

Quap Pg. 1 of 2
Swel

1. Manufactured and certified by GE Reuter-Stokes, Inc., 8499 Darrow Road, Twinsburg, Ohio 44087 6/6/07
(name and address of NPT Certificate Holder)
2. Manufactured for Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address of Purchaser)
3. Location of installation Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address)
4. Type: RS-C6-1315-201 N/A N/A N/A 2001
(drawing no.) (mat'l spec. no.) (torque strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1977 Summer 1977 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Certified Design Specification DC24A1257AK
Certified Design Report CDR-C-5320-236
On File at GE Reuter-Stokes, Inc.
8. Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 01S17456	N/A
(2) 01S17457	N/A
(3) 01S17458	N/A
(4)	
(5)	
(6)	
(7)	
(8) CORE LOCATION 32-25	
(9)	
(10) S/N 1S17458	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 1250 PSIG psi. Temp. Vessel 575°F. Seal 300°F. Hydro. test pressure 1925 PSIG at temp. 71 °F.
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATION OF DESIGN

Design specifications certified by Michael G. Turek P.E. State OH Reg. no. E-61730
(when applicable)

Design report* certified by Surinder L. Kampani P.E. State OH Reg. no. E-034113
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Assemblies conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2703 Expires September 16, 2003

Date 3/28/01 Name GE Reuter-Stokes, Inc. Signed James V. Holman
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of OHIO and employed by H.S.B.I. & I. Co. of HARTFORD, CT have inspected these items described in this Data Report on 3-23-2001, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 3-23-2001 Signed Robert Campbell Commissions NB9176A,B,N Ohio 1776
(Authorized Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Reactor Pressure Vessel (RPV) And Appurtenances</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 06/06/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	8	N/A	1976	See Item 7 Below Removed Installed	Yes, Code Class 1
LPRM	General Electric	J8991	N/A	N/A	1990		Yes, Code Class 1
LPRM	General Electric	04S84391	N/A	N/A	2004		Yes, Code Class 1

7. Description Of Work Performed: Replaced existing Local Power Range Monitoring (LPRM) incore assembly. The replacement work was performed as follows:

- 1) Removed existing Local Power Range Monitoring (LPRM) incore assembly Serial No J8991 from the Reactor Pressure Vessel (RPV) Core Location No 48-41.
- 2) Installed replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S84391 at the Reactor Pressure Vessel (RPV) Core Location No 48-41.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) OEM/OES General Electric (GE) Reuter-Stokes.
- 3) ASME Section III, Code Class 1, 1971 Edition with Summer 1971 Addenda for the Reactor Pressure Vessel (RPV) as documented on N-1A Code Data Report for nuclear vessels.
- 4) ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda for the appurtenances installed for the RPV as documented on N-5 Code Data Report for field installation of nuclear power plant components, components supports and appurtenances such as incore housing, CRD housing, etc.
- 5) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S84391.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [X] Test Pressure: Psig Test Temperature: °F
Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S84391.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/7/07 Date 6/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 6/8/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, I, W, S, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/8/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Richard Smith

6/6/07

1. Manufactured and certified by GE Reuter-Stokes, Inc., 8499 Darrow Road, Twinsburg, Ohio 44087
(name and address of NPT Certificate Holder)
2. Manufactured for Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address of Purchaser)
3. Location of installation Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address)
4. Type: RS-C6-1315-201 N/A N/A N/A 2004
(drawing no.) (matl spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1977 Summer 1977 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Certified Design Specification DC24A1257AK
Certified Design Report CDR-C-5320-289
On File at GE Reuter-Stokes, Inc.
8. Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 04S82806	N/A
(2) 04S84389	N/A
(3) 04S84390	N/A
(4) 04S84391	N/A
(5)	
(6)	
(7) CORE LOCATION 48-41	
(8)	
(9) SIN 04S84391	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

Design pressure 1250 PSIG psi. Temp. Vessel 575°F. Seal 300°F. Hydro. test pressure 1875 PSIG at temp. 70 ° F.
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATION OF DESIGN

Design specifications certified by Michael G. Turek P.E. State OH Reg. no. E-61730
(when applicable)

Design report* certified by Ahmed I. Sabet P.E. State NY Reg. no. 071638
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Assemblies conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2703 Expires September 16, 2006

Date 9/20/04 Name GE Reuter-Stokes, Inc. Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of OHIO and employed by H.S.B. CT of HARTFORD, CT have inspected these items described in this Data Report on 9-20-04, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 9-20-04 Signed [Signature] Commissions NB7920ANB1-OH
(Authorized Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 06/06/07

Sheet: 1 Of 1

Unit: Not Applicable

2. Plant: Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Pressure Vessel (RPV) And Appurtenances

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	8	N/A	1976	See Item 7 Below	Yes, Code Class 1
LPRM	General Electric	J8990	N/A	N/A	1990	Removed	Yes, Code Class 1
LPRM	General Electric	04S84389	N/A	N/A	2004	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced existing Local Power Range Monitoring (LPRM) incore assembly. The replacement work was performed as follows:

- 1) Removed existing Local Power Range Monitoring (LPRM) incore assembly Serial No J8990 from the Reactor Pressure Vessel (RPV) Core Location No 16-09.
- 2) Installed replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S84389 at the Reactor Pressure Vessel (RPV) Core Location No 16-09.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) OEM/OES General Electric (GE) Reuter-Stokes.
- 3) ASME Section III, Code Class 1, 1971 Edition with Summer 1971 Addenda for the Reactor Pressure Vessel (RPV) as documented on N-1A Code Data Report for nuclear vessels.
- 4) ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda for the appurtenances installed for the RPV as documented on N-5 Code Data Report for field installation of nuclear power plant components, components supports and appurtenances such as incore housing, CRD housing, etc.
- 5) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S84389.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [X] Test Pressure: Psig Test Temperature: °F
Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Local Power Range Monitoring (LPRM) incore assembly Serial No 04S84389.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/7/07 Date 6/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/16/06 to 6/8/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 W A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/8/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Paulip Supb

6/6/07

1. Manufactured and certified by GE Reuter-Stokes, Inc., 8499 Darrow Road, Twinsburg, Ohio 44087
(name and address of NPT Certificate Holder)
2. Manufactured for Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address of Purchaser)
3. Location of installation Columbia Generating Station, Energy Northwest, Richland, Washington 99352
(name and address)
4. Type: RS-C6-1315-201 N/A N/A N/A 2004
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1977 Summer 1977 1 N/A
(edition) (schedule date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Certified Design Specification DC24A1257AK
Certified Design Report CDR-C-5320-289
On File at GE Reuter-Stokes, Inc.
8. Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 04S82806	N/A
(2) 04S84389	N/A
(3) 04S84390	N/A
(4) 04S84391	N/A
(5)	
(6)	
(7)	
(8) CORE LOCATION 16-09	
(9)	
(10) S/N 04S84389	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

Design pressure 1250 PSIG psi. Temp. Vessel 575°F. Seal 300°F. Hydro. test pressure 1875 PSIG at temp. 70 ° F.
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATION OF DESIGN

Design specifications certified by Michael G. Turek P.E. State OH Reg. no. E-61730
(when applicable)

Design report* certified by Ahmed I. Sabet P.E. State NY Reg. no. 071638
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Assemblies conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2703 Expires September 16, 2006

Date 9/20/04 Name GE Reuter-Stokes, Inc. Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of OHIO and employed by H.S.B. CT of HARTFORD, CT have inspected these items described in this Data Report on 9-20-04, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 9-20-04 Signed [Signature] Commissions NB7920ANSI-OH
(Authorized Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Main Steam (MS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/02/2007
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4A	WPPSS*	MS(1)-4A-P4	N/A	N/A	1983	See Item 7 Below Removed Installed Removed Installed	Yes, Code Class 2
MS-V-605	Borg Warner	66620	N/A	N/A	1981		Yes, Code Class 1
MS-V-605	Flowserve	E660R-1-2	N/A	N/A	2002		Yes, Code Class 1
MS-V-638	Borg Warner	66705	N/A	N/A	1981		Yes, Code Class 1
MS-V-638	Flowserve	E660R-1-4	N/A	N/A	2002		Yes, Code Class 1

- 7. Description Of Work:** Replaced existing valve MS-V-605 and valve MS-V-638. The replacement work was performed as follows:
- 1) Removed existing valve MS-V-605, Serial No 66620.
 - 2) Removed existing valve MS-V-638, Serial No 66705.
 - 3) Installed replacement piping material such as pipe.
 - 4) Installed replacement valve MS-V-605, Serial No E660R-1-2.
 - 5) Installed replacement valve MS-V-638, Serial No E660R-1-4.
 - 6) Made required socket welds.
 - 7) Performed visual examination on the final socket welds. Visual examination results acceptable.
 - 8) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement valve MS-V-605, Serial No E660R-1-2 and valve MS-V-638, Serial No E660R-1-4 were installed is Main Steam (MS) piping system MS(1)-4A-P4. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement valve MS-V-605, Serial No E660R-1-2 and valve MS-V-638, Serial No E660R-1-4 are certified to comply with ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda requirements.
- 5) ASME Section III, Code Class 1 valves for ASME Section III, Code Class 2 application.
- 6) OEM/OES Borg Warner valves are now being manufactured by OEM/OES Flowserve.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Reports for the following replacement valves:

EPN No	Serial No
MS-V-605	E660R-1-2
MS-V-638	E660R-1-4

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/2/07 Date 7/2/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN NO. 2-2028

Quais Supb

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES
As Required by the Provisions of the ASME Code, Section III, Division 1

6/29/07

Pg. 1 of 1

- Manufactured and certified by Flowserve Corporation, 701 First Street, Williamsport, PA. 17701.
(Name and address of N Certificate Holder)
- Manufactured for Energy Northwest, P.O. Box 968, Richland, WA. 99352-0968.
(Name and address of Purchaser)
- Location of installation Columbia Nuclear Station, North Powerplant Loop, Richland, WA. 99352.
(Name and address)
- Model No., Series No., or Type Y-Globe Drawing 76590-2 Rev. N CRN N/A
- ASME Code, Section III, Division 1: 1977 (S) 1977 I N/A
(Edition) (Addenda date) (Class) (Code Case no.)
- Pump or valve Valve Nominal inlet size 3/4 Outlet size 3/4
(in.) (in.)
- Material: Body SA105 Bonnet N/A Disk COCR/S11 6 Bolting N/A

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
E660R-1-1	N/A	FS7: R429	N/A	M874G SN: 41
E660R-1-2	N/A	FS7: R430	N/A	M874G SN: 42
E660R-1-3	N/A	FS7: R431	N/A	M874G SN: 43
E660R-1-4	N/A	FS7: R432	N/A	M874G SN: 44
E660R-1-5	N/A	FS7: R433	N/A	M874G SN: 45
E660R-1-6	N/A	FS7: R434	N/A	M874G SN: 46

VALVE MS-V-605, S/N E 660R-1-2

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

028954 0117

12823-1281

8. Design conditions 3705 psi 100 °F or valve pressure class 150
(pressure) (temperature)

9. Cold working pressure 3705 psi at 100°F

10. Hydrostatic test 5575 psi. Disk differential test pressure 4076 psi

11. Remarks: 3/4"-1500#- Y-Globe Valves.
Material: Backseat: SA564-630-1100: HT Code: 52872.

CERTIFICATION OF DESIGN

Design Specification certified by Richard L. Schlosser P.E. State WA Reg. no. 21701
Design Report certified by Ronald S. Farrell P.E. State PA Reg. no. 035216-E

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N1712 Expires 04/15/04

Date 11/05/02 Name Flowserve Corporation Signed FR Decker
(N Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Pennsylvania and employed by One Beacon America Ins. Co. of Boston, MA. have inspected the pump, or valve, described in this Data Report on 12-6-01 to 11-6-02 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any way for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11-6-02 Signed [Signature] Commissions Pennsylvania 2392
(Authorized Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

310: 37

E6602-1-1 Through E6602-1-1
Certificate Holder's Serial No.

8. Design conditions 3705 psi 100 °F or valve pressure class 100
(pressure) (temperature)

9. Cold working pressure 3705 psi at 100°F

10. Hydrostatic test 5575 psi. Disk differential test pressure 4076 psi

11. Remarks: 3/4"-1500#- Y-Globe Valves.
Material: Backseat: SA564-630-1100: HT Code: 52872.

CERTIFICATION OF DESIGN

Design Specification certified by Richard L. Schlosser P.E. State WA Reg. no. 21701
Design Report certified by Ronald S. Farrell P.E. State PA Reg. no. 035216-E

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N1712 Expires 04/15/04

Date 11/05/02 Name Flowserve Corporation Signed RR Decker
(N Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Pennsylvania and employed by One Beacon America Ins. Co. of Boston, MA. have inspected the pump, or valve, described in this Data Report on 12-6-01 / 11-6-02 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any way for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11-6-02 Signed [Signature] Commissions Pennsylvania 2392
(Authorized Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

310:02
11-6-02



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Date: 01/06/07

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Residual Heat Removal (RHR) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1973 Addenda, Code Case: None

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RHR-V-71C	Velan	102	N/A	N/A	1975	See Item 7 Below	Yes, Code Class 2

7. Description Of Work Performed: Replaced existing studs and nuts for the valve body to bonnet joint for valve RHR-V-71C. The replacement work was performed as follows:

- 1) Removed existing valve body to bonnet joint one (1) at a time.
- 2) Installed replacement valve body to bonnet joint one (1) at a time.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): * Pressure test and VT-2 was not performed to confirm the pressure boundary integrity of the body to bonnet joint for valve RHR-V-71C. One (1) stud and nut was replaced at a time for the valve body to bonnet joint and the valve body to bonnet joint was not breached.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer
 (PLE)
 Date 1/6/07 Date 1/6/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/17/06 to 3/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB12723 N.I./WA 12723
 Inspector's Signature National Board, State, and Endorsements
 Date 3/9/2007



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 08/01/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Reactor Recirculation Cooling (RRC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RRC-P-1B Mechanical Seal Mechanical Seal*	Bingham Bingham Bingham	210100 (B-2-1035) 11N92-1 N01-1*	135 1078 N/A	N/A N/A N/A	1974 1983 1981*	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 No, Code Class 1*

7. Description Of Work Performed: Replaced existing upper mechanical seal for pump RRC-P-1B. The replacement work was performed as follows:

- 1) Removed existing rotating used spare replacement upper mechanical seal, Serial No 11N92-1.
- 2) Installed rotating used spare replacement upper mechanical seal, Serial No N01-1*.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing pump RRC-P-1B is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) * The origin of the rotating used spare replacement upper mechanical seal, Serial No N01-1 is as follows:
 The rotating used spare replacement upper mechanical seal, Serial No N01-1 is from a pump, Serial No 00N04, National Board No 473. This pump was furnished by Bingham Willamette to Black Fox plant. This plant was later cancelled. There is no ASME Code stamping nor ASME Code Data Report for this seal since it was part of an ASME Section III, Code Class 1 stamped pump, Serial No 00N04, National Board No 473 with the NPV-1 Code Data Report.
- 4) * Mechanical seal, Serial No N01-1 was previously refurbished in accordance with ASME Section XI Plan No 2-1843 and consists of seal holder Serial No N01-1 and upper seal gland Serial No N01-4.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached NPV-1 Code Data Report for pump, Serial No 00N04, National Board No 473. The rotating used spare replacement upper mechanical seal Serial No N01-1 is from a pump, Serial No 00N04, National Board No 473.
 2) * The test pressure and the test temperature on the was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 8/1/07 Date 8/1/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/18/06 to 8/3/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, R, I, N, S, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 8/13/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest **Date:** 09/16/06
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
- 2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Standby Liquid Control (SLC) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SLC(1)-1S	WPPSS*	SLC(1)-1S-P1	N/A	N/A	1982	See Item 7 Below Removed Installed	Yes, Code Class 2
SLC(2)-3S	WPPSS*	SLC(2)-3S-P1	N/A	N/A	1983		Yes, Code Class 2
SLC-RV-29A	Lonergan	509258-82-1	N/A	N/A	1978		Yes, Code Class 2
SLC-RV-29A	Lonergan	137180-1-1	N/A	N/A	1994		Yes, Code Class 2

- 7. Description Of Work Performed:** Replaced existing relief valve SLC-RV-29A. The replacement work was performed as follows:
- 1) Removed existing relief valve SLC-RV29A, Serial No 509258-82-1.
 - 2) Installed replacement relief valve SLC-RV-29A, Serial No 137180-1-1.
 - 3) Installed four (4) replacement studs for the relief valve inlet joint.
 - 4) Installed eight (8) replacement nuts for the relief valve inlet joint.
 - 5) Installed four (4) replacement studs for the relief valve outlet joint.
 - 6) Installed eight (8) replacement nuts for the relief valve outlet joint.
 - 7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet joint. No evidence of leakage during the pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement valve SLC-RV-29A, Serial No 137180-1-1 was installed is Standby Liquid Control (SLC) piping system SLC(1)-1S-P1 (For outlet). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The existing ASME Code Stamped piping system in which the replacement valve SLC-RV-29A, Serial No 137180-1-1 was installed is Standby Liquid Control (SLC) piping system SLC(2)-3S-P1 (For inlet). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement valve SLC-RV-29A, Serial No 137180-1-1 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: Static Head Test Temperature: 88.4° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NV-1 Code Data Report for the replacement valve SLC-RV-29A, Serial No 137180-1-1.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 9/16/06 Date 9/16/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5-30-06 to 10-17-06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 7486W N I NS
 Inspector's Signature National Board, State, and Endorsements

Date 10-17-06

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES*

As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

1. Manufactured and certified by Kunkle Industries, Inc.
Loneragan Valve Division, 8222 Bluffton Road, Fort Wayne, IN 46319
(name and address of NV Certificate Holder)
2. Manufactured for Washington Public Power Supply System, WNP-2 OPS WHS Complex, Warehouse 1, North Power Plant
(name and address of Purchaser)
Richland, WA 99352
3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHS Complex, Warehouse 1, North Power I
(name and address)
Loop, Richland, WA 99352
4. Valve ND50DS Orifice size 3/4 Nom. inlet size 1" Outlet size 2"
(model no., series no.) (in.) (in.) (in.)
5. ASME Code, Section III, Division 1: 197A Winter 197A 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Type Spring 1400 N/A 100° F 2100 at 33° min.
(spring, pilot or power operated) (set pressure, psig) (blowdown, psig) (rated temp.) (hydro. test, psig, inlet)
7. Identification 137180-1-1 thru -1-2 N/A A930246 Rev. 0 N/A 1994
(Cert. Holder's serial no.) (CRN) (drawing no.) (Nat'l. Bd. no.) (year built)
8. Control ring settings N/A
9. Pressure retaining items:
SLC-RV-29A, S/N 137180-1-1

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body	T3815-1, -2	SA-351 Gr. CF8M	70 ksi
Bonnet XXXXX	T3304-3, -4	SA-351 Gr. CF8M	70 ksi
XXXXX Stem	94918	SA-479 TY 316	75 ksi
Nozzle	35726	SA-479 TY 316	75 ksi
Disk	30340	SA-479 TY 316	75 ksi
Spring XXXXX Step	31828	SA-479 TY 316	75 ksi
XXXXX Ring Pin Screws	30091	SA-479 TY 316	75 ksi
XXXXX Plug	73028	SA-479 TY 316	75 ksi
Spring	20330	ASTM A-313 TY 316	*
XXXXX Nut	8079541 / N/A	SA-194 Gr. 2H	N/A
XXXXX Stud	8866612	SA-193 Gr. B7	125 ksi

Continued below **

10. Relieving capacity 63,533 lb./hr. (12.7 GPM) @ 10% overpressure as certified by the National Board 01/25/85
(steam or fluid, lb/hr) (psig) (date)
11. Remarks: * Spring exempt from material requirements of NC-2000 but meets design requirements of NC-3595.
- | | | | |
|-------------------|---------------|-----------------|--------|
| ** Cap | H8506-10, -13 | SA-351 Gr. CF8M | 70 ksi |
| Compression Screw | 700737 | SA-479 TY 316 | 75 ksi |
| Gag Plug Screw | 30091 | SA-479 TY 316 | 75 ksi |

CERTIFICATION OF DESIGN

Design Specification certified by David M. Bosl P.E. State WA Reg. no. 20941
 Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

NV Certificate of Authorization No. N-2853 Expires November 18, 1994
 Kunkle Industries, Inc.
 Date 2-24-94 Name Loneragan Valve Division Signed Brian S. McAllister
(NV Certificate Holder) (authorized representative)

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by HSBI & I Co. of Hartford, CT

have inspected the valve described in this Data Report on 2-24-99, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2-24-99 Signed Richard P. Pacey Commissions NB 7444 (NBIP), Ind. 840 Mich 402 [Natl. Bd. (incl. endorsements) and state or prov. and no.]



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest **Date:** 09/126/06
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. **Identification Of System:** Standby Liquid Control (SLC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SLC(1)-1S	WPPSS*	SLC(1)-1S-P1	N/A	N/A	1982	See Item 7 Below	Yes, Code Class 2
SLC(2)-3S	WPPSS*	SLC(2)-3S-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2
SLC-RV-29B	Loneragan	139407-1-2	N/A	N/A	1974	Removed	Yes, Code Class 2
SLC-RV-29B	Loneragan	137180-1-2	N/A	N/A	1994	Installed	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing relief valve SLC-RV-29B. The replacement work was performed as follows:
- 1) Removed existing relief valve SLC-RV29b, Serial No 139407-1-2.
 - 2) Installed replacement relief valve SLC-RV-29B, Serial No 137180-1-2.
 - 3) Installed four (4) replacement studs for the relief valve inlet joint.
 - 4) Installed eight (8) replacement nuts for the relief valve inlet joint.
 - 5) Installed four (4) replacement studs for the relief valve outlet joint.
 - 6) Installed eight (8) replacement nuts for the relief valve outlet joint.
 - 7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet joint. No evidence of leakage during the pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement valve SLC-RV-29B, Serial No 137180-1-2 was installed is Standby Liquid Control (SLC) piping system SLC(1)-1S-P1 (For outlet). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The existing ASME Code Stamped piping system in which the replacement valve SLC-RV-29B, Serial No 137180-1-2 was installed is Standby Liquid Control (SLC) piping system SLC(2)-3S-P1 (For inlet). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement valve SLC-RV-29B, Serial No 137180-1-2 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: Static Head Test Temperature: 88° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NV-1 Code Data Report for the replacement valve SLC-RV-29B, Serial No 137180-1-2.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 9/16/06 Date 9/16/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5-30-06 to 10-17-06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 7486 W NIS
 Inspector's Signature National Board, State, and Endorsements

Date 10-17-06

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

1. Manufactured and certified by Kunkle Industries, Inc.
Loneragan Valve Division, 8222 Bluffton Road, Fort Wayne, IN 46319
(name and address of NV Certificate Holder)
2. Manufactured for Washington Public Power Supply System, WNP-2 OPS WHS Complex, Warehouse 1, North Power Plant
Richland, WA 99352
(name and address of Purchaser)
3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHS Complex, Warehouse 1, North Power 1
Loop, Richland, WA 99352
(name and address)
4. Valve ND50DS Orifice size .394 Nom. inlet size 1" Outlet size 2"
(model no., series no.) (in.) (in.) (in.)
5. ASME Code, Section III, Division 1: 1974 Winter 1974 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Type Spring 1400 N/A 100° F 2100 at 33° min °F
(spring, pilot or power operated) (set pressure, psig) (blowdown, psi) (rated temp.) (hydro. test, psig, inlet)
7. Identification 137180-1-1 thru -1-2 N/A A930246 Rev. 0 N/A 1994
(Cert. Holder's serial no.) (CRN) (drawing no.) (Nat'l Bd. no.) (year built)
8. Control ring settings N/A
9. Pressure retaining items:

SLC-RV-29B, S/N 137180-1-2

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body	T3815-1, -2	SA-351 Gr. CF8M	70 ksi
Bonnet	T3304-3, -4	SA-351 Gr. CF8M	70 ksi
Stem	94918	SA-479 TY 316	75 ksi
Nozzle	35726	SA-479 TY 316	75 ksi
Disk	30340	SA-479 TY 316	75 ksi
Spring	31828	SA-479 TY 316	75 ksi
Ring Pin Screws	30091	SA-479 TY 316	75 ksi
Plug	73028	SA-479 TY 316	75 ksi
Spring	20330	ASTM A-313 TY 316	*
Nut	8079541 / N/C	SA-194 Gr. 2H	N/A
Stud	8866612	SA-193 Gr. B7	125 ksi

Continued below **

10. Relieving capacity 63,533 lb./hr. (12.7 GPM) @ 10% overpressure as certified by the National Board 01/25/85
(steam or fluid, lb/hr) (psi) (date)

11. Remarks: * Spring exempt from material requirements of NC-2000 but meets design requirements of NC-3595.

** Cap	H8506-10, -13	SA-351 Gr. CF8M	70 ksi
Compression Screw	700737	SA-479 TY 316	75 ksi
Gag Plug Screw	30091	SA-479 TY 316	75 ksi

CERTIFICATION OF DESIGN

Design Specification certified by David M. Bosi P.E. State WA Reg. no. 20941
Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

NV Certificate of Authorization No. N-2853 Expires November 18, 1994
Date 2-24-94 Name Kunkle Industries, Inc.
Loneragan Valve Division Signed Brian S. Mallon
(NV Certificate Holder) (authorized representative)

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by HSBI & I Co.

of Hartford, CT have inspected the valve described in this Data Report on 2-24-94, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2-24-94 Signed Richard P. Pracy Commissions NB 7444 (NBIP), Mich 402, Ind 840
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1971 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 06/23/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS-V-28B Pilot Disc Main disc	Rockwell Flowsolve Flowsolve	JS-98 84722-1 80496-3	96 N/A N/A	N/A N/A N/A	1974 2005 2006	See Item 7 Below See Item 7 Below See Item 7 Below	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Assembled pilot disc (stem disc) main disc (piston disc) for use for valve MS-V-28B, Serial No JS-98. The parts were assembled as follows:
 1) Assembled pilot disc (stem disc) Serial No 84722-1 and main disc (piston disc) Serial No 80496-3.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The ASME Section XI plans applicable to pilot disc (stem disc) and main disc (piston disc) for valve MS-V-28B are as follows:
 ASME Section XI Plan No 2-2034 - Assemble pilot disc (stem disc) and main disc (piston disc) for valve MS-V-28B.
 ASME Section XI Plan No 2-2036 - Replace pilot disc (stem disc) and main disc (piston disc) for valve MS-V-28C.
- 3) OEM/OES Rockwell International/Edward Valves, Inc valves/parts are now being manufactured by OEM/OES Flowsolve.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Reports for the following replacement parts:

Part Description	Serial No
Pilot disc (stem disc)	84722-1
Main disc (piston disc)	80496-3

2) * See ASME Section XI Plan No 2-2036 for the pressure test.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/11/07 to 7/17/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, J, NS, C 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/17/07

Reading Super
6/13/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(name and address of NPT Certificate Holder)
2. Manufactured for Energy Northwest, P. O. Box 968, Richland, WA 99352
(name and address of purchaser)
3. Location of installation Energy Northwest, Columbia Generating Station, N. Powerplant Loop, Richland, WA
(name and address)
4. Type PD-422885, R/F* SA105 N/A N/A 2005
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 Winter, 1971 I N/A
(edition) (addenda data) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Stem/Stem-Disk assembly for 26" 1612JMMNTY Valve
Disk material meets ASME Section II, 1974 Edition
* Sheet 3B. Sheet 1, R/U S. O. 33327
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 84722-1	N/A	(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7) SIN 84722-1 FOR		(32)	
(8)		(33)	
(9) VALVE MS-V-28B		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 1250 psi. Temp. 575 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. 84722-1 through ----

CERTIFICATION OF DESIGN

Design specifications certified by Boyd Brooks P.E. State CA Reg. no. 13655
(when applicable)
 Design report* certified by S. L. Adams P.E. State NC Reg. no. 4187
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s) conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006

Date 6/25/05 Name Flowserve Corporation Signed W. A. Ras
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 6-25-05, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.
 By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 6-25-05 Signed [Signature] Commissions NC 7421
(Authorized Nuclear Inspector) [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

Relay Suph
6/13/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(name and address of NPT Certificate Holder)
2. Manufactured for Energy Northwest, P. O. Box 968, Richland, WA 99352
(name and address of purchaser)
3. Location of installation Energy Northwest, Columbia Generating Station, N. Powerplant Loop, Richland, WA
(name and address)
4. Type PD-422885, R/E* SA105 N/A N/A 2006
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 Winter, 1971 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Disk-Piston assembly for 26" 1612JMMNTY Valve
Disk material meets ASME Section II, 1974 Edition
* Sheet 3B, Sheet 1, R/V S. O. 39120
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 80496-3	N/A
(2)	
(3)	
(4)	
(5)	
(6) S/N 80496-3 FOR VALVE	
(7) MS-V-283.	
(8)	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 1250 psi. Temp. 575 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.
(7/98) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Certificate Holder's Serial Nos. 80496-3 through ---

CERTIFICATION OF DESIGN

Design specifications certified by Boyd Brooks P.E. State CA Reg. no. 13655
(when applicable)
 Design report* certified by S. L. Adams P.E. State NC Reg. no. 4187
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s)
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006

Date 8/28/06 Name Flowserve Corporation Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 8/28/06, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 8/28/06 Signed [Signature] Commissions NC#1421
(Authorized Nuclear Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
 (b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
 (c) **Type Code Symbol Stamp:** Not Applicable
 (d) **Certificate Of Authorization No.:** Not Applicable
 (e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 197 Addenda, Code Case: Note 1
 (b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
 (c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 06/22/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS-V-28B	Rockwell	JS-98	96	N/A	1974	See Item 7 Below	Yes, Code Class 1
Pilot disc	Rockwell	6033641-151	N/A	N/A	1989	Removed	Yes, Code Class 1
Pilot disc	Flowserve	84722-1	N/A	N/A	2005	Installed	Yes, Code Class 1
Main disc	Edward	215585-3	N/A	N/A	1990	Removed	Yes, Code Class 1
Main disc	Flowserve	80496-3	N/A	N/A	2006	Installed	Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced existing parts for valve MS-V-28B, Serial No JS-98. The replacement work was performed as follows:
- 1) Removed existing pilot disc (stem disc) Serial No 6033641-151 from the valve.
 - 2) Removed existing main disc (piston disc) Serial No 215585-3 from the valve.
 - 3) Performed VT-1 visual examination on replacement studs for the valve body to bonnet joint for ISI (PSI). VT-1 visual examination results acceptable.
 - 4) Performed VT-1 visual examination on replacement nuts for the valve body to bonnet joint for ISI (PSI). VT-1 visual examination results acceptable.
 - 5) Installed replacement pilot disc (stem disc) Serial No 84722-1 in the valve.
 - 6) Installed replacement main disc (piston disc) Serial No 80496-3 in the valve.
 - 7) Installed twenty four (24) VT-1 visually examined replacement studs for the valve body to bonnet joint.
 - 8) Installed twenty four (24) VT-1 visually examined replacement nuts for the valve body to bonnet joint.
 - 9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve body to bonnet bolted joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The ASME Section XI plans applicable to valve MS-V-28B are as follows:
 ASME Section XI Plan No 2-2034 - Assemble pilot disc (stem disc) and main disc (piston disc) for valve MS-V-28B.
 ASME Section XI Plan No 2-2036 - Replace parts for valve MS-V-28B.
- 3) OEM/OES Rockwell International/Edward Valves, Inc parts are now being manufactured by OEM/OES Flowserve.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Reports for the following replacement parts:

Part Description	Serial No
Pilot disc (stem disc)	84722-1
Main disc (piston disc)	80496-3

2) * The test pressure and the test temperature on the valve body to bonnet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/1/07 to 6/27/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I.N.S.C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/27/07

Quaid Sup's
6/14/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(name and address of NPT Certificate Holder)
2. Manufactured for: Energy Northwest, P. O. Box 968, Richland, WA 99352
(name and address of purchaser)
3. Location of Installation Energy Northwest, Columbia Generating Station, N. Powerplant Loop, Richland, WA
(name and address)
4. Type PD-422885, R/F* SA105 N/A N/A 2005
(drawing no.) (mat. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 Winter, 1971 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Stem/Stem-Disk assembly for 26" 1612JMMNTY Valve
Disk material meets ASME Section II, 1974 Edition
* Sheet 3B, Sheet I, R/U S. O. 33327
8. Nom. thickness (In.) N/A Min. design thickness (In.) Per #4 Dis. ID (In. & In.) N/A Length overall (ft & In.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) 84722-1	N/A
(2)	
(3)	
(4)	
(5)	
(6) S/N 84722-1 FOR	
(7)	
(8)	
(9) VALVE MS-V-28B	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 1250 psi. Temp. 575 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. 84722-1 through ---

CERTIFICATION OF DESIGN

Design specifications certified by Boyd Brooks P.E. State CA Reg. no. 13655
(when applicable)
 Design report* certified by S. L. Adams P.E. State NC Reg. no. 4187
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s) conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006
 Date 6/25/05 Name Flowserve Corporation Signed W.A. Ras
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 6-25-05, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 6-25-05 Signed [Signature] Commissions NC 1421
(Authorized Nuclear Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

PLAN No. 2-2036

Quair Supb
6/14/07.

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(name and address of NPT Certificate Holder)
2. Manufactured for Energy Northwest, P. O. Box 968, Richland, WA 99352
(name and address of purchaser)
3. Location of installation Energy Northwest, Columbia Generating Station, N. Powerplant Loop, Richland, WA
(name and address)
4. Type PD-422885, R/E* SA105 N/A N/A 2006
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 Winter, 1971 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Disk-Piston assembly for 26" 1612JMMNTY Valve
Disk material meets ASME Section II, 1974 Edition
* Sheet 3B. Sheet 1, R/V S. O. 39120
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 80496-3	N/A
(2)	
(3)	
(4)	
(5)	
(6)	
(7) S/N 80496-3 FOR	
(8)	
(9)	
(10) VALVE MS-V-28B	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 1250 psi. Temp. 575 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. 80496-3 through ---

CERTIFICATION OF DESIGN

Design specifications certified by Boyd Brooks P.E. State CA Reg. no. 13655
(when applicable)
 Design report* certified by S. L. Adams P.E. State NC Reg. no. 4187
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s)
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006

Date 8/28/06 Name Flowserve Corporation Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province
 of NC and employed by HSB CT
 of Hartford, CT have inspected these items described in this Data Report on 8/28/06, and state that to the
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section
 III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described
 in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage
 or loss of any kind arising from or connected with this inspection.

Date 8/28/06 Signed [Signature] Commissions NC*1421
(Authorized Nuclear Inspector) [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Date: 05/24/07

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1971 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS-V-28C Pilot Disc Main disc	Rockwell Flowsolve Flowsolve	JU-17 83831-1 89220-2	77 N/A N/A	N/A N/A N/A	1973 2005 2006	See Item 7 Below See Item 7 Below See Item 7 Below	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Assembled pilot disc (stem disc) main disc (piston disc) for use for valve MS-V-28C, Serial No JU-17. The parts were assembled as follows:

- 1) Assembled pilot disc (stem disc) Serial No 83831-1 and main disc (piston disc) Serial No 89220-2.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The ASME Section XI plans applicable to pilot disc (stem disc) and main disc (piston disc) for valve MS-V-28C are as follows:
ASME Section XI Plan No 2-2037 - Assemble pilot disc (stem disc) and main disc (piston disc) for valve MS-V-28C.
ASME Section XI Plan No 2-2039 - Replace pilot disc (stem disc) and main disc (piston disc) for valve MS-V-28C.
- 3) OEM/OES Rockwell International/Edward Valves, Inc valves/parts are now being manufactured by OEM/OES Flowsolve.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Reports for the following replacement parts:

Part Description	Serial No
Pilot disc (stem disc)	83831-1
Main disc (piston disc)	89220-2

 2) * See ASME Section XI Plan No 2-2039 for the pressure test.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 5/24/07 Date 5/24/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/11/07 to 5/24/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Inspector's Signature Commissions 9496 NAB, I, NS, C, 9494
 National Board, State, and Endorsements
 Date 5/24/07

PLAN No. 2.2037

Relay Shop
5/24/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Flowserve Corp. 1900 S. Saunders Street Raleigh, NC 27603
(Name and Address of NPT Certificate Holder)
2. Manufactured for Energy Northwest / PO Box 968 Richland, WA 99352-0968
(Name and Address of Purchaser)
3. Location of Installation Energy Northwest, Columbia Generating Station / North Powerplant Loop Richland, WA 99352
(Name and Address)
- 4 Type: PD-422885 Rev E SA-105 N/A N/A 2005
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971** Winter, 1971 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Stem-Disk for a 26" Figure 1612JMMNTY Stop Valve

Sales Order 32112

** The SA105 material was supplied to Section II, 1974 Edition

8. Nom. Thickness (In.) N/A Min. design thickness PER#4 Dia. ID (ft & In.) N/A Length overall (ft & In.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number		National Board No. In Numerical Order	
(1)	83831-1		N/A
(2)			
(3)			
(4)			
(5)	S/N 83831-1 FOR MS-V-28C		
(6)			
(7)			
(8)			
(9)			
(10)			
(11)			
(12)			
(13)			
(14)			
(15)			
(16)			
(17)			
(18)			
(19)			
(20)			
(21)			
(22)			
(23)			
(24)			
(25)			
(26)			
(27)			
(28)			
(29)			
(30)			
(31)			
(32)			
(33)			
(34)			
(35)			
(36)			
(37)			
(38)			
(39)			
(40)			
(41)			
(42)			
(43)			
(44)			
(45)			
(46)			
(47)			
(48)			
(49)			
(50)			

10. Design pressure 1250 psi. Temp. 575 °F. Hydro. Test pressure N/A At temp. °F

*Supplemental information in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATION OF DESIGN

Design specification certified by B. Brooks P.E. State CA Reg. no. 13655
 Design Report * certified by _____ P.E. State _____ Reg. no. _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PARTS
 Conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N1563 Expires 11/26/2006

Date 3 124 105 Name Flowserve Corp. Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by HSB CT of Hartford Connecticut have inspected these items described in this Data Report on 3 124 105, and state that, to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Signed [Signature] Commissions NC1421 Date 3 124 105
(Authorized Inspector) (Nat'l. Bd. (incl. Endorsements) and state, prov. and no.)

Quay Smith

5/26/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
 As Required by the Provisions of the ASME Code, Section III
 Not to Exceed One Day's Production

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(name and address of NPT Certificate Holder)
2. Manufactured for Energy Northwest, P. O. Box 968, Richland, WA 99352
(name and address of purchaser)
3. Location of installation Energy Northwest, Columbia Generating Station, N. Powerplant Loop, Richland, WA
(name and address)
4. Type PD-422885, R/E* SA105 N/A N/A 2006
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 Winter, 1971 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Disk-Piston assembly for 26" 1612JMMNTY Valve
Disk material meets ASME Section II, 1974 Edition
* Sheet 3B. Sheet 1, R/V S. O. 39120
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 89220-1	N/A
(2) 89220-2	N/A
(3)	
(4)	
(5)	
(6) <u>S/N 89220-2 FOR MS-V-280</u>	
(7)	
(8)	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 1250 psi. Temp. 575 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. 89220-1 through 89220-2

CERTIFICATION OF DESIGN

Design specifications certified by Boyd Brooks P.E. State CA Reg. no. 13655
(when applicable)
 Design report* certified by S. L. Adams P.E. State NC Reg. no. 4187
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s) conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006

Date 8/28/06 Name Flowserve Corporation Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 8/28/06, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 8/28/06 Signed [Signature] Commissions NC #1421
(Authorized Nuclear Inspector) (Natl. Bd. (incl. endorsements) and state or prov. and no.)



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
 (b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
 (c) **Type Code Symbol Stamp:** Not Applicable
 (d) **Certificate Of Authorization No.:** Not Applicable
 (e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 197 Addenda, Code Case: Note 1
 (b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
 (c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 06/22/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS-V-28C	Rockwell	JU-17	77	N/A	1973	See Item 7 Below	Yes, Code Class 1
Pilot disc	Rockwell	6033641-157	N/A	N/A	1989	Removed	Yes, Code Class 1
Pilot disc	Flowserve	83831-1	N/A	N/A	2005	Installed	Yes, Code Class 1
Main disc	Edward	215585-4	N/A	N/A	1990	Removed	Yes, Code Class 1
Main disc	Flowserve	89220-2	N/A	N/A	2006	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced existing parts for valve MS-V-28C, Serial No JU-17. The replacement work was performed as follows:

- 1) Removed existing pilot disc (stem disc) Serial No 6033641-157 from the valve.
- 2) Removed existing main disc (piston disc) Serial No 215585-4 from the valve.
- 3) Performed VT-1 visual examination on replacement studs for the valve body to bonnet joint for ISI (PSI). VT-1 visual examination results acceptable.
- 4) Performed VT-1 visual examination on replacement nuts for the valve body to bonnet joint for ISI (PSI). VT-1 visual examination results acceptable.
- 5) Installed replacement pilot disc (stem disc) Serial No 83831-1 in the valve.
- 6) Installed replacement main disc (piston disc) Serial No 89220-2 in the valve.
- 7) Installed twenty four (24) VT-1 visually examined replacement studs for the valve body to bonnet joint.
- 8) Installed twenty four (24) VT-1 visually examined replacement nuts for the valve body to bonnet joint.
- 9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve body to bonnet bolted joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The ASME Section XI plans applicable to valve MS-V-28C are as follows:
 ASME Section XI Plan No 2-2037 - Assemble pilot disc (stem disc) and main disc (piston disc) for valve MS-V-28B.
 ASME Section XI Plan No 2-2039 - Replace parts for valve MS-V-28C.
- 3) OEM/OES Rockwell International/Edward Valves, Inc parts are now being manufactured by OEM/OES Flowserve.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Exempt Pneumatic Test Pressure: 1021 Psig Nominal Operating Pressure Test Temperature: 182.5° F Other

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Reports for the following replacement parts:

Part Description	Serial No
Pilot disc (stem disc)	83831-1
Main disc (piston disc)	89220-2

2) * The test pressure and the test temperature on the valve body to bonnet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/1/07 to 6/28/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I, N.S. C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/28/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Repair Supp

1. Manufactured and certified by Flowserve Corp. 1900 S. Saunders Street Raleigh, NC 27603
(Name and Address of NPT Certificate Holder)
2. Manufactured for Energy Northwest / PO Box 968 Richland, WA 99352-0968
(Name and Address of Purchaser)
3. Location of Installation Energy Northwest, Columbia Generating Station / North Powerplant Loop Richland, WA 99352
(Name and Address)
4. Type: PD-422885 Rev E SA-105 N/A N/A 2005
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971** Winter, 1971 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Stem-Disk for a 26" Figure 1612JMMNTY Stop Valve

Sales Order 32112

** The SA105 material was supplied to Section II, 1974 Edition

8. Nom. Thickness (in.) N/A Min. design thickness PER#4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. In Numerical Order		Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	83831-1	N/A	(26)		
(2)			(27)		
(3)			(28)		
(4)			(29)		
(5)			(30)		
(6)	<u>SN 83831-1</u>	<u>FOR</u>	(31)		
(7)			(32)		
(8)			(33)		
(9)	<u>VALVE MS-V-28C</u>		(34)		
(10)			(35)		
(11)			(36)		
(12)			(37)		
(13)			(38)		
(14)			(39)		
(15)			(40)		
(16)			(41)		
(17)			(42)		
(18)			(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

10. Design pressure 1250 psi. Temp. 575 °F. Hydro. Test pressure N/A At temp. °F

*Supplemental information in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

CERTIFICATION OF DESIGN

Design specification certified by B. Brooks P.E. State CA Reg. no. 13655
 Design Report * certified by _____ P.E. State _____ Reg. no. _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PARTS
 Conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N1563 Expires 11/26/2006

Date 3 124 05 Name Flowserve Corp. Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by HSB CT of Hartford Connecticut have inspected these items described in this Data Report on 3 124 05, and state that, to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.
 By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Signed [Signature] Commissions NC1421 Date 3 124 05
(Authorized Inspector) (Nat'l. Bd. (Incl. Endorsements) and state, prov. and no.)

PLAN No. 2-2039

David Sipe

6/14/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III Not to Exceed One Day's Production

- 1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(name and address of NPT Certificate Holder)
- 2. Manufactured for Energy Northwest, P. O. Box 968, Richland, WA 99352
(name and address of purchaser)
- 3. Location of installation Energy Northwest, Columbia Generating Station, N. Powerplant Loop, Richland, WA
(name and address)
- 4. Type PD-422885, R/E* SA105 N/A N/A 2006
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
- 5. ASME Code, Section III, Division 1: 1971 Winter, 1971 I N/A
(edition) (addenda date) (class) (Code Case no.)
- 6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
- 7. Remarks: Disk-Piston assembly for 26" 1612JMMNTY Valve
Disk material meets ASME Section II, 1974 Edition
* Sheet 3B. Sheet 1, R/V S. O. 39120
- 8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
- 9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 89220-1	N/A	(26)	
(2) 89220-2	N/A	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8) SIN 89220-2 FOR		(33)	
(9)		(34)	
(10)		(35)	
(11) VALVE MIS-V-28C		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 1250 psi. Temp. 575 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. 89220-1 through 89220-2

CERTIFICATION OF DESIGN

Design specifications certified by Boyd Brooks P.E. State CA Reg. no. 13655
(when applicable)
 Design report* certified by S. L. Adams P.E. State NC Reg. no. 4187
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s)
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006
 Date 8/28/06 Name Flowserve Corporation Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province
 of NC and employed by HSB CT
 of Hartford, CT have inspected these items described in this Data Report on 8/28/06, and state that to the
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section
 III, Division 1. Each part listed has been authorized for stamping on the date shown above.
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described
 in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage
 or loss of any kind arising from or connected with this inspection.

Date 8/28/06 Signed [Signature] Commissions NC 1421
(Authorized Nuclear Inspector) (Nuc'l. Bd. (incl. endorsements) and state or prov. and no.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Fuel Pool Cooling (FPC) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 09/27/06
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
FPC(2)-1B	WPPSS*	FPC(2)-1B-P1	N/A	N/A	1983	See Item 7 Below Removed Installed	Yes, Code Class 3
FPC-RV-21B	Loneran	509258-98-1	N/A	N/A	1982		Yes, Code Class 3
FPC-RV-21B	Crosby**	N99777-00-0004	N/A	N/A	2005		Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing relief valve FPC-RV-21B. The replacement work was performed as follows:
- 1) Removed existing relief valve FPC-RV-21B, Serial No 509258-98-1.
 - 2) Installed replacement relief valve FPC-RV-21B, Serial No N99777-00-0004.
 - 3) Installed four (4) replacement studs for the relief valve inlet joint.
 - 4) Installed eight (8) replacement nuts for the relief valve inlet joint.
 - 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet bolted flanged joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) ** Anderson Greenwood Crosby.
- 4) The existing ASME Code Stamped piping system applicable to the replacement valve FPC-RV-21B, Serial No N99777-00-0004 is Fuel Pool Cooling (FPC) piping system FPC(2)-1B-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement valve FPC-RV-21B, Serial No N99777-00-0004 is certified to comply with ASME Section III, Code Class 3, 1995 Edition with 1996 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 117.5 Psig Test Temperature: 95° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve FPC-RV-21B, Serial No N99777-00-0004.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 9/27/06 Date 9/27/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5-15-06 to 10-17-06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions TH86WNIIS
 Inspector's Signature National Board, State, and Endorsements
 Date 10-17-06

10. Relieving capacity 279 Gpm Water @ 70 DEG.F @ 10 overpressure as certified by the National Board 2.1980
(steam or fluid, lb/hr) (date)

11. Remarks: _____

CERTIFICATE OF DESIGN

Design Specification certified by Jack R. Cole PE State WA Reg. No. 0020653

Design Report certified by Charles R. Dowd PE State MA Reg. No. 39103

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

NV Certificate of Authorization No. N-1878 Expires 30-Sep-07

Date 31-MAR-05 Name Anderson Greenwood Crosby
Wrentham, MA Signed D. E. T...
(NV Certificate Holder) (Authorized Representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by HSB - CT of Hartford, CT have inspected the valve described in this Data Report on 3-31, 2005 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date April 2, '05 Signed [Signature] Commissions MA-1420 A, N, I
(Authorized Inspector) (Nat'l. Bd. (incl. Endorsements) and state or prov. and no.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: High Pressure Core Spray (HPCS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971* Edition with Winter 1973* Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 12/07/06
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(70)-1-HPCS HPCS-P-2	WPPSS** Pacific Pumps	SW(70)-1-HPCS-P1 48153	N/A 49	N/A N/A	1983 1974	See Item 7 Below See Item 7 Below	Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work Performed: Replaced bolting material associated with pump HPCS-P-2 discharge to pipe joints. The replacement work was performed as follows:

- 1) Removed existing studs.
- 2) Removed existing nuts.
- 3) Installed eight (8) replacement studs.
- 4) Installed eight (8) replacement nuts.
- 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test. See VT-2 visual examination data sheet for locations of the joints.

Replaced bolting material associated with pump HPCS-P-2 joints. The replacement work was performed as follows:

- 1) Removed existing stud bolts/hex head cap screws from ten (10) joints.
- 2) Removed existing nuts from ten (10) joints.
- 3) Installed replacement stud bolts/hex head cap screws for ten (10) joints.
- 4) Installed replacement nuts for ten (10) joints.
- 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test. See VT-2 visual examination data sheet for locations of the joint.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * The existing ASME Code Stamped High Pressure Core Spray (HPCS) (RHR) piping system SW(70)-1-HPCS-P1 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 3) * The existing ASME Code Stamped pump HPCS-P-2, Serial No 48153 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with no Addenda requirements.
- 4) ** Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 58/59 Psig Test Temperature: 62° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 12/7/06 Date 12/7/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/9/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Inspectors Signature Commissions 6A 12723 N.I.
 National Board, State, and Endorsements

Date 12/8/06



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 07/05/06
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class	
RCIC-V-54	Flowserve	E959R-1-2	N/A	N/A	2003	See Item 7 Below	Yes, Code Class 2	
Back Seat	Flowserve	H/C ONU	N/A	N/A	2003		No, Code Class 2	
Back Seat	Flowserve	18897-2	N/A	N/A	2005		Installed	No, Code Class 2
Stem Disc	Flowserve	8	N/A	N/A	2003		Removed	No, Code Class 2
Stem Disc	Borg Warner	320692-2	N/A	N/A	1996		Installed	Yes, Code Class 2

7. **Description Of Work:** Replaced parts for valve RCIC-V-54, Serial No E959-1-2. The replacement work was performed as follows:
- 1) Removed existing back seat with Heat Code No ONU from the valve.
 - 2) Installed replacement back seat with Serial No 1197-2 in the valve.
 - 3) Removed existing stem disc assembly with Serial No 8 from the valve.
 - 4) Installed replacement stem disc assembly with Serial No 320692-2 in the valve.

NOTES -

- 1) OEM/OES Borg Warner parts are now being manufactured by OEM/OES Flowserve



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement stem disc assembly with Serial No 320692-2.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/5/06 Date 7/5/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller Commissions _____
 Inspector's Signature National Board, State, and Endorsements
 Date _____

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Philip Sully

1. Manufactured and certified by EN/IP INTERNATIONAL, INC. PUMP DIV. LOS ANGELES OPERATIONS 1200 E. VESPER, VESPER CA.
(name and address of NPT Certificate Holder) 90

2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEMS, NORTH POWER PLANT LOOP RICHLAND, WASHINGTON, 99352
(name and address of Purchaser)

3. Location of Installation WASHINGTON PUBLIC POWER SUPPLY SYSTEMS, NORTH POWER PLANT LOOP RICHLAND, WASHINGTON, 99352
(name and address)

4. Type: 76148 REV.B. STELLITE #6, ALLOY 1 N/A N/A 1996
(drawing no.) (mat'l spec. no.) (tensile strength) (CRND) (year built)

5. ASME Code, Section III, Division 1: * * 2 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)

7. Remarks: EN/IP JOB NO. 06SN6824 PART NAME: STEM & DISC ASSEMBLY

HYDROSTATIC TESTING NOT PERFORMED NAMEPLATE ATTACHED BY WIRE

* MEETS 1971 ED., WINTER 1973 ADD., AND 1974 ED., SUMMER 1975 ADD. PRESSURE CLASS: 1500#

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 320692 SN 1	NA
(2) 320692 SN 2	NA
(3) 320692 SN 3	NA
(4) 320692 SN 4	NA
(5) 320692 SN 5	NA
(6)	
(7)	
(8)	<i>S/N 320692, S/N 2</i>
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 3000 psi. Temp. 100 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. 100692 21's 1 1288 1

CERTIFICATION OF DESIGN

Design specifications certified by N/A (when applicable) P.E. State N/A Reg. no. N/A
Design report* certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that (these) STEEL & DISC ASSEMBLY conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1131 Expires JUNE 10, 1999

Date 8-19-96 Name BR/IP INTERNATIONAL, INC. Signed Robert J. Costello (Authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by ARCHRIGHT MUTUAL INS. FACTORY MUTUAL ENGINEERING ASSOCIATION of NORWOOD, MASS. have inspected these items described in this Data Report on 8/21/96, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 8/21/96 Signed [Signature] Commissions NBI-15, CA1864 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

SATISFACTORY [checked] UNSATISFACTORY
Vijay Bell II 8-20-96
RECEIVED INSPECTOR / LEVEL / DATE

000010419



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
 (b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
 (c) **Type Code Symbol Stamp:** Not Applicable
 (d) **Certificate Of Authorization No.:** Not Applicable
 (e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Residual Heat Removal (RHR) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
 (c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 06/04/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2A	WPPSS*	RHR(1)-2A-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2
RHR(4)-1A	WPPSS*	RHR(4)-1A-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2
RHR-RV-1A	Crosby	N60597-00-0018	N/A	N/A	1990	Removed	Yes, Code Class 2
RHR-RV-1A	Crosby	N60597-00-0019	N/A	N/A	1990	Installed	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing valve relief valve RHR-RV-1A. The replacement work was performed as follows:
- 1) Removed rotating used existing valve RHR-RV-1A., Serial No N60597-00-0018.
 - 2) Installed rotating used spare replacement relief valve RHR-RV-1A, Serial No N60597-00-0019.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) Inlet Side - The existing ASME Code Stamped piping system in which the replacement valve RHR-RV-1A, Serial No N60597-00-0019 was installed is Residual Heat Removal (RHR) piping system RHR(1)-2A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) Outlet Side - The existing ASME Code Stamped piping system in which the replacement valve RHR-RV-1A, Serial No N60597-00-0019 was installed is Residual Heat Removal (RHR) piping system RHR(4)-2A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement valve RHR-RV-1A, Serial No N60597-00-0019 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1974 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: P_{sig} Test Temperature: °F
 Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NV-1 Code Data Report for the rotating used spare replacement relief valve RHR-RV-1A, Serial No N60597-00-0019.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/7/07 Date 6/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9/15/06 to 6/8/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/8/07 6/12/07

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM MASS

Relief Supp

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

QC-4C-1

6/4/07

DATA REPORT
Safety and Safety-Relief-Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, MA 02093

Name and Address

Model No. JR-WR Order No. N06360 Contract Date 3/7/90 National Board No. ---
Washington Public Power Supply System

2. Manufactured For PO Box 968 Richland, WA 99352-0968 Order No. 204649

Name and Address

3. Owner Washington Public Power Supply System

Name and Address

4. Location of Plant Hanford II RHR-RV-1A, S/W N60597-00-0019

5. Valve Identification MPL E123001 Serial No. N60597-00-0019 Drawing No. DS-C-60597 Rev. E

Type Relief Orifice Size .280 Pipe Size --- Inlet 3/4 Outlet 1
Safety Safety Relief Pilot Power Actuated Inch Inch Inch Inch

6. Set Pressure (PSIG) 500 480°
Raised Temperature

Stamped Capacity 20 GPM WTR @ 70°F 10 % Overpressure --- Blowdown (PSIG) 15% of SP

Hydrostatic Test (PSIG) Inlet 750 Complete Valve 225

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 2 Edition 1974, Addenda Date Summer 1975, Case No. 1567 & N242-1 1711

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification (including Type or Grade)
1. Castings		
Body		
XXXXXX Cylinder	<u>N91851-34-0024</u>	<u>ASME SA 216 Gr. WCB</u>
2. Bar Stock and Forgings		
Support Rods		
XXXXXX Base	<u>N91850-37-0024</u>	<u>ASME SA 479 Type 316</u>
Disc	<u>N91855-46-0088</u>	<u>ASME SB 164 CL. A</u>
Spring Washers	<u>N92220-36-0081</u> <u>N92220-36-0083</u>	<u>ASME SA 193 Gr. B6</u>
Adjusting Bolt	<u>N92221-34-0028</u>	<u>ASME SA 193 Gr. B6</u>
Spindle K61719-39-0034	<u>N92219-39-0034</u>	<u>ASME SA 193 Gr. B6</u>

VERIFIED & ACCEPTED DR
REG. INSPECTOR
LEVEL IF DATE 10-22-90

Serial No. or
Identification

Material Specification
Including Type or Grade

c. Spring

NX3119-0027

ASTM B166

d. Bolting

e. Other Parts such as Pilot Components

We certify that the statements made in this report are correct.

Date 9/29/90 Signed Crosby Valve & Gage Co. By [Signature]
Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1992

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MASS. and employed by Factory Mutual Insurance Company have inspected the equipment described in this Data Report on Sept 27 1990 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

*By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date Sept 27 19 90 Factory Mutual System

[Signature] (Inspector) Commissions MA 1207
National Board, State, Province and No. 1

2 4 2 0 1 1 5 6



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 06/24/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1ST Rear Snubber Rear Snubber	A/G* Pacific Scientific Pacific Scientific	VB 7899 30887 30910	N/A N/A N/A	N/A N/A N/A	1983 ----- -----	See Item 7 Below Removed Installed	Yes, Code Class 2 No, Code Class 1 No, Code Class 1

7. Description Of Work Performed: Replaced rear snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1ST. The replacement work was performed as follows:

- 1) Removed existing rear snubber Serial No 30887 from the valve.
- 2) Installed new replacement rear snubber Serial No 30910 for the valve.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Anderson Greenwood and Company.
- 3) ASME Section III, Code Class 2 for valve CVB-V-1ST, Serial No VB 7899.
- 4) ASME Section III, Code Class NF(1) for snubber Serial No 30910. ASME Section III, Code Class NF(1) snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [X] Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/24/07 Date 6/24/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/23/07 to 7/2/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Inspector's Signature Commissions 9496 N, A, B, T, NS, C 9496 W
National Board, State, and Endorsements

Date 7/2/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Residual Heat Removal (RHR) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 06/06/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2B	WPPSS*	RHR(1)-2B-P1	N/A	N/A	1984	See Item 7 Below	Yes, Code Class 2
RHR(4)-1B	WPPSS*	RHR(4)-1B-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2
RHR-RV-1B	Crosby	N60597-00-0020	N/A	N/A	1993	Removed	Yes, Code Class 2
RHR-RV-1B	Crosby	N60597-00-0003	N/A	N/A	1990	Installed	Yes, Code Class 2

- 7. Description Of Work Performed:** Replaced existing valve relief valve RHR-RV-1B. The replacement work was performed as follows:
- 1) Removed rotating used existing valve RHR-RV-1B., Serial No N60597-00-0020.
 - 2) Installed rotating used spare replacement relief valve RHR-RV-1B, Serial No N60597-00-0003.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) Inlet Side - The existing ASME Code Stamped piping system in which the replacement valve RHR-RV-1B, Serial No N60597-00-0003 was installed is Residual Heat Removal (RHR) piping system RHR(1)-2B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) Outlet Side - The existing ASME Code Stamped piping system in which the replacement valve RHR-RV-1B, Serial No N60597-00-0003 was installed is Residual Heat Removal (RHR) piping system RHR(4)-2B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement valve RHR-RV-1B, Serial No N60597-00-0003 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1974 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [X] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: Psig Test Temperature: °F
Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NV-1 Code Data Report for the rotating used spare replacement relief valve RHR-RV-1B, Serial No N60597-00-0003.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/7/07 Date 6/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9/15/06 to 6/8/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, A, I, N, S, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/8/07

PLAN No. 2-2047



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Philip Rupp
G.C.-44C
6/6/07

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co. 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. JR-WR Order No. N63949 Contract Date 5/21/76 National Board No. --
General Electric Co., 175 Curtner Ave.

2. Manufactured For San Jose, California 95125 Order No. 205-4H930
Name and Address

3. Owner Washington Public Power Supply Systems, Hanford 2
Name and Address

4. Location of Plant Richland, Washington RHR-RV-1B SIN N60597-00-0003
MPL #E12B001

5. Valve Identification Hanford 2 Serial No. N60597-00-0003 Drawing No. DS-C-60597 Rev. C

Type Relief Orifice Size SPL Pipe Size Inlet 3/4 Outlet 1
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch

6. Set Pressure (PSIG) 500 480 F
Rated Temperature

Stamped Capacity 20 GPM Water e 10 % Overpressure -- Blowdown (PSIG) 10% S. P.

Hydrostatic Test (PSIG) Inlet 750 Outlet 225
~~Overpressure~~

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 2 Edition 1974, Addenda Date Summer 1975, Case No. 1711, 1567

Pressure Containing or Pressure Retaining Components

a. Castings	Serial No. Identification	Material Specification Including Type or Grade
Body	<u> </u>	<u> </u>
Bracket Cylinder	<u>N91851-31-0005</u>	<u>ASME SA216 Gr. WCB</u>
b. Bar Stock and Forgings		
Support Base	<u>N91850-31-0016</u>	<u>ASME SA479 Type 316</u>
Lapjoint Stub End	<u>N91852-31-0013</u>	<u>ASME SA105</u>
Nozzle	<u> </u>	<u> </u>
Disc	<u>N91855-32-0029</u>	<u>ASME SB164 CL. A</u>
Spring Washers	<u>N92220-31-0028</u> <u>N92220-31-0007</u>	<u>ASME SA193 Gr. B6</u>
Adjusting Bolt	<u>N92221-31-0017</u>	<u>ASME SA193 Gr. B6</u>
Spindle K61719-31-0015	<u>N92219-31-0015</u>	<u>ASTM A193-73 Gr. B6</u> <u>ASME SA193 Gr. B6</u>

FOR INFORMATION ONLY

00012

EHB
7-26-79

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	<u>NX3119-0009</u>	<u>ASTM A166</u>
d. Bolting	_____	_____
e. Other Parts such as Pilot Components	_____	_____
Mating Flange	<u>N91853-0005</u>	<u>ASME SA105</u>
Mating Flange Stud	<u>22999</u>	<u>ASME SA193 Gr. B7</u>
Mating Flange Nut	<u>2404</u>	<u>ASME SA194 Gr. 7</u>

We certify that the statements made in this report are correct.

Date 6/26 19 79 Signed Crosby Valve & Gage Co. By [Signature]
 Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1980

FOR INFORMATION ONLY

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on JUNE 26 19 79 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

*By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date JUNE 26 19 79
[Signature] (Inspector) Commissions MA 1266
 National Board, State, Province and No.)

* Arkwright-Boston Manufacturers Mutual Insurance Company-
 Mutual Boiler & Machinery Division.

00013



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Reactor Water Clean Up (RWCU) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
- 6. **Identification Of Components**

Date: 06/27/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RWCU(3)-4	WPPSS*	RWCU(3)-4-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced upper load pin for rigid strut for support RWCU-1C-9PS. The replacement work was performed as follows:
- 1) Installed one (1) replacement upper load pin.
 - 2) Perform VT-3 visual examination on the support. VT-3 visual examination results acceptable

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) ASME Section III, Code Class NF(1), 1971 Edition with Winter 1973 Addenda for rigid strut for support RWCU-1C-9PS.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/27/07 Date 6/27/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/18/07 to 7/2/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N A A I N S C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/2/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Water Clean Up (RWCU) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RWCU-HX-1C	General Electric	223397	54361	N/A	1972	See Item 7 Below	Yes, Code Class 3

7. Description Of Work Performed: Replaced cover plate (flange) for RWCU-HX-1C. The replacement work was performed as follows:

- 1) Removed existing cover plate (flange).
- 2) Removed existing diaphragm plate.
- 3) Installed replacement diaphragm plate.
- 4) Made required weld.
- 5) Performed visual examination on the final weld. Visual examination results acceptable.
- 6) Performed magnetic particle (MT) examination on the final weld. Magnetic particle (MT) examination results acceptable.
- 7) Installed replacement cover plate (flange).
- 8) Installed replacement studs and nuts for the cover plate (flange).
- 9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): * The test pressure and the test temperature on RWCU-HX-1C cover plate (flange) joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/8/07 Date 7/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/8/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, E, NSC 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/9/07



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest **Date:** 06/22/05
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. **Identification Of System:** Standby Liquid Control (SLC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SLC(2)-3S	WPPSS*	SLC(2)-3S-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2
SLC(2)-4S	WPPSS*	SLC(2)-4S-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1
SLC-V-4A	Conax	4	91	N/A	1975	See Item 7 Below	Yes, Code Class 1
Trigger Body	Conax	4585	N/A	N/A	1995	Removed	Yes, Code Class 1
Trigger Body	Conax	5886	N/A	N/A	2000	Installed	Yes, Code Class 1
Inlet Fitting	Conax	4570	N/A	N/A	1995	Removed	Yes, Code Class 1
Inlet Fitting	Conax	5888	N/A	N/A	2000	Installed	Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced parts for the existing valve SLC-V-4A, Serial No 4, National Board No 91. The replacement work was performed as follows:
- Removed the existing Trigger Body Subassembly Serial No 4585 from the valve.
 - Installed new replacement Trigger Body Subassembly Serial No 5886 in the valve.
 - Removed the existing Inlet Fitting Serial No 4570 from the valve.
 - Installed new replacement Inlet Fitting Serial No 5888 in the valve.
 - Reinstalled refurbished valve SLC-V-4A, Serial No 4, National Board No 91.
 - Reinstalled existing studs and nuts for the valve inlet and outlet joints.
 - Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- The existing ASME Code Stamped piping system in which the existing valve SLC-V-4A, Serial No 4, National Board No 91 was reinstalled is Standby Liquid Control (SLC) piping system SLC(2)-4S-P1 for the RPV side. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- The existing ASME Code Stamped piping system in which the existing valve SLC-V-4A, Serial No 4, National Board No 91 was reinstalled is Standby Liquid Control (SLC) piping system SLC(2)-3S-P1 for the pump side. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda for the existing valve SLC-V-4A, Serial No 4, National Board No 91.
- ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new replacement Trigger Body Subassembly Serial No 5886. The new replacement Trigger Body Subassembly certified to 1977 Edition with Summer 1977 Addenda is acceptable for use in the existing valve certified to 1971 Edition with Winter 1972 Addenda.
- ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new replacement Inlet Fitting Serial No 5888. The new replacement Inlet Fitting certified to 1977 Edition with Summer 1977 Addenda is acceptable for use in the existing valve certified to 1971 Edition with Winter 1972 Addenda.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1220/1220 Psig Test Temperature: 78/78° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Reports for the following new replacement valve parts:

Valve Part	Serial No
Trigger Body Subassembly	5886
Inlet Fitting	5888

- 2) Test pressure on the down stream side of valve SLC-V-4A (RPV Side) - Test pressure of 1220 Psig and test temperature of 78° F.
- 3) Test pressure on the up stream side of valve SLC-V-4A (SLC-P-1A Side) - Test pressure of 1220 Psig and test temperature of 78° F.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9/15/06 to 7/2/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/2/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Oldip Sup 009
6/17/07 Pg. 1 of 2

Manufactured and certified by IST-Conax Nuclear, 402 Sonwil Drive, Cheektowaga, NY 14225
(name and address of NPT Certificate Holder)

2. Manufactured for Energy Northwest, Richland, WA 99352
(name and address of Purchaser)

3. Location of installation UNKNOWN
(name and address)

4. Type: N20000, Rev. G SA479 304SST 75 KSI N/A 2000
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III, Division 1: 77 S77 1 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision _____ Date _____
(no.)

7. Remarks: Trigger Body Subassembly for explosive actuated valve replacement kit for standby liquid control system.
Para. NB-2121 (b) is applicable to ram. Press Fit/Seal on .328 & .4375 diameters. Overall subassembly length is 2.5".
Pressure Test at 2800 psi for 10 minutes.

8. Nom. thickness (in.) See Remarks Min. design thickness (in.) See Remarks Dia. ID (ft & in.) See Remarks Length overall (ft & in.) See Remarks

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 5885	5885
(2) 5886	5886
(3)	
(4)	
(5)	
(6) SIN 5886 FOR VALVE	
(7)	
(8) SLC-V-4A	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

Design pressure 1500 psi. Temp. 150 °F. Hydro. test pressure * See Remarks at temp. °F
(when applicable)

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. 5885 through 5886

CERTIFICATION OF DESIGN

Design specifications certified by George I. Skoda P.E. State CA Reg. no. 15847
(when applicable)

Design report* certified by Francis J. Domino P.E. State NY Reg. no. 36832
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Trigger Body Sub Assembly
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1850 Expires September 2, 2001

Date 8/10/00 Name IST Conax Nuclear Signed Paul E. Cochran
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by Hartford Steam Boiler Inspection & Insurance Company

of Hartford, CT have inspected these items described in this Data Report on AUG. 10, 2000, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 8-10-00 Signed Allen J. Premack Commissions NB 10964AN NY 5057
(Authorized Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

PLAN NO. 2-2051
Repair Supp, 011
6/17/07, Pg. 1 of 2

1. Manufactured and certified by IST Conax Nuclear, 402 Sonwil Drive, Cheektowaga, NY 14225
(name and address of NPT Certificate Holder)

2. Manufactured for Energy Northwest Richland, WA 99352
(name and address of Purchaser)

3. Location of installation UNKNOWN
(name and address)

4. Type: N38017, Rev. F SA479 304SST 75 KSI N/A 2000
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III, Division 1: 77 S77 1 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision Date
(no.)

7. Remarks: Inlet Fitting for explosive actuated valve replacement kit for standby liquid control system.

Pressure Test at 2800 psi for 10 minutes.

8. Nom. thickness (in.) .040 Min. design thickness (in.) .031 Dia. ID (ft & in.) .895" Length overall (ft & in.) 2.245"

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	5887	5887
(2)	5888	5888
(3)		
(4)		
(5)		
(6)		
(7)	STN 5888 FOR VALVE	
(8)		
(9)		
(10)	SLC-V-4A	
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

Design pressure 1500 psi. Temp. 150 °F. Hydro. test pressure * See Remarks at temp. °F
(when applicable)

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. 5887 through 5888

CERTIFICATION OF DESIGN

Design specifications certified by George I. Skoda P.E. State CA Reg. no. 15847
(when applicable)

Design report* certified by Francis J. Domino P.E. State NY Reg. no. 36832
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Inlet Fittings
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1850 Expires September 2, 2001

Date 8/10/00 Name IST Conax Nuclear Signed Paul Elouchym
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by Hartford Steam Boiler Inspection & Insurance Company

of Hartford, CT have inspected these items described in this Data Report on AUG 10 2000, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 8-10-00 Signed Allen J. Brumby Commissions NB 10964AN NY 5057
(Authorized Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 09/27/06
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Fuel Pool Cooling (FPC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
FPC(2)-1B	WPPSS*	FPC(2)-1B-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 3

7. Description Of Work Performed: Replaced existing studs and nuts associated with bolted flanged joints for valve FPC-V-6B. The replacement work was performed as follows:

- 1) Removed existing studs associated with bolted flanged joints for valve FPC-V-6B.
- 2) Removed existing nuts associated with bolted flanged joints for valve FPC-V-6B.
- 3) Installed eight (8) replacement studs associated with bolted flanged joints for valve FPC-V-6B.
- 4) Installed sixteen (16) replacement nuts associated with bolted flanged joints for valve FPC-V-6B.
- 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the bolted flanged joints associated with for valve FPC-V-6B. No evidence of leakage during the pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: 117.5 Psig Test Temperature: 95° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 9/27/06 Date 9/27/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9-13-06 to 10-17-06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

A.M. Foster Commissions 74860 NI NS
 Inspector's Signature National Board, State, and Endorsements

Date 10-17-06



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Main Steam (MS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/25/2007
 Sheet: 1 Of 2
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4C	WPPSS*	MS(1)-4C-P3	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2
MS(1)-4D	WPPSS*	MS(1)-4D-P3	N/A	N/A	1983	Installed	Yes, Code Class 2
MS-1000N (N)	Pacific Scientific	4141	N/A	N/A	1979	Installed	Yes, Code Class 1
MS-1000N (S)	Pacific Scientific	4144	N/A	N/A	1979	Installed	Yes, Code Class 1
MS-1009N (N)	Pacific Scientific	4139	N/A	N/A	1979	Installed	Yes, Code Class 1
MS-1009N (S)	Pacific Scientific	4143	N/A	N/A	1979	Installed	Yes, Code Class 1

7. Description Of Work Performed: Modify existing pipe supports MS-1000N and MS-1009N. The modification/replacement work was performed as follows:

PIPE SUPPORT MS-1000N

- 1) Cut/ground existing bracket to tube steel welds.
- 2) Prepped cut bracket surfaces on as needed basis for rewelding.
- 3) Reinstalled existing brackets.
- 4) Made required bracket to tube steel welds.
- 5) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results unacceptable for one (1) bracket location.
- 6) Removed unacceptable magnetic particle (MT) indication. No welding was required to be performed.
- 7) Performed visual examination on the final welds. Visual examination results acceptable.
- 8) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable.
- 9) Installed replacement snubber Serial No 4141 for pipe support MS-1000N (North).
- 10) Installed replacement snubber Serial No 4144 for pipe support MS-1000N (South).
- 11) Reinstalled existing bracket pins.
- 12) Performed VT-3 visual examination on the entire final installed pipe support MS-1000N to satisfy ISI (PSI) requirements. VT-3 visual examination results acceptable.

PIPE SUPPORT MS-1009N

- 1) Installed replacement brackets.
- 2) Made required bracket to tube steel welds.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the following replacement snubbers:

EPN No	Serial No
MS-1000N (N)	4141
MS-1000N (S)	4144
MS-1009N (N)	4139
MS-1009N (S)	4143

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/28/07 Date 7/28/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/17/07 to 8/3/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, A, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 8/3/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest **Date:** 07/25/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 2 Of 2
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4C	WPPSS*	MS(1)-4C-P3	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2
MS(1)-4D	WPPSS*	MS(1)-4D-P3	N/A	N/A	1983	Installed	Yes, Code Class 2
MS-1000N (N)	Pacific Scientific	4141	N/A	N/A	1979	Installed	Yes, Code Class 1
MS-1000N (S)	Pacific Scientific	4144	N/A	N/A	1979	Installed	Yes, Code Class 1
MS-1009N (N)	Pacific Scientific	4139	N/A	N/A	1979	Installed	Yes, Code Class 1
MS-1009N (S)	Pacific Scientific	4143	N/A	N/A	1979	Installed	Yes, Code Class 1

7. Description Of Work Performed: Continuation From Sheet 1 of 2

PIPE SUPPORT MS-1009N

- 3) Performed visual examination on the final welds. Visual examination results acceptable.
- 4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable.
- 5) Installed replacement snubber Serial No 4139 for pipe support MS-1009N (North).
- 6) Installed replacement snubber Serial No 4143 for pipe support MS-1009N (South).
- 7) Installed replacement bracket pins.
- 8) Performed VT-3 visual examination on the entire final installed pipe support MS-1009N to satisfy ISI (PSI) requirements. VT-3 visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) ASME Section III, Code Class 1 snubbers for ASME Section III, Code Class 2 application.

*Joe C. Hair 8/3/07 9496 N.A.A.J.M.S.C
9496W*

As Required by the Provisions of the ASME Code Rules, Section III, Division 1

Thrup Supl
7/25/07

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 9280
(Name and address of NPT Certificate Holder)

2. Manufacturer for General Electric 175 Curtner Ave. San Jose, Ca. 95125
(Name and address of purchaser or owner)

3. Location of Installation Washington Public Power Supply System, Hanford Unit No. 2

4. Identification

(a) Component Support I D No	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No	(h) Year Built
(1) <u>4141-4144</u>	<u>None</u>	<u>1801112-11-D₄</u>	<u>DR-1333-Rev. A</u>	<u>Linear</u>	<u>1</u>	<u>None</u>	<u>1979</u>
(2)							
(3)							
(4)							
(5)	<u>MS-1000N, SIN 4141 (NORTH)</u>						
(6)							
(7)							
(8)							
(9)							
(10)							

5. Remarks: _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Summer '77.
Code Case No. 1644-5 (Date)

Date 27 April 1979 Signed Pacific Scientific by Bill Jenkins
(NPT Certificate Holder)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)

Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at Pacific Scientific
Filed Per NA3256

Design Specifications Certified by (1) Michael D. Potter PE State California

Reg No 25904

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg No 13533

CRW
APR 27 '79

(1) List name only, signature not required

Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1, 2 & 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of California and employed by HSBI&I Co. of Hartford, CT

have inspected the component supports described in this Data Report on 27 APRIL 19 79 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Date 4-27-79

Signed Robert D. Hovee Commissions California 1386
(Nat'l Bd., State, Prov. and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov. and No.)

06-EE
CRW APR 27 1979

As Required by the Provisions of the ASME Code Rules, Section III, Division 1

Edward Smith
1/25/07

1 Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 9280
(Name and address of NPT Certificate Holder)

2 Manufacturer for General Electric 175 Curtner Ave. San Jose, Ca. 95125
(Name and address of purchaser or owner)

3 Location of Installation Washington Public Power Supply System, Hanford Unit No. 2

4 Identification

(a) Component Support I D No	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No	(h) Year Built
(1) <u>A141-4144</u>	<u>None</u>	<u>1801112-11-D₄</u>	<u>DR-1333-Rev. A</u>	<u>Linear</u>	<u>1</u>	<u>None</u>	<u>1979</u>
(2)							
(3)							
(4)							
(5)	<u>MS-1000N, S/N A144 (SOUTH)</u>						
(6)							
(7)							
(8)							
(9)							
(10)							

5 Remarks:

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Summer '77.
Code Case No. 1644-5 (Date)

Date 27 April 1979 Signed Pacific Scientific by Bille Jenkins
(NPT Certificate Holder)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)

Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at Pacific Scientific
Filed Per NA3256

Design Specifications Certified by (1) Michael D. Potter PE State California

Reg No 25904

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg No 13533



(1) List name only, signature not required

Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11" (2) information in items 1, 2 & 4g on this Data Report is included on each sheet and (3) each sheet is numbered and number of sheets is recorded at top of this form

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of California and employed by HSBI&I Co. of Hartford, CT

have inspected the component supports described in this Data Report on 27 APRIL 19 79 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Date 4-27-79

Signed Robert D. Green Commissions California 1386
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ Province of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)

CA-EE
DRW APR 27 1979

Subdir Supp 725(0)

1 Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 92702
(Name and address of NPT Certificate Holder)

2 Manufacturer for General Electric 175 Curtner Ave. San Jose, Ca. 95125
(Name and address of purchaser or owner)

3 Location of Installation Washington Public Power Supply System, Hanford Unit No. 2

4 Identification

(a) Component Support I D. No	(b) Canadian Registration No	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No	(h) Year Built
----------------------------------	---------------------------------	--	--	----------------------------------	--------------	-----------------------	-------------------

(1) 4139-4140	None	1801112-09-D ₄	DR-1333- Rev. A	Linear	1	None	1979
(2)							
(3)							
(4)							
(5)	<u>MS-1009 N, S/N 4139 (NORTH)</u>						
(6)							
(7)							
(8)							
(9)							
(10)							

5. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 77, Addenda Summer '77
(Date)

Code Case No. 1644-5
 Date 27 April 1979 Signed Pacific Scientific by Bill Jenkins
(NPT Certificate Holder)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)

Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at Pacific Scientific
 Filed Per NA3256

Design Specifications Certified by (1) Michael D. Potter PE State California

Reg No. 25904

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg No. 13533



(1) List name only, signature not required

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1, 2, 4c, 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form

ZX00388984

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of California and employed by HSBI&I Co. of Hartford, CT

have inspected the component supports described in this Data Report on 22 APRIL 19 79 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4-27-79

Signed Robert D. Myers Commissions California 1386
(Nat'l Bd., State, Prov. and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of _____ and employed by _____ of _____

have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov. and No.)

QA-FE
CHW APR 27 1979

PLAN No. 2-2053

ASME CODE FOR COMPONENT SUPPORTS
As Required by the Provisions of the ASME Code Rules, Section III, Division 1, Edition 1977, Addenda Summer '77

Handwritten signature
7/25/07

1 Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 9280
(Name and address of NPT Certificate Holder)

2 Manufacturer for General Electric 175 Curtner Ave. San Jose, Ca. 95125
(Name and address of purchaser or owner)

3 Location of Installation Washington Public Power Supply System, Hanford Unit No. 2

4. Identification

(a) Component Support I D No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No	(h) Year Built
(1) <u>A141-4144</u>	<u>None</u>	<u>1801112-11-D₄</u>	<u>DR-1333-Rev. A</u>	<u>Linear</u>	<u>1</u>	<u>None</u>	<u>1979</u>
(2)							
(3)							
(4)							
(5)	<u>MS-1009N, S)N 4143 (SOUTH)</u>						
(6)							
(7)							
(8)							
(9)							
(10)							

5 Remarks: _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Summer '77.
Code Case No. 1644-5 (Date)

Date 27 April 1979 Signed Pacific Scientific by Bill Jenkins
(NPT Certificate Holder)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)

Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at Pacific Scientific

Filed Per NA3256
Design Specifications Certified by (1) Michael D. Potter PE State California

Reg No. 25904

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg No. 13533

Handwritten signature and stamp
APR 27 '79

(1) List name only, signature not required

Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1, 2 & 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of California and employed by HSBI&I Co. of Hartford, CT

have inspected the component supports described in this Data Report on 27 APRIL 19 79 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4-27-79

Signed Robert D. Green Commissions California 1386
(Nat'l Bd., State, Prov. and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ and employed by _____ of _____

have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov. and No.)

CRW:PR 2779



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Fuel Pool Cooling (FPC) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 03/08/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
FPC(12)-1 FPC-V-108 FPC-V-108	WPPSS* Borg Warner Flowserve	FPC(12)-1-P1 16696 E-204P-1-1	N/A N/A N/A	N/A N/A N/A	1983 1977 1999	See Item 7 Below Removed Installed	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 3

- 7. Description Of Work Performed:** Replaced existing valve FPC-V-108. The replacement work was performed as follows:
- 1) Removed existing valve FPC-V-108, Serial No 16696.
 - 2) Installed replacement piping material such as elbows and pipe.
 - 3) Installed replacement valve FPC-V-108, Serial No E-204P-1-1.
 - 4) Made required circumferential butt welds.
 - 5) Performed visual examination on the final circumferential butt welds. Visual examination results acceptable.
 - 6) Installed replacement shear lugs.
 - 7) Made required shear lug welds.
 - 8) Performed visual examination on the final shear lug welds. Visual examination results acceptable.
 - 9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity on Weld No 8. No evidence of leakage during the pressure test.
 - 10) Performed open flow path test on Weld No 9, 10, 11-2 and 12. Open flow path test results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement valve FPC-V-108, Serial No E-204P-1-1 was installed is Fuel Pool Cooling (FPC) piping system FPC(12)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement valve FPC-V-108, Serial No E-204P-1-1 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements. ASME Section III, Code Class 1 valve for ASME Section III, Code Class 3 application.
- 5) OEM/OES Borg Warner valves are now being manufactured by OEM/OES Flowserve.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Test Pressure: ** Psig Test Temperature: **°F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve FPC-V-108, Serial No E-204P-1-1.

- 1) * Performed pressure test to confirm pressure boundary integrity on Weld No 8. Test Pressure "Static Head" (Approximately 8 to 10 Psig), Test Temperature "Ambient".
- 2) ** Performed open flow path test on Weld No 9, 10, 11-2 and 12.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 3/8/07 Date 3/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/11/07 to 3/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB12723 NI/WA12723
 Inspector's Signature National Board, State, and Endorsements
 Date 3/9/07

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code Rules

Philip Smith
3/8/07

1. Manufactured by Flowserve Corp.
 701 First Street, Williamsport, PA 17701 Order No. E-204P-1
(Name & Address of Manufacturer)

2. Manufactured for Washington Public Power Supply System
 P.O. Box 968, Richland, WA 99352 Order No. 00302572
(Name and Address)

3. Owner Washington Public Power Supply System

4. Location of Plant North Powerplant Loop, Richland, WA 99352

5. ~~XXXXXX~~ Valve Identification E-204P-1-1 VALVE FPC-V-108
2"-1500#-Y-Globe Valve
(Brief description of service for which equipment was designed)

(a) Drawing No. 76870-000 R/K Prepared by Flowserve Corporation

(b) National Board No. N/A

6. Design Conditions 3600 psi 100 °F
(Pressure) (Temperature)

7. The material, design, construction, and workmanship complies with ASME Code Section III. Class 1
 Edition 1971, Addenda Date Winter 1973, Case No. N/A

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Disc R/S 331059 S/N 4	AMS 5387B	BW/IP International, Inc.	Pump Division
(b) Forgings			
Body R/S 223693 S/N 1	SA105	BW/IP International, Inc.	Pump Division
Bonnet HT.#G3402 S/N 1	SA105	Patriot Forge, Inc.	

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items, 1, 2, 5a and 5b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
N/A			
(d) Other Parts			
N/A			

B. Hydrostatic test 5400 psi.

CERTIFICATION OF DESIGN

Design information on file at Flowserve Corporation, 701 First St., Williamsport, PA 17701
 Stress analysis report on file at Flowserve Corporation, 701 First St., Williamsport, PA 17701
 Design specifications certified by Richard Schlosser (1) Prof. Eng. State WA Reg. No. 21701
 Stress analysis report certified by Ronald S. Farrell (1) Prof. Eng. State PA Reg. No. 035216-E
 (1) Signature not required. List name only.

We certify that the statements made in this report are correct.

Date 4-14 19 99 Signed Flowserve Corp. By D. Roudenslager
(Manufacturer)

Certificate of Authorization No. N1712 expires 4/15/01

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State ~~of~~ of Pennsylvania and employed by Commercial Union Ins. Co. of Boston, MA have inspected the equipment described in this Data Report on 9-3-98 ~~to~~ 4-14 19 99, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4-14 19 99

Charles Young Commissions Pennsylvania 2392
(Inspector) (National Board, State, Province and No.)
 Charles Young



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Reactor Recirculation (RRC) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 06/26/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RRC(51)-4	WPPSS*	RRC(51)-4-P1	N/A	N/A	1983	See Item 7 Below Removed Installed	Yes, Code Class 1
RRC-V-19	Target Rock	9	N/A	N/A	2004		Yes, Code Class 1
RRC-V-19	Target Rock	10	N/A	N/A	2006		Yes, Code Class 1

7. **Description Of Work:** Replaced existing valve RRC-V-19. The replacement work was performed as follows:
- 1) Removed existing valve RRC-V-19, Serial No 9.
 - 2) Installed replacement valve RRC-V-19, Serial No 10.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement valve RRC-V-19, Serial No 10 was installed is Reactor Recirculation (RRC) piping system RRC(51)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement valve RRC-V-19, Serial No 10 is certified to comply with ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve RRC-V-19, Serial No 10.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/26/07 Date 6/24/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____

Quedip Supb

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES* 6/26/07
As Required by the Provisions of the ASME Code, Section III, Division 1

- 1. Manufactured and certified by Target Rock; 1966E Broadhollow Road; E. Farmingdale, NY 11735
(name and address of N Certificate Holder)
- 2. Manufactured for Energy Northwest; North Power Plant Loop; Richland, WA
(name and address of Purchaser)
- 3. Location of installation Columbia Generating Station; North Power Plant Loop; Richland, WA
(name and address)
- 4. Model No., Series No., or Type 96T-001 Drawing 96T-001 Rev. C CRN N/A
- 5. ASME Code, Section III, Division 1: 1980 Winter 1981 1 None
(edition) (addenda date) (class) (Code Case no.)
- 6. Pump or valve Valve Nominal inlet size 1 Outlet size 1
(in.) (in.)
- 7. Material: Body SA182 F316 Bonnet SA479 XM-19 Disc SA479 347 Bolting SA453 660

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disc Serial No.
10	N/A	TR 101	93	126

ERC-V-19, S/N 10

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

REPRINT 6/93

FORM NPV-1 (BACK - Pg. 2 of 2)

Certificate Holder's Serial No. 96T-001, s/n 10

8. Design conditions 1550 psi 575 °F or valve pressure class N/A (1)
 (pressure) (temperature)
9. Cold working pressure 3600 psi at 100 °F
10. Hydrostatic test 6575 psi. Disc differential test pressure N/A psi
11. Remarks: Clamp Ring SA479 316 S/N 735
Indicator Tube SA479 316 S/N 5424
Inlet Flange SA182 F316 S/N 19
Outlet Flange SA182 F316 S/N 20

CERTIFICATION OF DESIGN

Design Specification certified by Abbas A. Mostala P.E. State WA Reg. No. 28777
 Design Report certified by S. Karidas P.E. State NY Reg. No. 056047

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1947 Expires 12/12/2007

Date 4/24/2006 Name Target Rock Signed [Signature]
 (N Certificate Holder) R. E. Glazier, QA Manager
 (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of New York and employed by OneBeacon America Insurance Co. of Boston, MA have inspected the pump, or valve, described in this Data Report on 4/24/2006 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4/24/06 Signed [Signature] Commissions NY 5102
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: High Pressure Core Spray (HPCS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/05/2007
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2	WPPSS*	HPCS(1)-4CL2-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2

- 7. Description Of Work:** Replaced pipe adjacent to valve HPCS-V-40. The replacement work was performed as follows:
- 1) Removed existing pipe.
 - 2) Installed replacement pipe.
 - 3) Made required socket welds.
 - 4) Performed visual examination on the final socket welds. Visual examination results acceptable.
 - 5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.
 Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/5/07 Date 7/5/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
 By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements
 Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Process Instrumentation (PI) Tubing
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 07/09/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-IR-81-2 IR-81-V-2C* IR-81-V-2C*	JCI Dragon Dragon	PI(1)-ST-IR-81-2 GP1365 PB1394	N/A N/A N/A	N/A N/A N/A	1983 1981 2003	See Item 7 Below Removed Installed	Yes, Code Class 3 Yes, Code Class 2 Yes, Code Class 2

- 7. Description Of Work:** Replaced existing valve IR-81-V-2C*. The replacement work was performed as follows:
- 1) Removed existing valve IR-81-V-2C*, Serial No GP1365.
 - 2) Removed tubing material associated with valve IR-81-V-2C*.
 - 3) Installed replacement tubing material.
 - 4) Installed new replacement valve IR-81-V-2C*, Serial No PB1394.
 - 5) Made required socket welds.
 - 6) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing ASME Code Stamped Process Instrumentation (PI) Tubing in which the new replacement valve IR-81-V-2C*, Serial No PB1394 was installed is PI(1)-ST-IR-81-2. This process instrumentation tubing is certified to comply with ASME Section III, Code Class 3, 1974 Edition with Winter 1975 Addenda requirements.
- 3) The new replacement valve IR-81-V-2C*, Serial No PB1394 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda requirements.
- 4) ASME Section III, Code Class 2 valve for ASME Section III, Code Class 3 application.
- 5) * This valve has two (2) EPN's. Valve EPN No IR-81-V-2C appears on Dwg No D-220-15.0-PED-I-0563, CVI No 220-01,1248 and valve EPN No IR-V-IR-81/V4 appears on PASSPORT.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Exempt Pneumatic Test Pressure: Psig Nominal Operating Pressure Test Temperature: °F Other

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve IR-81-V-2C*, Serial No PB1394.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/9/07 Date 7/9/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN No. 2-2058

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code, Section III, Div. 1

Richard Smith

1. Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA. 90650 7/9/07
(Name and Address of N Certificate Holder)
2. Manufactured for Energy Northwest, P.O. Box 968, Richland, WA, 99352-0968
(Name and Address of Purchaser or Owner)
3. Location of Installation Energy Northwest, Columbia Generating Station, Richland, WA. 99352
(Name and Address)
4. Pump or Valve Valve Nominal Inlet Size 1/2 Outlet Size 1/2
(inch) (inch)

(a) Model No. (b) N Certificate Holder's (c) Canadian
 Series No. Serial Registration (d) Drawing (f) Nat'l. (g) Year
 or Type No. No. No. No. (e) Class Bd. No. Built

(1)	7N058SWD	PB1394	N/A	10580	2	N/A	2003
(2)		Thru		Rev. C			
(3)		PB1397					
(4)							
(5)							
(6)	VALVE IR-81-V-2C, S/N PB1394						
(7)	(IR-V-IR-81/V4)						
(8)							
(9)							
(10)							

5. Instrument Valve (4 Pcs.)
(Brief description of service for which equipment was designed)

6. Design Conditions psi °F or Valve Pressure Class 1500 (1)
(Pressure) (Temperature)
7. Cold Working Pressure 3600 psi at 100°F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings N/A			
(b) Forgings			
HT. AJ9461	ASME SA182 GR. F316	Ajax Forge Co.	Body
HT. A19167	ASME SA182 GR. F316	Ajax Forge Co.	Bonnet Yoke

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting N/A			
(d) Other Parts			
HT. 712678	ASME SA564 GR. 630	Carpenter Tech. Corp.	Disc

9. Hydrostatic test 5400 psi. Disk Differential test pressure 3600 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. I., Edition 1974.

Addenda S'75 (Date), Code Case No. N/A, Date February 25, 2003.

Signed Dragon Valves, Inc. by Mark A. Snyder
(N Certificate Holder)

Our ASME Certificate of Authorization No. N-1033 to use the N (N) symbol expires 5/6/05 (Date).

CERTIFICATION OF DESIGN

Design information on file at Energy Northwest

Stress analysis report (Class 1 only) on file at N/A

Design specifications certified by (1) Abbas A. Mostala

PE State WA. Reg. No. 28777

Stress analysis certified by (1) N/A

PE State _____ Reg. No. _____

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by HSB CT of HARTFORD, CT. have inspected the pump, or valve, described in this Data Report on 2-25 ~~to~~ 03, and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2-25 ~~to~~ 03

[Signature] (Inspector) Commissions NB 12050-N / 06-1369
(Nat'l Bd., State, Prov. and No.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 07/30/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 3
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4A	WPPSS*	MS(1)-4A-P4	N/A	N/A	1983	See Item 7 Below Removed Installed (Parts) Installed (Body)	Yes, Code Class 2
MS-V-20	Anchor Darling	R-Z227-1-1	N/A	N/A	1995		Yes, Code Class 2
MS-V-20 (Note 3)	Flowsolve	AZ962 (See Note 3)	N/A	N/A	2006		Yes, Code Class 2
MS-V-20 (Note 3)	Anchor Darling	U466 (See Note 3)	N/A	N/A	1995		Yes, Code Class 2

7. Description Of Work Performed: Replaced existing valve MS-V-20. The replacement work was performed as follows:

ASME SECTION PLAN No 2-2059

- 1) Removed existing valve MS-V-20, Serial No R-Z227-1-1.
- 2) Beveled the cut pipe ends.
- 3) Installed replacement valve MS-V-20, Serial No AZ962.
- 4) Made required circumferential butt weld.
- 5) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 6) Performed radiographic (RT) examination on the final circumferential butt weld. Radiographic (RT) examination results unacceptable. Due to unacceptable radiographic (RT) examination on the final circumferential butt weld, it was decided to perform complete cut and reweld of the valve circumferential butt weld. Complete cut and reweld of the valve circumferential butt weld was performed in accordance with ASME Section XI Plan No 2-2059-R1 as discussed below. See note 3 for additional information.

ASME SECTION PLAN No 2-2059-R1

- 1) Removed valve MS-V-20, Serial No AZ962 installed in accordance with ASME Section XI Plan No 2-2059 as discussed above.
- 2) Beveled the cut pipe ends.
- 3) Installed replacement body Serial No U466 for valve MS-V-20. See note 3 for additional information.
- 4) Made required circumferential butt weld.
- 5) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 6) Performed radiographic (RT) examination on the final circumferential butt weld. Radiographic (RT) examination results acceptable.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 and N-2 Code Data Reports for the following replacement valve MS-V-20:

Code Data Report	Item	Serial No
NPV-1	Valve	AZ962. See note 3 above for additional information.
N-2	Body	U466. See note 3 above for additional information.

* The test pressure and the test temperature on the valve MS-V-20 welded joint and valve body to bonnet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/31/07 Date 7/31/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/6/07 to 8/6/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

J.M.C. Hair Commissions 9496 N.A.B.I. N.S.C 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 8/6/07



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. **Owner:** Energy Northwest **Date:** 07/30/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 2 Of 3
- 2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
 (b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
 (c) **Type Code Symbol Stamp:** Not Applicable
 (d) **Certificate Of Authorization No.:** Not Applicable
 (e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
 (c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4A MS-V-20 MS-V-20 (Note 3) MS-V-20 (Note 3)	WPPSS* Anchor Darling Flowsolve Anchor Darling	MS(1)-4A-P4 R-Z227-1-1 AZ962 (See Note 3) U466 (See Note 3)	N/A N/A N/A N/A	N/A N/A N/A N/A	1983 1995 2006 1995	See Item 7 Below Removed Installed (Parts) Installed (Body)	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Continuation From Sheet 1 of 3

- 7) Performed ultrasonic (UT) examination on the final circumferential butt weld for ISI (PSI). Ultrasonic (UT) examination results acceptable.
- 8) Removed ASME pressure boundary (retaining) parts such as bonnet, disc, etc from valve MS-V-20, Serial No AZ962 installed in accordance with ASME Section XI Plan No 2-2059 as discussed above. See note 3 for additional information.
- 9) Installed ASME pressure boundary (retaining) parts such as bonnet, disc, etc in valve body Serial No U466 for valve MS-V-20. See note 3 for additional information.
- 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve to pipe welded joint. No evidence of leakage during the pressure test.
- 11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve body to bonnet joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The body for the existing/replacement valve MS-V-20, Serial No AZ962 can no longer be used since the bevel weld end preps were damaged when the valve was cut out. The valve was cut out because the localized repair of the RT indications authorized by ASME Section XI Plan No 2-2059 Change Notice No 1 was found to be unsuccessful. The valve body from existing/replacement valve MS-V-20, Serial No AZ962 will be replaced with replacement valve body Serial No U466.

8/6/07 J.M.C. Hair 9496 N, A, B, E, NS, C 9496 W



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. **Owner:** Energy Northwest **Date:** 07/30/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 3 Of 3
- 2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
 (b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
 (c) **Type Code Symbol Stamp:** Not Applicable
 (d) **Certificate Of Authorization No.:** Not Applicable
 (e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
 (c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4A MS-V-20 MS-V-20 (Note 3) MS-V-20 (Note 3)	WPPSS* Anchor Darling Flowserve Anchor Darling	MS(1)-4A-P4 R-Z227-1-1 AZ962 (See Note 3) U466 (See Note 3)	N/A N/A N/A N/A	N/A N/A N/A N/A	1983 1995 2006 1995	See Item 7 Below Removed Installed (Parts) Installed (Body)	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Continuation From Sheet 2 of 3

- 4) Surface examination for ISI (PSI) is not required in accordance with ASME Section XI Code Case N-663 "Alternative Requirements for Classes 1 and 2 Surface Examinations Section XI, Division 1".
- 5) The existing ASME Code Stamped piping system in which the replacement body Serial No U466 for valve MS-V-20 was installed is Main Steam (MS) piping system MS(1)-4A-P4. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 6) The replacement valve MS-V-20, Serial No AZ962 is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1972 Addenda requirements. See note 3 above for additional information.
- 7) The replacement body Serial No U466 for valve MS-V-20 is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1972 Addenda requirements. See note 3 above for additional information.
- 8) OEM/OES Anchor Darling valves are now being manufactured by OEM/OES Flowserve.

8/16/07 Joe C. Hair 9496 N, A, B, I, N, C 9496W

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code, Section III, Div. 1

Richard Sup's Pg. 1 of 2

1. Manufactured by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603 7/30/07
(Name and Address of N Certificate Holder)

2. Manufactured for Energy Northwest, Columbia Generating Station, North Powerplant Loop, Richland, WA 99352
(Name and Address of Purchaser or Owner)

3. Location of Installation Energy Northwest, Columbia Generating Station, North Powerplant Loop, Richland, WA 99352
(Name and Address)

4. Pump or Valve Valve Nominal Inlet Size 3" Outlet Size 3"
(inch) (inch)

	(a) Model No. Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	900#	AZ962	N/A	W9524452 REV. A	2	N/A	2006
(2)							
(3)							
(4)	<u>MS-V-20, S/N AZ962</u> ⊗						
(5)							
(6)							
(7)							
(8)	⊗ <u>FOR BONNET, DISC, GASKET RETAINER</u>						
(9)							
(10)							

5. 3" 900# GLOBE Valve
(Brief description of service for which equipment was designed)

SO 37775

6. Design Conditions 1250 psi 575 °F or Valve Pressure Class 900 (1)
(Pressure) (Temperature)

7. Cold Working Pressure 2160 psi at 100 °F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
<u>06X512-1</u>	<u>SA216-WCB</u>	<u>FLOWSERVE</u>	<u>Body</u>
(b) Forgings			
<u>20774-2</u>	<u>SA105</u>	<u>DuBose</u>	<u>BONNET</u>
<u>20774-2</u>	<u>SA105</u>	<u>DuBose</u>	<u>DISC</u>
<u>664A</u>	<u>SA105</u>	<u>Nova</u>	<u>GASKET RETAINER</u>

(1) For manually operated valves only
 *Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

Shedup Suiy

1. (a) Manufactured by Anchor/Darling Valve Co., 701 First St., Williamsport, PA 17701 7/20/07
(Name and address of NPT Certificate Holder)

(b) Manufactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 99352-
(Name and address of N Certificate Holder for completed nuclear component) 0968

2. Identification-Certificate Holder's Serial No. of Part U466 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. D13595 Drawing Prepared by Anchor/Darling Valve Company

(b) Description of Part Inspected Body w/Seat Rings SA216-WCB Ht. #E1517

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date W/1972, Case No. N/A Class 2

3. Remarks: Spare Parts for Dwg. 2650-3 SJO 4513-42 & 4513-79
(Brief description of service for which component was designed)

WPPSS P.O. #244197 A/DV S.O. #P244B-001

MS-V-20; S/N U466 (BODY)

Hydro tested at 3250 p.s.i. for 10 minutes

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 10-23-95 19____ Signed Anchor/Darling Valve Co. By Henry D. Larson
(NPT Certificate Holder)

Certificate of Authorization Expires 4/15/98 Certificate of Authorization No. N1713

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file as _____

Stress analysis report on file as _____

Design specifications certified by _____ Prof. Eng. State _____ Reg. No. _____

Stress analysis report certified by _____ Prof. Eng. State _____ Reg. No. _____

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Pennsylvania and employed by Commercial Union Insurance Company of Boston, Mass. have inspected the part of a pressure vessel described in this

Partial Data Report on P-2-95 thru 10-24-95 19____, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 10-24 1995

Charles Young
Inspector's Signature

Commissions Pennsylvania 2392
National Board, State, Province and No.

* Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1-3 on this form is repeated on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3. "Remarks"



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Control Air System (CAS)</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 06/23/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CAS(5)-1	WPPSS*	CAS(5)-1-P1	N/A	N/A	1984	See Item 7 Below	Yes, Code Class 3

7. Description Of Work: Replaced existing tubing material for CAS supply to valve MS-V-28A. The replacement work was performed as follows:

- 1) Removed existing tubing material such as tubing, tee, elbow and connector.
- 2) Installed new tubing material such as tubing, tee, elbow and connector.
- 3) Made required socket welds.
- 4) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Date: 06/27/07

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Air System (CAS)

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CAS(5)-1	WPPSS*	CAS(5)-1-P1	N/A	N/A	1984	See Item 7 Below	Yes, Code Class 3

7. Description Of Work: Replaced existing tubing material for CAS supply to valve MS-V-28B. The replacement work was performed as follows:

- 1) Removed existing tubing material such as tubing, tee and connectors.
- 2) Installed replacement tubing material such as tubing, tee and connectors.
- 3) Made required socket welds.
- 4) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [X] Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/27/07 Date 6/27/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller Commissions
Inspector's Signature National Board, State, and Endorsements

Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 06/27/07
Sheet: 1 Of 1
Unit: Not Applicable

2. Plant: Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable

4. Identification Of System: Control Air System (CAS)

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CAS(5)-1	WPPSS*	CAS(5)-1-P1	N/A	N/A	1984	See Item 7 Below	Yes, Code Class 3

7. Description Of Work: Replaced existing tubing material for CAS supply to valve MS-V-28C. The replacement work was performed as follows:

- 1) Removed existing tubing and piping material such as tubing, pipe, tee, elbow and connectors.
- 2) Installed replacement tubing and piping material such as tubing, pipe, tee, elbow and connectors.
- 3) Made required socket welds.
- 4) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/27/07 Date 6/27/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 06/27/07
Sheet: 1 Of 1
Unit: Not Applicable

2. Plant: Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable

4. Identification Of System: Control Air System (CAS)

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CAS(5)-1	WPPSS*	CAS(5)-1-P1	N/A	N/A	1984	See Item 7 Below	Yes, Code Class 3

7. Description Of Work: Replaced existing tubing material for CAS supply to valve MS-V-28D. The replacement work was performed as follows:

- 1) Removed existing tubing and piping material such as tubing, pipe, tee, elbow and connectors.
- 2) Installed replacement tubing and piping material such as tubing, pipe, tee, elbow and connectors.
- 3) Made required socket welds.
- 4) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/27/07 Date 6/27/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements
 Date _____



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Containment</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/25/2007
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Containment	PDM	12764	790	N/A	1976	See Item 7 Below	Yes, Code Class MC

- 7. Description Of Work Performed:** Fabricated plugs for penetrations. The plugs were fabricated as follows:
- 1) Cut plate material to the required dimensions to fabricate penetration plugs.
 - 2) Fabricated ten (10) penetration plugs to the required dimensions.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The fabricated penetration plugs will be installed in accordance with ASME Section XI work plans as follows:
ASME Section XI Plan No 2-2065 - Install plugs for penetrations X-102, X-103, X-104 and X-105 (C-X-102, C-X-103, C-X-104 and C-X-105).
ASME Section XI Plan No 2-2066 - Install plugs for penetrations X-96, X-97, X-98 and X-99 (C-X-96, C-X-97, C-X-98 and C-X-99).



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: P_{sig} Test Temperature: °F

9. **Remarks** (Applicable Manufacturer's Data Reports to be attached): * The pressure test is addressed in the following ASME Section XI work plans:
 1) ASME Section XI Plan No 2-2065 - Install plugs for penetrations X-102, X-103, X-104 and X-105 (C-X-102, C-X-103, C-X-104 and C-X-105).
 2) ASME Section XI Plan No 2-2066 - Install plugs for penetrations X-96, X-97, X-98 and X-99 (C-X-96, C-X-97, C-X-98 and C-X-99).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/25/07 Date 7/25/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/8/07 to 8/3/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I., N.S.C. 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 8/3/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Containment</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/25/2007
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Containment	PDM	12764	790	N/A	1976	See Item 7 Below	Yes, Code Class MC

7. Description Of Work Performed: Installed plugs for penetrations X-102, X-103, X-104 and X-105 (C-X-102, C-X-103, C-X-104 and C-X-105). The plugs were installed as follows:

- 1) Installed fabricated penetration plugs.
- 2) Made required penetration plug welds.
- 3) Performed visual examination on the final welds. Visual examination results acceptable.
- 4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable.
- 5) Performed VT-1 visual examination on the penetration plug welds for ISI (PSI). VT-1 visual examination results acceptable.
- 6) Performed VT-3 visual examination on the penetration plug welds for ISI (PSI). VT-3 visual examination results acceptable.
- 7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The penetration plugs were previously fabricated in accordance with ASME Section XI Plan No 2-2064.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 38.84 Psig Test Temperature: 75.8° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): * VT-2 visual examination to confirm pressure boundary integrity of the plug welds for penetrations X-102, X-103, X-104 and X-105 (C-X-102, C-X-103, C-X-104 and C-X-105) was performed during 10CFR50, Appendix J Local Leak Rate Test (LLRT).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/25/07 Date 7/25/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/8/07 to 8/6/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.F.M.C. 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 8/6/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Containment</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/31/2007
 Sheet: 1 Of 3
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Containment	PDM	12764	790	N/A	1976	See Item 7 Below	Yes, Code Class MC

7. Description Of Work Performed: Installed plugs for penetrations. The plugs were installed as follows:

Penetrations X-96, X-98 And X-99 (C-X-96, C-X-98 And C-X-99)

Installed plugs for penetrations X-96, X-98 and X-99 (C-X-96, C-X-98 and C-X-99) as follows:

- 1) Installed fabricated penetration plugs.
- 2) Made required penetration plug welds.
- 3) Performed visual examination on the final welds. Visual examination results acceptable.
- 4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable.
- 5) Performed VT-1 visual examination on the penetration plug welds for ISI (PSI). VT-1 visual examination results acceptable.
- 6) Performed VT-3 visual examination on the penetration plug welds for ISI (PSI). VT-3 visual examination results acceptable.
- 7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

Penetration X-97 (C-X-97)

Installed plug for penetration X-97 (C-X-97) as follows:

- 1) Installed fabricated penetration plug.
- 2) Made required penetration plug weld.
- 3) Performed visual examination on the final weld. Visual examination results acceptable.
- 4) Performed magnetic particle (MT) examination on the final weld. Magnetic particle (MT) examination results acceptable.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 38.7 Psig Test Temperature: 74/75° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): * VT-2 visual examination to confirm pressure boundary integrity of the plug welds for penetrations X-96, X-97, X-98 and X-99 (C-X-96, C-X-97, C-X-98 and C-X-99) was performed during 10CFR50, Appendix J Local Leak Rate Test (LLRT).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/31/07 Date 7/31/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/8/06 to 8/6/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements

Date 8/6/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Containment
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 07/31/2007
Sheet: 2 Of 3
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Containment	PDM	12764	790	N/A	1976	See Item 7 Below	Yes, Code Class MC

7. Description Of Work Performed: Continuation From Sheet 1 of 3

- 5) Performed VT-1 visual examination on the penetration plug weld for ISI (PSI). VT-1 visual examination results acceptable.
- 6) Performed VT-3 visual examination on the penetration plug weld for ISI (PSI). VT-3 visual examination results acceptable.
- 7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. Leakage was observed during the pressure test.
- 8) Removed (locally) weld area with a pin hole.
- 9) Prepared the excavation/cavity for weld repair.
- 10) Performed liquid penetrant (PT) examination of excavation/cavity area. Liquid penetrant (PT) examination results acceptable.
- 11) Mapped the excavation/cavity.
- 12) Weld repaired the excavation/cavity.
- 13) Blended the weld repaired area with the surrounding weld metal.
- 14) Performed magnetic particle (MT) examination on the final weld repaired areas. Magnetic particle (MT) examination results unacceptable.
- 15) Removed (locally) unacceptable magnetic particle (MT) examination indication.
- 16) Performed liquid penetrant (PT) examination of excavation/cavity area. Liquid penetrant (PT) examination results acceptable. Note - Subsequent welding was not required for the excavated/cavity area.
- 17) Performed visual examination on the final excavated/cavity area. Visual examination results acceptable.
- 18) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the repaired surface. No evidence of leakage during the pressure test.

8/6/07 Joe P. Fair 9496 N.A.B.I.N.S.C 9496W



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Containment
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
- 6. **Identification Of Components**

Date: 07/31/2007
Sheet: 3 Of 3
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Containment	PDM	12764	790	N/A	1976	See Item 7 Below	Yes, Code Class MC

7. Description Of Work Performed: Continuation From Sheet 2 of 3

19) See note 3 below for VT-1 and VT-3 visual examination on the penetration plug weld repaired areas for ISI (PSI).

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The penetration plugs were previously fabricated in accordance with ASME Section XI Plan No 2-2064.
- 3) The requirements for VT-1 and VT-3 visual examination of the local weld repaired area encompassing approximately 25% of the total weld surface after weld repair on penetration X-97 (C-X-97) to satisfy ASME Section XI ISI (PSI) requirements were not satisfied. This non conformance is documented in Condition Report (CR) No 2-07-7267.

8/6/07 Joe C. Hair 9496 N, A, B, I, NS, C 9496W



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Containment Atmospheric Control (CAC) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 07/08/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CAC(21)-1A	WPPSS*	CAC(21)-1A-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2

- 7. Description Of Work Performed:** Installed blind flange for CAC-BF-3A. The work was performed as follows:
- 1) Cut existing pipe.
 - 2) Installed replacement blind flange.
 - 3) Made required welds.
 - 4) Performed visual examination on the final welds. Visual examination results acceptable.
 - 5) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable.
 - 6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the welded joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 38.75 Psig Test Temperature: 82° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): * VT-2 visual examination to confirm pressure boundary integrity of the welded joint was performed during 10CFR50, Appendix J Local Leak Rate Test (LLRT).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 7/8/07 Date 7/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/8/07 to 7/10/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, R, I, N, S, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 7/10/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Date: 07/08/2007

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Containment Atmospheric Control (CAC) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CAC(21)-1B	WPPSS*	CAC(21)-1B-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2

7. Description Of Work Performed: Installed blind flange for CAC-BF-3B. The work was performed as follows:

- 1) Cut existing pipe.
- 2) Installed replacement blind flange.
- 3) Made required welds.
- 4) Performed visual examination on the final welds. Visual examination results acceptable.
- 5) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable.
- 6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the welded joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 38.74 Psig Test Temperature: 82° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): * VT-2 visual examination to confirm pressure boundary integrity of the welded joint was performed during 10CFR50, Appendix J Local Leak Rate Test (LLRT).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/8/07 Date 7/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/8/07 to 7/12/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I. NSC 9496W
 Inspector's Signature National Board, State, and Endorsements

Date 7/12/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 07/08/2007

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Service Water (SW) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(1)-2 SW(21)-2	WPPSS* WPPSS*	SW(1)-2-P1 SW(21)-2-P1	N/A N/A	N/A N/A	1983 1983	See Item 7 Below See Item 7 Below	Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work Performed: Installed blind flanges for SW-BF-1A and SW-BF-2A. The work was performed as follows:

- 1) Cut existing pipe.
- 2) Installed replacement blind flanges.
- 3) Made required welds.
- 4) Performed visual examination on the final welds. Visual examination results acceptable.
- 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the welded joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 207 Psig Test Temperature: 60° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.
 Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/8/07 Date 7/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/8/07 to 7/16/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
 By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I., N.S.C. 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date Joe C. Hair 7/16/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Service Water (SW) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: **Note 1**
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 05/22/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2	WPPSS*	SW(22)-2-P1	N/A	N/A	1983	See Item 7 Below Removed Installed	Yes, Code Class 3
SW-V-845	Borg Warner	57596	N/A	N/A	1983		Yes, Code Class 1
SW-V-845	Flowserve	02BEV	N/A	N/A	2006		Yes, Code Class 1

- 7. Description Of Work:** Replaced existing valve SW-V-845. The replacement work was performed as follows:
- 1) Removed existing valve SW-V-845, Serial No 57596.
 - 2) Installed replacement valve SW-V-845, Serial No 02BEV.
 - 3) Made required socket welds.
 - 4) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement valve SW-V-845, Serial No 02BEV was installed is Service Water (SW) piping system SW(22)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement valve SW-V-845, Serial No 02BEV is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- 5) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 3 application.
- 6) OEM/OES Borg Warner valves are now being manufactured by OEM/OES Flowserve



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Exempt Pneumatic Test Pressure: P_{sig} Nominal Operating Pressure Test Temperature: °F Other

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve SW-V-845, Serial No 02BEV.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 5/22/07 Date 5/22/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller Commissions
Inspector's Signature National Board, State, and Endorsements
Date _____

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Div. 1

1. Manufactured by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(Name and Address of N Certificate Holder)

2. Manufactured for Energy Northwest PO Box 968 Richland, WA 99352-0968
(Name and Address of Purchaser or Owner)

3. Location of Installation Columbia Generating Station Snake River Warehouse Complex, Richland, WA 99352
(Name and Address)

4. Pump or Valve Valve Nominal Inlet Size 3/4" Outlet Size 3/4"
(Inch) (Inch)

(a) Model No. Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l Bd. No.	(g) Year Built
(1) 1500	02BEV	N/A	116CCA1-006 Rev. B	1	N/A	2006
(2)						
(3)						
(4)	<u>SW-V-845, S/N 02BEV</u>					
(5)						
(6)						
(7)						
(8)						
(9)						
(10)						

Rudip Singh
5/16/07

5. .75"-1500# Y-TYPE LIFT CHECK VALVE
(Brief description of service for which equipment was designed)

36656

6. Design Conditions 3600 psi 100 °F or Valve Pressure Class 1500 (1)
(Pressure) (Temperature)

7. Cold Working Pressure 3600 psi at 100 °F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
(b) Forgings			
86157	SA182-F316	Larson	Body
M906	SA182-F316	Nova	Bonnet
M5737	Stellite #6	Flowserve	Disk

(1) For manually operated valves only
*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Containment
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
- 6. **Identification Of Components**

Date: 06/24/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Containment Drywell Head C-DH-1	PDM	12764	790	N/A	1976	See Item 7 Below	Yes, Code Class MC

7. Description Of Work Performed: Replaced nuts and bolts for the Containment Drywell Head C-DH-1 bolted joint. The replacement work was performed as follows:

- 1) Performed VT-1 visual examination on replacement nuts for ISI (PSI). VT-1 visual examination results acceptable.
- 2) Performed VT-1 visual examination on replacement bolts for ISI (PSI). VT-1 visual examination results acceptable.
- 3) Performed VT-3 visual examination on replacement nuts for ISI (PSI). VT-3 visual examination results acceptable.
- 4) Performed VT-3 visual examination on replacement bolts for ISI (PSI). VT-3 visual examination results acceptable.
- 5) Installed two (2) replacement VT-1 and VT-3 visually examination nuts.
- 6) Installed two (2) replacement VT-1 and VT-3 visually examination bolts.
- 7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 38.92 Psig Test Temperature: 75.8° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): * VT-2 visual examination to confirm pressure boundary integrity of the Containment Drywell Head C-DH-1 bolted joint was performed during 10CFR50, Appendix J Local Leak Rate Test (LLRT).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/24/07 Date 6/24/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/29/07 to 6/27/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, E, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/27/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 06/24/07

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Containment Supply Purge (CSP) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CSP-V-800/12	Borg Warner	13736	N/A	N/A	1977	See Item 7 Below	Yes, Code Class 1

7. Description Of Work: Performed work on valve CSP-V-800/12. The work was performed as follows:

- 1) Removed the disc from the valve.
- 2) Machined the disc seating surfaces.
- 3) Performed liquid penetrant (PT) examination on the valve disc machined surfaces. Liquid penetrant (PT) examination results acceptable.
- 4) Reinstalled the valve parts.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/24/07 Date 6/24/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 08/17/2007

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

Unit: Not Applicable

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Closed Cooling (Water) (RCC) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RCC(3)-1	WPPSS*	RCC(3)-1-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 3

7. Description Of Work Performed: Replaced stud and nut material for bolted joints in RCC piping system associated with valve RCC-V-88C. The replacement work was performed as follows:

- 1) Installed replacement studs. See Note 3.
- 2) Installed replacement nuts. See Note 3.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) Studs and nuts were replaced without QC or ANII involvement. This non conformance is documented in Condition Report (CR) No 2-07-7267.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 74 Psig Test Temperature: 64° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 8/17/07 Date 8/17/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/7/07 to 8/20/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 8/20/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** High Pressure Core Spray (HPCS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Summer 1971 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 07/05/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS-P-1	Flowserve	RLSA06032	N/A	N/A	2006	See Item 7 Below	Yes, Code Class 2

- 7. Description Of Work:** Replaced existing seal piping material for pump HPCS-P-1. The replacement work was performed as follows:
- 1) Removed existing seal pipe.
 - 2) Installed replacement seal pipe.
 - 3) Reinstalled existing flange.
 - 3) Made required socket welds.
 - 4) Performed visual examination on the final socket welds. Visual examination results acceptable.
 - 5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. **Remarks** (Applicable Manufacturers Data Reports to be attached): The seal piping is attached to the replacement pump HPCS-P-1, Serial No RLSA06032. The following ASME Code Data Reports are attached for information to acknowledge installation of replacement pump HPCS-P-1 in accordance with ASME Section XI Plan No 2-2105:

1) NPV-1 Code Data Report for the replacement pump HPCS-P-1, Serial No RLSA06032, 2) N-2 Code Data Report for the replacement pump discharge head associated with replacement pump HPCS-P-1, Serial No RLSA06032.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/6/07 Date 7/6/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____

** AMENDED 8/30/2006

ANI SIGNATURE

FLOWSERVE REP

RLSA06032

Tamer Pezek
 Tamer PEZEK

Certificate Holder's Serial No. NA

- 8 Design conditions _____ 1715 _____ 40-212 _____ °F or valve pressure class _____ (1)
 (pressure) NA (temperature)
9. Cold working pressure _____ 2580/2600 _____ psi at 100°F NA
10. Hydrostatic test _____ psi Disk differential test pressure _____ psi
 Name Plate attached with drive screws
- 11 Remarks: _____
 Material, Body: Carbon Steel (ASME SA 316/ ASME SA 350/ ASME SA 106/ ASME SA 234)
 Material, Bolting: Alloy 4140 (ASME SA 193 GR. B7/ ASME SA 194 GR. 7)
- *** SEE N-2 CODE DATA REPORT FOR DISCHARGE HEAD, SERIAL NUMBER 411R-1, NATIONAL BOARD NUMBER 454

CERTIFICATION OF DESIGN

Design Specification certified by Fred J. Mollerus, Jr P.E. State Washington Reg. no. 8273
 Design Report certified by Dave Kraft P.E. State New Jersey Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1

N Certificate of Authorization No. N-1130 Expires June 10, 2008

Date 7/14/2006 Name Flowserve Pump Division, Nuclear Products Operations Signed Tamer Pezek
 (N Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIF and employed by HOB-CI of HARTFORD CT have inspected the pump, or valve described in this Data Report on 7-14-06, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Date 7-14-06 Signed [Signature] Commissions NB 12050-N / CA-1969
 (Authorized Inspector) (Nat'l Bd (incl endorsements) and state or prov and no)

(1) For manually operated valves only.

SATISFACTORY UNSATISFACTORY _____
[Signature] 9.18.06
 RECEIPT INSPECTOR / LEVEL / DATE

PLAN NO. 2-208's.

CORRECTED COPY
ERP 5/26/06
SL 5/26/06

Deadp Equip
7/6/07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Penn Iron Works, Inc, 700 Old Fritztown Road, Sinking Spring, PA 19608
(name and address of NPT Certificate Holder)
2. Manufactured for Flowserve Pump Corp., 2300 East Vernon Avenue, Vernon, CA 90058
(name and address of purchaser)
3. Location of installation Unknown
(name and address)
4. Type F-12X20KD361BX2E, Rev. N SA-106 70 ksi Min. NA 2005
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRM) (year built)
5. ASME Code, Section III, Division 1: See Remarks 1 Below See Remarks 1 Below 2 NA
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision NA Date NA
(no.)
7. Remarks: * Penn Iron Works, Inc. not responsible for design
1. 1971 Edition, Summer 1971 Addenda for fabrication, NDT and stamping; 1998 Edition, 2000 Addenda for materials
8. Nom. thickness (in.) 1.312" Min. design thickness (in.) NA Dia. ID (ft & in.) 1' Length overall (ft & in.) 2'-6.75"
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 4118-1	454	(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5) WPCS-P-1, SIN		(30)	
(6)		(31)	
(7)		(32)	
(8) RL SA 06 032.		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 1715 psi. Temp. 40-212 °F. Hydro. test pressure 2580 at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

SATISFACTORY UNSATISFACTORY
9-18
8.23.06
RECEIPT INSPECTOR / LEVEL / DATE

Certificate Holder's Serial Nos. 4118-1 through 4118-1

CERTIFICATION OF DESIGN

Design specifications certified by NA P.E. State NA Reg. no. NA
(when applicable)

Design report^o certified by NA P.E. State NA Reg. no. NA
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Discharge Head conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2927 Expires November 11, 2005

Date 5/26/06 Name Penn Iron Works, Inc. Signed [Signature]
(P.E. Certificate Number) (Individual Name Certificate)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CF of HARTFORD, CT have inspected these items described in this Data Report on 9/15/05, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 5/26/06 Signed [Signature] Commissions NIS 9364 (NFI) PA 2372
(Authorized Nuclear Inspector) (Natl. Bd. (incl. endorsements) and state or prov. and no.)

SATISFACTORY UNSATISFACTORY [Signature]
[Signature] 8-23-06
 RECEIPT INSPECTOR / LEVEL / DATE



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Service Water (SW) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 07/05/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(2)-2-UG	WPPSS*	SW(2)-2-UG-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 3

- 7. Description Of Work:** Replaced piping material associated with valve SW-V-706B. The replacement work was performed as follows:
- 1) Removed existing piping material such as elbow and pipe.
 - 2) Installed replacement piping material such as elbow and pipe.
 - 3) Made required socket welds.
 - 4) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturers Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/5/07 Date 7/5/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Fuel Pool Cooling (FPC) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1972 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 03/08/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
FPC-V-112A	Anchor Darling	3N-381	N/A	N/A	1975	Corrected (Repaired)	Yes, Code Class 3

7. Description Of Work Performed: Machined existing hinge pins for valve FPC-V-112A, Serial No 3N-381. The work was performed as follows:

- 1) Machined both the existing hinge pins.
- 2) Surface finished the machined surfaces on as needed basis for both the existing hinge pins.
- 3) Reinstalled both the existing hinge pins
- 4) Reinstalled existing studs for the valve body to bonnet joint.
- 5) Reinstalled existing nuts for the valve body to bonnet joint.
- 6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve body to bonnet joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Report.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Test Pressure: 98 Psig Test Temperature: 91°F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 3/8/07 Date 3/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/30/07 to 3/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB12723 NE/WA12723
Inspector's Signature National Board, State, and Endorsements
Date 3/9/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 05/05/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4	WPPSS*	MS(9)-4-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1

- 7. Description Of Work:** Fabricate solid bar spacers for MSLC deactivation. The work was performed as follows:
- 1) Cut round bar material to the required dimensions to fabricate solid bar spacers
 - 2) Fabricated/machined solid bar spacers to the required dimensions.
 - 3) Final finished the machined surfaces of the solid bar spacers.
 - 4) Performed liquid penetrant (PT) examination on the final finished surfaces of the solid bar spacers. Liquid penetrant (PT) examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The solid bar spacers fabricated in accordance with ASME Section XI Plan No 2-2086 were installed in the plant in accordance with the following ASME Section XI work plans:
 - Plan No 2-2087 installed solid bar spacer associated with PI-V-X18A for MSLC deactivation.
 - Plan No 2-2088 installed solid bar spacer associated with PI-V-X18B for MSLC deactivation.
 - Plan No 2-2089 installed solid bar spacer associated with PI-V-X18C for MSLC deactivation.
 - Plan No 2-2090 installed solid bar spacer associated with PI-V-X18D for MSLC deactivation.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Exempt Pneumatic Test Pressure: Psig Nominal Operating Pressure Test Temperature: °F Other

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature _____ National Board, State, and Endorsements _____
 Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 07/10/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4	WPPSS*	MS(9)-4-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1

7. Description Of Work: Install solid bar spacer associated with valve PI-V-X18A for MSLC deactivation. The replacement work was performed as follows:

- 1) Cut/ground existing pipe to reducing insert socket weld.
- 2) Cut/ground existing pipe to valve socket weld.
- 3) Prepped cut/ground reducing insert socket end surfaces on as needed basis for rewelding.
- 4) Prepped cut/ground reducing valve socket end surfaces on as needed basis for rewelding.
- 5) Performed liquid penetrant (PT) examination on the final reducing insert socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
- 6) Performed liquid penetrant (PT) examination on the final valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
- 7) Installed solid bar spacer.
- 8) Made required socket welds XI-3 and XI-4.
- 9) Performed visual examination on the final socket welds XI-3 and XI-4. Visual examination results acceptable.
- 10) Performed liquid penetrant (PT) examination on the final socket welds XI-3 and XI-4. Liquid penetrant (PT) examination results acceptable except for socket weld XI-3.
- 11) Performed local repairs on socket weld XI-3R-2 (weld XI-3R-1, weld XI-3).
- 12) Performed visual examination on the final socket weld XI-3R-2 (weld XI-3R-1, weld XI-3). Visual examination results acceptable.
- 13) Performed liquid penetrant (PT) examination on the final repaired surfaces socket weld XI-3R-2 (weld XI-3R-1, weld XI-3). Liquid penetrant (PT) examination results acceptable except for socket weld XI-3R-2 (weld XI-3R-1, weld XI-3).

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/11/07 Date 7/11/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Main Steam (MS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/10/2007
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4	WPPSS*	MS(9)-4-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1

- 7. Description Of Work:** Install solid bar spacer associated with valve PI-V-X18B for MSLC deactivation. The replacement work was performed as follows:
- 1) Cut/ground existing pipe to reducing insert socket weld.
 - 2) Cut/ground existing pipe to valve socket weld.
 - 3) Prepped cut/ground reducing insert socket end surfaces on as needed basis for rewelding.
 - 4) Prepped cut/ground reducing valve socket end surfaces on as needed basis for rewelding.
 - 5) Performed liquid penetrant (PT) examination on the final reducing insert socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
 - 6) Performed liquid penetrant (PT) examination on the final valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
 - 7) Installed solid bar spacer.
 - 8) Made required socket welds XI-1 and XI-2.
 - 9) Performed visual examination on the final socket welds XI-1 and XI-2. Visual examination results acceptable.
 - 10) Performed liquid penetrant (PT) examination on the final socket welds XI-1 and XI-2. Liquid penetrant (PT) examination results acceptable.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 7/11/07 Date 7/11/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller Commissions
Inspector's Signature National Board, State, and Endorsements

Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Main Steam (MS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/10/2007
 Sheet: 1 Of 2
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4	WPPSS*	MS(9)-4-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1

7. Description Of Work: Install solid bar spacer associated with valve PI-V-X18C for MSLC deactivation. The replacement work was performed as follows:

- 1) Cut/ground existing pipe to reducing insert socket weld.
- 2) Cut/ground existing pipe to valve socket weld.
- 3) Prepped cut/ground reducing insert socket end surfaces on as needed basis for rewelding.
- 4) Prepped cut/ground reducing valve socket end surfaces on as needed basis for rewelding.
- 5) Performed liquid penetrant (PT) examination on the final reducing insert socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
- 6) Performed liquid penetrant (PT) examination on the final valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
- 7) Installed solid bar spacer.
- 8) Made required socket welds XI-1 and XI-2.
- 9) Performed visual examination on the final socket welds XI-1 and XI-2. Visual examination results acceptable.
- 10) Performed liquid penetrant (PT) examination on the final socket welds XI-1 and XI-2. Liquid penetrant (PT) examination results unacceptable.

Note - Attempt was made to repair both welds XI-1 and XI-2. The attempt was unsuccessful. Cut/ground both the welds.

- 11) Cut/ground both socket welds XI-1 and XI-2.
- 12) Prepped cut/ground reducing insert socket end surfaces on as needed basis for rewelding.
- 13) Prepped cut/ground reducing valve socket end surfaces on as needed basis for rewelding.
- 14) Performed liquid penetrant (PT) examination on the final reducing insert socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/11/07 Date 7/11/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 07/10/2007
Sheet: 2 Of 2
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4	WPPSS*	MS(9)-4-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1

7. Description Of Work Performed: Continuation From Sheet 1 of 2

- 15) Performed liquid penetrant (PT) examination on the final valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
- 16) Performed liquid penetrant (PT) examination on the final prepped surfaces of the solid bar spacer. Liquid penetrant (PT) examination results acceptable.
- 17) Reinstalled solid bar spacer.
- 18) Made required socket welds XI-1-1 and XI-2-1.
- 19) Performed visual examination on the final socket welds XI-1-1 and XI-2-1. Visual examination results acceptable.
- 20) Performed liquid penetrant (PT) examination on the final socket welds XI-1-1 and XI-2-1. Liquid penetrant (PT) examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Main Steam (MS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/10/2007
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4	WPPSS*	MS(9)-4-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1

7. Description Of Work: Install solid bar spacer associated with valve PI-V-X18D for MSLC deactivation. The replacement work was performed as follows:

- 1) Cut/ground existing pipe to reducing insert socket weld.
- 2) Cut/ground existing pipe to valve socket weld.
- 3) Prepped cut/ground reducing insert socket end surfaces on as needed basis for rewelding.
- 4) Prepped cut/ground reducing valve socket end surfaces on as needed basis for rewelding.
- 5) Performed liquid penetrant (PT) examination on the final reducing insert socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
- 6) Performed liquid penetrant (PT) examination on the final valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
- 7) Installed solid bar spacer.
- 8) Made required socket welds XI-1 and XI-2.
- 9) Performed visual examination on the final socket welds XI-1 and XI-2. Visual examination results acceptable.
- 10) Performed liquid penetrant (PT) examination on the final socket welds XI-1 and XI-2. Liquid penetrant (PT) examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/11/07 Date 7/11/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller Commissions _____
 Inspector's Signature _____ National Board, State, and Endorsements _____
 Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 05/08/07

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306

(b) Repair/Replacement Organization P.O. No, Job No, etc.: PO No 313236

(c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR

(d) Certificate Of Authorization No.: NWS Technologies, LLC, VR No 632 And NR No 81

(e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2009 And NR - April 09, 2009

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-03-0050	N/A	N/A	1980	See Item 7 Below	Yes, Code Class 1
Disc Insert	Crosby	N93185-56-0153	N/A	N/A	N/A	Removed	No, Code Class 1
Disc Insert	Crosby	N97499-46-0122	N/A	N/A	N/A	Installed	No, Code Class 1
Nozzle	Crosby	N93184-52-0159	N/A	N/A	N/A	Removed	No, Code Class 1
Nozzle	Crosby	N97498-33-0012	N/A	N/A	N/A	Installed	No, Code Class 1

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0050 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

- 1) Disassembled the relief valve to perform the required work.
- 2) Removed existing disc insert Serial No N93185-56-0153 from the relief valve.
- 3) Installed replacement (modified) disc insert Serial No N97499-46-0122 in the relief valve.
- 4) Removed existing nozzle Serial No N93184-52-0159 from the relief valve.
- 5) Installed replacement (modified) nozzle Serial No N97498-33-0012 in the relief valve.
- 6) Installed two (2) Heli-Coils in inlet hole location # 1 and inlet hole location # 4.
- 7) Installed two (2) replacement studs for the relief valve inlet joint. See Note 2.
- 8) Reassembled the relief valve.
- 9) Tested the relief valve to verify set pressure of 1175 PSIG. Test results acceptable.
- 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test. See Note 3

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) Energy Northwest performed VT-1 visual examination on two (2) replacement studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
- 3) Energy Northwest performed VT-2 visual examination to confirm pressure boundary integrity of the valve body to bonnet joint.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None

Test Pressure: 10 Psig

Test Temperature: 72° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for Main Steam Relief Valve (MSRV), Serial No N63790-03-0050, 2) See attached NV-1 Code Data Report for Main Steam Relief Valve (MSRV), Serial No N63790-00-0050 (Post Mod Serial No N63790-03-0050).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 5/8/07 Date 5/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/28/07 to 5/10/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 A B C I N N S 9496 W
 Inspector's Signature National Board, State, and Endorsements

Date 5/10/07

CORRECTED COPY

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES

Repair Sup's

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9 5/8/07
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968
5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.
HB-65-BP-FN new s/n: N63790-03-0050 N/A steam 6 x 10 1980
(type) (mfr's S/N) (NB#) (service) (size) (yr. built)
- d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1971 N/A N/A
(edition) (addenda) (Code Case(s))
9. Design responsibilities: N/A
10. Opening pressure: 1175 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): See attachment 1.
12. Remarks: See attachment 1. Corrected Item 5c Year Built.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.
National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

5.5.07 NWS Technologies, LLC T.P. Nedzostek for C.V. Sierra Manager, QA
Date Repair Organization Authorized representative Title
T. P. NEDZOSTEK

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 5 MAY 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

5/5/07 Charles F. Toegel Jr. NB # 8462, A, N, I NC# 1073
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0050

The S/N for this valve was N63790-00-0050 The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

11. Description of work:

NWS Traveler # 03-168

The valve was disassembled. The nozzle and disc were removed and returned to site. NWS machined the Disc Ring per Crosby Instruction Procedure FS-5335 Rev. 1.

Inlet flange holes #1 and #4 were repaired using heli-coils.

Parts replaced during the repair include:

Disc: New S/N N97499-46-0122

Nozzle: New S/N N97498-33-0012

Eductor Gasket: MC 56230461

Two Inlet Studs: B7SLR

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity. A final steam seat tightness test was then done at 93% of set-pressure.

T. P. NEDEBOSTER

5-5-07
Date

NWS Technologies, LLC
(repair organization)

T. P. Nedebooster or C. V. Sierra
(authorized representative)

Manager, QA
(title)

5/5/07
Date

[Signature]
Inspector's Signature

NB# 8462, A,N,I NC# 1073
Commissions (NB (incl endorsements), jurisdiction, & no.)



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Relief Valve

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules 518701 Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves **FOR INFORMATION ONLY**

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address
- Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A
General Electric Company, 175 Curtner Ave.,
2. Manufactured For San Jose, CA 95125 Order No. 205-AJ986
Name and Address
3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address
4. Location of Plant Hanford Reservation, Richland, Washington 99352
5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0050 Drawing No. DS-A-63790 Rev. C
Type Safety Relief Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Inch Inch Inch Inch
Power Actuated
6. Set Pressure (psig) 1175 575° F
Rated Temperature
- Stamped Capacity 884,314 @ 3 Overpressure -- Blowdown (psig) 2% to 11%
975 psig (Assembled Valve)
- Hydrostatic Test (psig) Inlet 2370 Outlet 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Cascings		
Body	<u>N93183-35-0069</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
Bonnet	<u>N93407-35-0032</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
b. Back Flange		
Support Body Disc Insert	<u>N93185-34-0082</u>	<u>ASME SA637 Gr. 718</u>
Nozzle	<u>N93184-33-0054</u>	<u>ASME SA182 Gr. F316</u>
Disc Holder *K55484-35-0097	<u>*N89714-34-0101</u>	<u>AMS 5662B</u>
Spring Washers K62858-35-0032	<u>K62856-35-0088</u> <u>K62857-35-0053</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
Adjusting Bolt	<u>N93410-33-0057</u>	<u>ASME SA193 Gr. B6</u> <u>ASTM A564-71 Type 630</u> <u>ASME SA564 Type 630</u>
Spindle Point K62873-35-0050	<u>*N89720-34-0066</u>	<u>ASTM A304-66 Gr. 4161H</u>
c. Spring K62858-35-0032	<u>*N89722-0008</u>	
d. Bolting		
Spindle Ball	<u>N93213-0050</u>	<u>Stellite #6</u>
e. Back Flange		
Thrust Bearing Adapter	<u>N93409-32-0052</u>	<u>ASME SA193 Gr. B6</u> <u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u>
Bonnet Stud (BW5, I17)	<u>N93207-0597 thru 0608</u>	<u>ASME SA194 Gr. 2H</u>
Bonnet Stud Nut (J87)	<u>N93210-0817 thru 0828</u>	<u>ASME SA194 Gr. 2H</u>
Inlet Stud (BW6)	<u>N93216-0599 thru 0610</u>	<u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u>
Inlet Stud Nut (BW8)	<u>N93218-0603 thru 0614</u>	<u>ASTM A194-71 Gr. 2H</u> <u>ASME SA194 Gr. 2H</u>
Adjusting Bolt Button K63618-33-0058	<u>N93411-33-0058</u>	<u>ASME SA193 Gr. B6</u>

2X00380116

... replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.

N163790-00-0050

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 & 1711.

Class 1 (Date)

Date 11-5-80 Signed Crosby Valve & Gage Co. by R. G. Casanova
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1878 to use the NV

symbol expires September 30, 1983.
(Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company

43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by ¹Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by ¹W. D. Greenlaw

PE State Massachusetts Reg. No. 14784

¹Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts

and employed by Factory Mutual Systems* of Norwood, Massachusetts

have inspected the pump, or valve, described in this Data Report on 12/5, 1980

and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with his inspection.

FOR INFORMATION ONLY

Signed John Emerson (Inspector) Commissions MASS 1266
(Nat'l. Bd., State, Prov. and No.)

Franklin-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380117



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: PO No 313236
 (c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR
 (d) Certificate Of Authorization No.: NWS Technologies, LLC, VR No 632 And NR No 81
 (e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2009 And NR - April 09, 2009</p> <p>4. Identification Of System: Main Steam (MS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 05/08/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-03-0134	N/A	N/A	1973	See Item 7 Below	Yes, Code Class 1
Disc Insert	Crosby	N93185-56-0252	N/A	N/A	N/A	Removed	No, Code Class 1
Disc Insert	Crosby	N97499-46-0127	N/A	N/A	N/A	Installed	No, Code Class 1
Nozzle	Crosby	N93184-44-0113	N/A	N/A	N/A	Removed	No, Code Class 1
Nozzle	Crosby	N97498-33-0016	N/A	N/A	N/A	Installed	No, Code Class 1

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0134 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

- 1) Disassembled the relief valve to perform the required work.
- 2) Removed existing disc insert Serial No N93185-56-0252 from the relief valve.
- 3) Installed replacement (modified) disc insert Serial No N97499-46-0127 in the relief valve.
- 4) Removed existing nozzle Serial No N93184-44-0113 from the relief valve.
- 5) Installed replacement (modified) nozzle Serial No N97498-33-0016 in the relief valve.
- 6) Reassembled the relief valve.
- 7) Tested the relief valve to verify set pressure of 1175 PSIG. Test results acceptable.
- 8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test. See Note 2

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) Energy Northwest performed VT-2 visual examination to confirm pressure boundary integrity of the valve body to bonnet joint.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: 10 Psig Test Temperature: 72° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for Main Steam Relief Valve (MSRV), Serial No N63790-03-0134, 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) documenting the modification (upgrade) work performed by Crosby for Main Steam Relief Valve (MSRV), Serial No Serial No N63790-00-0134 (N56000-01-0037), 3) See attached NV-1 Code Data Report for relief valve Serial No N56000-01-0037 (N63790-00-0134).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 5/8/07 Date 5/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/28/07 to 5/10/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 A, B, C, I, N, NS, 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 5/10/07

PLAN NO. 2221
 Philip Quip
 CORRECTED COPY 5/8/05

**FORM NVR-1 REPORT OF REPAIR REPLACEMENT
 OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968
5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
 b: Name of manufacturer: Crosby Valve & Gage Co.
 c: Identifying nos.
HB-65-BP-FN new s/n: N63790-03-0134 N/A steam 6 x 10 1973
 (type) (mfr's S/N) (NB#) (service) (size) (yr. built)
- d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1
 (name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 N/A
 (edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 N/A
 (edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1971 N/A N/A
 (edition) (addenda) (Code Case(s))
9. Design responsibilities: N/A
10. Opening pressure: 1175 psig
 Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (Include name and identifying number of replacement parts): See attachment 1.
12. Remarks: See attachment 1.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.
 National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

5-5-07 NWS Technologies, LLC T.P. Nedevostel for C.V. Sierra Manager, QA
 Date Repair Organization Authorized representative Title
T.P. NEDEVOSTEL

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 5 MAY 2005 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

5/5/2005 Charles F. Toegel Jr. NB # 8462, A, N, I NC# 1073
 Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0134

The S/N for this valve was N63790-00-0134 The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

11. Description of work:

NWS Traveler # 02-146

The valve was disassembled. The nozzle and disc were removed and returned to site.

NWS machined the Disc Ring per Crosby Instruction Procedure FS-5335 Rev. 1.

Parts replaced during the repair include:

Disc: New S/N N97499-46-0127

Nozzle: New S/N N97498-33-0016

Eductor Gasket: MC 56230461

After reassembly, the valve set-pressure was certified using steam as the lift medium.

The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

5-5-07
Date

NWS Technologies, LLC
(repair organization)

T. P. NEDEROSTEK
T.P. Nederostek for CVSEAA
(authorized representative)

Manager, QA
(title)

5/5/07
Date

[Signature]
Inspector's Signature

NB# 8462, A,N,I NC# 1073
Commissions (NB (incl endorsements), jurisdiction, & no.)

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MA

Richard G. Smith
51810

**Q.C.-292, REV.A
SHEET 1 OF 2**

Richard G. Smith
3/10/94

**REPAIR AND REPLACEMENT
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS**

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.) NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND, WA

5. a. Identifying Nos. N63790-00-0134 -- -- -- -- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component --
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO Code Case --

9. Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC. XI, 1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: **THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:**

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-43-0126
BONNET	N89717	N93407-41-0052
SPINDLE ASSY	K55465	K62873-46-0060
SPR. WASHER	N89724	K62856-41-0200
SPR. WASHER	N89723	K62857-41-0200
SPRING ASSY	K55466	K62858-31-0006
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0156
DISC INSERT	N89715	N93185-52-0202
SPRING	NX2689	NX2689-0134
THR. BRG. ADAPT.	N89725	N93409-34-0008
ADJ. BOLT	N89726	N93410-36-0132
ADJ. BOLT BUTT. COMMERCIAL		N93411-33-0008
ADJ. BOLT ASSY COMMERCIAL		K63618-31-0001
INLET STUD	N89727	N93216/NAD QTY 10

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Pires QA Eng Manager 24 Feb 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 24, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2/24, 1994 Factory Mutual Systems
Signed Will P. Gelli Commissions 1461455
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-2094

Dudip Swig
5/8/07

<u>WPPSS S/N</u>	<u>WPPSS Set</u>	<u>Bally S/N</u>	<u>Bally Set</u>
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

Dudip Swig
1/26/07

PLAN No. 2-2094



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Repair Shop 3/9/79

Repair Shop

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44A

5/8/07

DATA REPORT
Safety and Safety Relief Valves

- 1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
Name and Address
- Model No. HB-65-BP-FN Order No. N-105286 Contract Date 6/28/71
General Electric Company
- 2. Manufactured For San Jose, California Order No. 205-AD148
Name and Address
- 3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I,
Name and Address Baileytown, Indiana
- 4. Location of Plant Baileytown, Indiana
- 5. Valve Identification MPL #B-22-F013 Serial No. N56000-01-0037 Drawing No. H-56000 Rev. C
Type Safety Relief Orifice Size R Pipe Size - Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch
- 6. Set Pressure (PSIG) 1175 575° F
Rated Temperature
- Stamped Capacity 883950 Lbs. Hr. 3 % Overpressure - Blowdown (PSIG) 5%
Sat. Steam
- Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.
Class 1 Edition 1971 Addenda Date Summer 1972

~~XXXX~~
Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. XXXXXX Forgings		
Body	<u>N90118-32-0008</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
Bonnet XXXXXX	<u>N89717-32-0021</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
b. Bar Stock and Forgings		
XXXXXX Disc Insert	<u>N89715-31-0028</u>	<u>ASTM A-461-65 Type 630</u>
Nozzle	<u>N89713-32-0039</u>	<u>ASTM A-182-71 F316</u> <u>ASME SA-182 F316</u>
Disc Holder	<u>N89714-32-0037</u>	<u>AMS 5662 B</u>
Spring Washers	Top <u>N89724-32-0037</u> Bottom <u>N89723-32-0008</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
Adjusting XXXX Bolt	<u>N89726-33-0046</u>	<u>ASTM A-193-71 Gr. B6</u> <u>ASME SA-193 Gr. B6</u>
Spindle Point	<u>N89720-32-0046</u>	<u>ASTM A-564-72 Type 630</u>



3-3-75



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 05/08/07
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306
(b) Repair/Replacement Organization P.O. No, Job No, etc.: PO No 313236
(c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR
(d) Certificate Of Authorization No.: NWS Technologies, LLC, VR No 632 And NR No 81
(e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2009 And NR - April 09, 2009
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-03-0135	N/A	N/A	1976	See Item 7 Below	Yes, Code Class 1
Disc Insert	Crosby	N93185-52-0199	N/A	N/A	N/A	Removed	No, Code Class 1
Disc Insert	Crosby	N97499-46-0123	N/A	N/A	N/A	Installed	No, Code Class 1
Nozzle	Crosby	N93184-51-0155	N/A	N/A	N/A	Removed	No, Code Class 1
Nozzle	Crosby	N97498-33-0013	N/A	N/A	N/A	Installed	No, Code Class 1

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0135 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

- 1) Disassembled the relief valve to perform the required work.
- 2) Removed existing disc insert Serial No N93185-52-0199 from the relief valve.
- 3) Installed replacement (modified) disc insert Serial No N97499-46-0123 in the relief valve.
- 4) Removed existing nozzle Serial No N93184-51-0155 from the relief valve.
- 5) Installed replacement (modified) nozzle Serial No N97498-33-0013 in the relief valve.
- 6) Installed one (1) Heli-Coil in inlet hole location # 8.
- 7) Installed six (6) replacement studs for the relief valve inlet joint. See Note 2.
- 8) Reassembled the relief valve.
- 9) Tested the relief valve to verify set pressure of 1205 PSIG. Test results acceptable.
- 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test. See Note 3

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) Energy Northwest performed VT-1 visual examination on six (6) replacement studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
- 3) Energy Northwest performed VT-2 visual examination to confirm pressure boundary integrity of the valve body to bonnet joint.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: 10 Psig Test Temperature: 72° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for Main Steam Relief Valve (MSRV), Serial No N63790-03-0135, 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) documenting the modification (upgrade) work performed by Crosby for Main Steam Relief Valve (MSRV), Serial No Serial No N63790-00-0135 (N56000-01-0099), 3) See attached NV-1 Code Data Report for relief valve Serial No N56000-01-0099 (N63790-00-0135).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 5/8/07 Date 5/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/28/07 to 5/10/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 A, B, C, I, N, NS, 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 5/10/07

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES

Repair Supply

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9 5/18/07
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968
5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.
HB-65-BP-FN new s/n: N63790-03-0135 N/A steam 6 x 10 1976
(type) (mfr's S/N) (NB#) (service) (size) (yr.built)
- d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1971 N/A N/A
(edition) (addenda) (Code Case(s))
9. Design responsibilities: N/A
10. Opening pressure: 1205 psig
Set-pressure adjustment made at NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): See attachment 1.
12. Remarks: See attachment 1. (PAGE 1 OF 1) @ 4/23/07

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

4/23/07 NWS Technologies, LLC *Cesar V. Sierra* Manager, QA
Date Repair Organization Authorized representative Title

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 28 APRIL 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/23/07 *Charles F. Toegel Jr.* NB # 8462, A, N, I NC# 1073
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0135

The S/N for this valve was N63790-00-0135 The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

11. Description of work:

NWS Traveler # 02-147

The valve was disassembled. The nozzle and disc were removed and returned to site. Disc Ring and Bellows removed from Valve S/N N63790-00-0062 and installed in this valve. NWS machined the Disc Ring per Crosby Instruction Procedure FS-5335 Rev. 1.

Inlet flange hole #8 were repaired using heli-coils.

Parts replaced during the repair include:

- Disc: New S/N N97499-46-0123
- Nozzle: New S/N N97498-33-0013
- Disc Ring: N63790-00-0062
- Bellows Assembly: K55483-35-0103
- Eductor Gasket: MC 56230461
- Six Inlet Studs B7SLR

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity. A final steam seat tightness test was then done at 93% of set-pressure.

<u>4/23/07</u> Date	<u>NWS Technologies, LLC</u> (repair organization)	<u><i>[Signature]</i></u> (authorized representative)	<u>Manager, QA</u> (title)
<u>4/28/07</u> Date	<u><i>[Signature]</i></u> Inspector's Signature	<u>NB# 8462, A,N,I NC# 1073</u> Commissions (NB (incl endorsements), jurisdiction, & no.)	

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MA

Richard Supt
5/18/10

Q.C.-292, REV.A
SHEET 1 OF 2

Richard Supt
3/10/94

**REPAIR AND REPLACEMENT
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS**

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.) NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND, WA

5. a. Identifying Nos. N63790-00-0135 -- -- -- -- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component --
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO Code Case --

9. Description of work N56000-01-0099 WAS MODIFIED TO N63790-00-0135
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: **THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:**

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-46-0129
BONNET	N89717	N93407-42-0053
SPINDLE ASSY	K55465	K62873-45-0059
SPR.WASHER	N89724	K62856-42-0201
SPR.WASHER	N89723	K62857-42-0201
SPRING ASSY	K55466	K62858-31-0003
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0155
DISC INSERT	N89715	N93185-52-0199
SPRING	NX2689	N89722-0072
THR.BRG.ADAPT	N89725	N93409-32-0006
ADJ.BOLT	N89726	N93410-32-0005
ADJ.BOLT BUTT. COMMERCIAL		N93411-33-0012
ADJ.BOLT ASSY COMMERCIAL		K63618-31-0005

R. Supt

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. _____ conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Pines QA Eng Manager 24 Feb, 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Factory Mutual Systems

Date 2/25, 1994

Signed Walter P. Glick
(Inspector)

Commissions 1461755
(Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-2095

Duair Sup's
5/8/07

<u>WPPSS S/N</u>	<u>WPPSS Set</u>	<u>Bally S/N</u>	<u>Bally Set</u>
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

Duair Sup's
1/26/07

Rudip Gue's

3/10/74

5/8/07



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44C

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
HB-65-BP- Name and Address
 Model No. FN Order No. N-51726 Contract Date 1/27/75 National Board No. _____
General Electric Co., 175 Curtner Ave.,
2. Manufactured For San Jose, California 95125 Order No. 205-AD148
 Name and Address
3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I
 Name and Address
4. Location of Plant Baileytown, Indiana
Spare
5. Valve Identification MPL#B22-F013 Serial No. N56000-01-0099 Drawing No. H-56000 Rev. C
 Type Safety Relief Orifice Size R Pipe Size _____ Inlet 6 Outlet 10
 Safety Safety Relief Pilot Power Actuated Inch Inch Inch Inch
6. Set Pressure (PSIG) 1130 Rated Temperature 575° F
 Stamped Capacity 850500#/Hr. Sat. 3 % Overpressure Blowdown (PSIG) 5Z
 Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825
7. The material, design, construction and workmanship comply with ASME Code, Section III.
 Class 1 Edition 1971, Addenda Date Summer 1972, Case No. _____

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings Forgings		
Body	<u>N90118-35-0032</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
Bonnet	<u>N89717-36-0083</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
b. Bar Stock and Forgings		
Substituted Disc Insert	<u>N89715-36-0106</u>	<u>ASTM A564-71 Type 630</u> <u>ASME SA564 Type 630</u>
Nozzle	<u>N89713-36-0106</u>	<u>ASTM A182-71 Type 316</u> <u>ASME SA182 Type 316</u>
Disc Holder K55484-39-0135	<u>N89714-35-0173</u>	<u>AMS 5662B</u>
Spring Washers K55466-36-0093	<u>N89724-36-0122</u> <u>N89723-38-0131</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
Adjusting Bolt	<u>N89726-40-0119</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Spindle K55465-35-0106	<u>N89720-38-0129</u>	<u>ASTM A564 Type 630</u> <u>ASME SA564 Type 630</u>
Spindle Ball	<u>N89721-0206</u>	<u>Stoody No. 6</u>
Thrust Bearing Adapter	<u>N89725-34-0116</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest **Date:** 05/08/07
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306
(b) Repair/Replacement Organization P.O. No, Job No, etc.: PO No 313236
(c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR
(d) Certificate Of Authorization No.: NWS Technologies, LLC, VR No 632 And NR No 81
(e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2009 And NR - April 09, 2009
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-03-0138	N/A	N/A	1976	See Item 7 Below	Yes, Code Class 1
Disc Insert	Crosby	N93185-56-0240	N/A	N/A	N/A	Removed	No, Code Class 1
Disc Insert	Crosby	N97499-46-0121	N/A	N/A	N/A	Installed	No, Code Class 1
Nozzle	Crosby	N93184-50-0151	N/A	N/A	N/A	Removed	No, Code Class 1
Nozzle	Crosby	N97498-33-0011	N/A	N/A	N/A	Installed	No, Code Class 1

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0138 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

- 1) Disassembled the relief valve to perform the required work.
- 2) Removed existing disc insert Serial No N93185-56-0240 from the relief valve.
- 3) Installed replacement (modified) disc insert Serial No N97499-46-0121 in the relief valve.
- 4) Removed existing nozzle Serial No N93184-50-0151 from the relief valve.
- 5) Installed replacement (modified) nozzle Serial No N97498-33-0011 in the relief valve.
- 6) Reassembled the relief valve.
- 7) Tested the relief valve to verify set pressure of 1185 PSIG. Test results acceptable.
- 8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test. See Note 2

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) Energy Northwest performed VT-2 visual examination to confirm pressure boundary integrity of the valve body to bonnet joint.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: 10 Psig Test Temperature: 72° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for Main Steam Relief Valve (MSRV), Serial No N63790-03-0138, 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) documenting the modification (upgrade) work performed by Crosby for Main Steam Relief Valve (MSRV), Serial No Serial No N63790-00-0138 (N56000-01-0038), 3) See attached NV-1 Code Data Report for relief valve Serial No N56000-01-0038 (N63790-00-0138).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 5/8/07 Date 5/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/28/07 to 5/10/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 A, B, C, I, N, NS, 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 5/10/07

PLAN NO. 2-2096

CORRECTED COPY

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES

Repair Shop

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9 *5/8/07*
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968
5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.
HB-65-BP-FN new s/n: N63790-03-0138 N/A steam 6 x 10 1976
(type) (mfr's S/N) (NB#) (service) (size) (yr. built)
- d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1971 N/A N/A
(edition) (addenda) (Code Case(s))
9. Design responsibilities: N/A
10. Opening pressure: 1185 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): See attachment 1.
12. Remarks: See attachment 1. Corrected Item 5c Year Built.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.
National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

5-5-07 NWS Technologies, LLC T.P. Nedzostek for C.V. SIERRA Manager, QA
Date Repair Organization Authorized representative Title
T.P. NEDZOSTEK

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 5 MAY 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

5/5/07 Charles F. Toegel Jr. NB # 8462, A, N, I NC# 1073
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0138

The S/N for this valve was N63790-00-0138 The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

11. Description of work:

NWS Traveler # 02-148

The valve was disassembled. The nozzle and disc were removed and returned to site.

Disc Ring removed from Valve S/N N63790-00-0046 and installed in this valve.

This disc ring had been previously machined per Crosby Procedure FS-5335 Rev. 1.

Parts replaced during the repair include:

Disc: New S/N N97499-46-0121

Nozzle: New S/N N97498-33-0011

Disc Ring: N63790-00-0046

Eductor Gasket: MC 56230461

After reassembly, the valve set-pressure was certified using steam as the lift medium.

The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

<u>5.5.07</u>	<u>NWS Technologies, LLC</u>	<u>T. P. NEDERDSTEK</u>	<u>For C.V. SIERRA</u>	<u>Manager, QA</u>
Date	(repair organization)	(authorized representative)		(title)
<u>5/5/07</u>	<u>Inspector's Signature</u>		<u>NB# 8462, A,N,I NC# 1073</u>	
Date			Commissions (NB (Incl endorsements), jurisdiction, & no.)	



CROSBY VALVE & GAGE COMPANY

WRENTHAM, MA

Rudip Supt
50707

**Q.C.-292, REV.A
SHEET 1 OF 2**

Rudip Supt
3/10/94

**REPAIR AND REPLACEMENT
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS**

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.) NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND, WA

5. a. Identifying Nos. N63790-00-0138 -- -- -- -- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component --
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO Code Case --

9. Description of work N56000-01-0038 WAS MODIFIED TO N63790-00-0138
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC. XI, 1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: **THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:**

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-44-0127
BONNET	N89717	N93407-45-0056
SPINDLE ASSY	K55465	K62873-43-0057
SPR. WASHER	N89724	K62856-45-0204
SPR. WASHER	N89723	K62857-45-0204
SPRING ASSY	K55466	K62858-31-0002
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0154
DISC INSERT	N89715	N93185-52-0201
THR. BRG. ADAPT.	N89725	N93409-34-0011
ADJ. BOLT	N89726	N93410-31-0004
ADJ. BOLT BUTT. COMMERCIAL		N93411-33-0011
ADJ. BOLT ASSY COMMERCIAL		K63618-31-0004

3/23/94

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. _____ conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Lina QA Eng Manager 24 Feb, 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Factory Mutual Systems

Date 2/25, 1994
Signed Will P. Gilla Commissions MA 1455
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-2096
Thompson's
5/8/07

<u>WPPSS S/N</u>	<u>WPPSS Set</u>	<u>Bally S/N</u>	<u>Bally Set</u>
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

Thompson's
1/26/07

PLAN No 2-2096



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Quap Sample
3/18/74

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44A
5/8/74

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
Name and Address

Model No. HB-65-BP-FN Order No. N-105286 Contract Date 6/28/71
General Electric Company

2. Manufactured For San Jose, California Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I,
Name and Address Baileytown, Indiana

4. Location of Plant Baileytown, Indiana

5. Valve Identification MPL #B-22-F013 Serial No. N56000-01-0038 Drawing No. H-56000 Rev. C

Type Safety Relief Orifice Size R Pipe Size - Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch

6. Set Pressure (PSIG) 1175 575° F
Rated Temperature

Stamped Capacity 883950 Lbs. Hr. 3 % Overpressure - Blowdown XXXX 5%
Sat. Steam

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class I Edition 1971 Addenda Date Summer 1972
I or II

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. XXXXXX Forgings		
Body	<u>N90118-32-0009</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
Bonnet XXXXXX	<u>N89717-32-0022</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
b. Bar Stock and Forgings		
XXXXXX Disc Insert	<u>N89715-32-0018</u>	<u>ASTM A-461-65 Type 630</u>
Nozzle	<u>N89713-32-0028</u>	<u>ASTM A-182-71 F316</u> <u>ASME SA-182 F316</u>
Disc Holder	<u>N89714-32-0038</u>	<u>AMS 5662 B</u>
Spring Washers	Top <u>N89724-32-0038</u> Bottom <u>N89723-32-0023</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
Adjusting XXXXXX Bolt	<u>N89726-32-0015</u>	<u>ASTM A-193-71 Gr. B6</u> <u>ASME SA-193 Gr. B6</u>
Spindle Point	<u>N89720-32-0044</u>	<u>ASTM A-564-72 Type 630</u>



3-3-75

S/N N56000-01-0038

Audip Singh

1/26/07

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	<u>NX2689-0043</u>	<u>ASTM A-304-66 Gr. 4161H</u>
d. Bolting		
e. INDEX OF PARTS		
Inlet Stud	<u>N89727-0445 thru 0456</u>	<u>ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7</u>
Inlet Stud Nut	<u>N89728-0449 thru 0460</u>	<u>ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H</u>
Bonnet Stud	<u>N89718-0449 thru 0460</u>	<u>ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7</u>
Bonnet Stud Nut	<u>N89719-0451 thru 0462</u>	<u>ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H</u>

OTHER PARTS

Spindle Ball	<u>N89721-0044</u>	<u>Stellite 6</u>
BARS & FORGINGS		
Thrust Bearing Adapter	<u>N89725-32-0033</u>	<u>ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6</u>

We certify that the statements made in this report are correct.

Date 10-31 19 73 Signed Crosby Valve & Gage Co. By *Ch. Herman*
Manufacturer QA Manager

Certificate of Authorization No. 331 expires November 9, 1974

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Mutual Boiler & Machinery Insurance Co., Waltham, Mass. have inspected the equipment described in this Data Report on October 31 1973 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

*Factory Mutual Group of Insurance Co.

Date October 31 19 73

Donald J. Chinnia Commissions N.B. 6665, Mass. 1090
(Inspector) National Board, State, Province and No.)



3-3-75



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: PO No 313236
 (c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR
 (d) Certificate Of Authorization No.: NWS Technologies, LLC, VR No 632 And NR No 81
 (e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2009 And NR - April 09, 2009</p> <p>4. Identification Of System: Main Steam (MS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 05/08/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-03-0139	N/A	N/A	1976	See Item 7 Below	Yes, Code Class 1
Disc Insert	Crosby	N97499-31-0001	N/A	N/A	N/A	Removed	No, Code Class 1
Disc Insert	Crosby	N97499-46-0124	N/A	N/A	N/A	Installed	No, Code Class 1
Nozzle	Crosby	N97498-33-0039	N/A	N/A	N/A	Removed	No, Code Class 1
Nozzle	Crosby	N97498-33-0014	N/A	N/A	N/A	Installed	No, Code Class 1

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0139 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

- 1) Disassembled the relief valve to perform the required work.
- 2) Removed existing disc insert Serial No N97449-31-0001 from the relief valve.
- 3) Installed replacement (modified) disc insert Serial No N97499-46-0124 in the relief valve.
- 4) Removed existing nozzle Serial No N97498-33-0039 from the relief valve.
- 5) Installed replacement (modified) nozzle Serial No N97498-33-0014 in the relief valve.
- 6) Installed nine (9) replacement studs for the relief valve inlet joint. See Note 2.
- 7) Reassembled the relief valve.
- 8) Tested the relief valve to verify set pressure of 1165 PSIG. Test results acceptable.
- 9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test. See Note 3

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) Energy Northwest performed VT-1 visual examination on nine (9) replacement studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
- 3) Energy Northwest performed VT-2 visual examination to confirm pressure boundary integrity of the valve body to bonnet joint.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: 10 Psig Test Temperature: 72° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for Main Steam Relief Valve (MSRV), Serial No N63790-03-0139, 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) documenting the modification (upgrade) work performed by Crosby for Main Steam Relief Valve (MSRV), Serial No Serial No N63790-00-0139 (N56000-01-0100), 3) See attached NV-1 Code Data Report for relief valve Serial No N56000-01-0100 (N63790-00-0139).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 5/8/07 Date 5/8/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/28/07 to 5/10/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 A, B, C, I, N, NS, 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 5/10/07

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES

Philip Smith

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9 5/8/07
131 Venture Boulevard, Spartanburg, SC 29306

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve

b: Name of manufacturer: Crosby Valve & Gage Co.

c: Identifying nos.

HB-65-BP-FN new s/n: N63790-03-0139 N/A steam 6 x 10 1976
(type) (mfr's S/N) (NB#) (service) (size) (yr. built)

d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)

6. ASME Code Section XI applicable for inservice inspection: 2001 2003 N/A
(edition) (addenda) (Code Case(s))

7. ASME Code Section XI used for repairs, replacements: 2001 2003 N/A
(edition) (addenda) (Code Case(s))

8. Construction Code used for repairs, replacements: 1971 N/A N/A
(edition) (addenda) (Code Case(s))

9. Design responsibilities: N/A

10. Opening pressure: 1165 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): See attachment 1.

12. Remarks: See attachment 1. (PAGE 1 OF 1) @ 4/28/07

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

4/28/07
Date

NWS Technologies, LLC
Repair Organization

Cesar V. Sierra
Authorized representative

Manager, QA
Title

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 23 APRIL 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/28/07
Date

Charles F. Toegel Jr.
Inspector's Signature

NB # 8462, A, N, I NC# 1073
Commissions (NB (incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0139

11. Description of work:

NWS Traveler # 02-149

The valve was disassembled. The nozzle and disc were removed and returned to site.

Parts replaced during the repair include:

Disc: New S/N N97499-46-0124

Nozzle: New S/N N97498-33-0014

Eductor Gasket: MC 56230461

Nine Inlet Studs: B7SLR

After reassembly, the valve set-pressure was certified using steam as the lift medium.

The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

4/28/07
Date

NWS Technologies, LLC
(repair organization)

[Signature]
(authorized representative)

Manager, QA
(title)

4/28/07
Date

[Signature]
Inspector's Signature

NB# 8462, A,N,I NC# 1073

Commissions (NB (incl endorsements), jurisdiction, & no.)

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MA

*Repair Shop
518707*

**Q.C.-292, REV.
SHEET 1 OF 2**

**REPAIR AND REPLACEMENT
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS**

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.) NV400020

2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND, WA

5. a. Identifying Nos. N63790-00-0139 -- -- -- -- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component --
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition

Addenda NO

Code Case --

9. Description of work N56000-01-0100 WAS MODIFIED TO N63790-00-0139
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC. XI, 1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-45-0128
BONNET	N89717	N93407-46-0057
SPINDLE ASSY	K55465	K62873-42-0056
SPR. WASHER	N89724	K62856-46-0205
SPR. WASHER	N89723	K62857-46-0205
SPRING ASSY	K55466	K62858-31-0004
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0158
DISC INSERT	N89715	N93185-52-0200
THR. BRG. ADAPT.	N89725	N93409-34-0010
ADJ. BOLT	N89726	N93410-36-0139
ADJ. BOLT BUTT. COMMERCIAL		N93411-33-0009
ADJ. BOLT ASSY COMMERCIAL		K63618-31-0002

E 2/23/74

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Lusa QA Eng Manager 24 Feb, 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2/25, 1994 Factory Mutual Systems
Signed W. P. G. Lusa Commissions 194155
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN No. 22097

Audip Supls
5/8/07

<u>WPPSS S/N</u>	<u>WPPSS Set</u>	<u>Bally S/N</u>	<u>Bally Set</u>
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130 /

Audip Supls
1/26/07

PLAN No. 2-2097



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS.

Repair Supls

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44C

5/8/07

DATA REPORT
Safety and Safety Relief Valves

- 1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
HB-65-BP- Name and Address
- Model No. FN Order No N-51726 Contract Date 1/27/75 National Board No. _____
General Electric Co., 175 Curtner Ave.,
- 2. Manufactured For San Jose, California 95125 Order No. 205-ADI48
Name and Address
- 3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I
Name and Address
- 4. Location of Plant Baileytown, Indiana
Spare
- 5. Valve Identification MPL#B22-F013 Serial No. N56000-01-0100 Drawing No. H-56000 Rev. C
Type Safety Relief Orifice Size R Pipe Size _____ Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch
- 6. Set Pressure (PSIG) 1130 _____ 575° F
Rated Temperature
- Stamped Capacity 850500#/Hr. Sat. 3 % Overpressure _____ Blowdown (PSIG) 5%
- Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.
Class I Edition 1971, Addenda Date Summer 1972, Case No. _____

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification including Type or Grade
a. Crossed Forging		
Body	<u>N90118-35-0031</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
Bonnet	<u>N89717-36-0086</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
b. Bar Stock and Forgings		
NOZZLE Disc Insert	<u>N89715-36-0107</u>	<u>ASTM A564-71 Type 630</u> <u>ASME SA564 Type 630</u>
Nozzle	<u>N89713-33-0051</u>	<u>ASTM A182-71 Type 316</u> <u>ASME SA182 Type 316</u>
Disc Holder K55484-39-0134	<u>N89714-35-0146</u> <u>N89724-36-0111</u>	<u>AMS 5662B</u> <u>ASTM A105-71</u> <u>ASME SA105</u>
Spring Washers K55466-36-0095	<u>N89723-38-0129</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Adjusting Bolt	<u>N89726-40-0133</u>	<u>ASTM A564 Type 630</u> <u>ASME SA564 Type 630</u>
Spindle K55465-35-0104	<u>N89720-38-0126</u>	
Spindle Ball	<u>N89721-0204</u>	<u>Stoody No. 6</u>
Thrust Bearing Adapter	<u>N89725-34-0104</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 07/04/2007
Sheet: 1 Of 2
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001A MS-RV-1A MS-RV-1A	WPPSS* Crosby Crosby	B22-G001A-P1 N63790-03-0047 N63790-03-0050	N/A N/A N/A	N/A N/A N/A	1983 1980 1981	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced existing relief valve MS-RV-1A The replacement work was performed as follows:
- 1) Removed twelve (12) existing standard (regular) nuts for the relief valve inlet joint.
 - 2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.
 - 3) Removed existing relief valve Serial No N63790-03-0047 (Previous/Original Serial No N63790-00-0047) with set pressure of 1175 Psig at rated temperature of 575°F.
 - 4) Performed VT-1 visual examination on twelve (12) new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
 - 5) Performed VT-1 visual examination on eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
 - 6) Installed replacement relief valve with Serial No N63790-03-0050 (Previous/Original Serial No N63790-00-0050) with set pressure of 1175 Psig at rated temperature of 575°F.
 - 7) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.
 - 8) Installed VT-1 visually examined eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint.
 - 9) Installed sixteen (16) new "Superbolt" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.
 - 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturers Data Reports to be attached): 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0050 (Previous/Original Serial No N63790-00-0050), 2) See attached NV-1 Code Data Report for previous/original relief valve Serial No N63790-00-0050, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 7/5/07 Date 7/5/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/8/07 to 7/16/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe P. Hair Commissions 9496N A, D, J, NS, C 9496W
Inspector's Signature National Board, State, and Endorsements
Date 7/16/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest **Date:** 07/04/2007
- Address:** Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 2 Of 2
- 2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
- Address:** Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
- (b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
- (c) **Type Code Symbol Stamp:** Not Applicable
- (d) **Certificate Of Authorization No.:** Not Applicable
- (e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
- (b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
- (c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001A	WPPSS*	B22-G001A-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1
MS-RV-1A	Crosby	N63790-03-0047	N/A	N/A	1980	Removed	Yes, Code Class 1
MS-RV-1A	Crosby	N63790-03-0050	N/A	N/A	1981	Installed	Yes, Code Class 1

7. Description Of Work Performed: Notes Continuation From Sheet 1 of 2

NOTES -

- 3) The existing ASME Code Stamped piping system in which the replacement valve Serial No N63790-03-0050 (Previous/Original Serial No N63790-00-0050) was installed is Main Steam (MS) piping system B22-G001A-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement relief valve Serial No N63790-03-0050 (Previous/Original Serial No N63790-00-0050) is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 6) The relief valve serial number in parenthesis is the old (previous/original) serial numbers. The relief valve serial number with out the parenthesis is the serial numbers of relief valve previously modified (upgraded) by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work on the relief valve was performed in accordance with NWS Technologies, LLC VR and NR programs.

Joe C. Hair 7/16/07 NB9496 NA, B, F, NS, C 9496W

PLAN No. 2-2098

Dudip Srip's
CORRECTED COPY

7/3/07

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29306

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve

b: Name of manufacturer: Crosby Valve & Gage Co.

c: Identifying nos.

<u>HB-65-BP-FN</u> (type)	new s/n: <u>N63790-03-0050</u> (mfr's S/N)	<u>N/A</u> (NB#)	<u>steam</u> (service)	<u>6 x 10</u> (size)	<u>1980</u> (yr.built)
d: Construction Code: <u>ASME Sec. III Div. 1</u> (name/section/division)	<u>1971</u> (edition)	<u>N/A</u> (addenda)	<u>N/A</u> (Code Cases(s))	<u>1</u> (Code Class)	

6. ASME Code Section XI applicable for inservice inspection: 2001 (edition) 2003 (addenda) N/A (Code Case(s))

7. ASME Code Section XI used for repairs, replacements: 2001 (edition) 2003 (addenda) N/A (Code Case(s))

8. Construction Code used for repairs, replacements: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities: N/A MS-RV-1A, S/N N63790-03-0050

10. Opening pressure: 1175 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): See attachment 1.

12. Remarks: See attachment 1. Corrected Item 5c Year Built.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

<u>5.5.07</u> Date	<u>NWS Technologies, LLC</u> Repair Organization	<u>T.P. Nedwostel</u> Authorized representative <i>T. P. NEDWOSTEL</i>	<u>for C.V. SIERRA</u> Title <u>Manager, QA</u>
-----------------------	---	--	---

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 5 MAY 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury property damage or loss of any kind arising from or connected with this inspection.

<u>5/5/07</u> Date	<u>Charles F. Toegel Jr.</u> Inspector's Signature	<u>NB # 8462, A, N, I NC# 1073</u> Commissions (NB (incl endorsements), jurisdiction, & no.)
-----------------------	---	---

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0050

The S/N for this valve was N63790-00-0050 The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

11. Description of work:

NWS Traveler # 03-168

The valve was disassembled. The nozzle and disc were removed and returned to site. NWS machined the Disc Ring per Crosby Instruction Procedure FS-5335 Rev. 1.

Inlet flange holes #1 and #4 were repaired using heli-coils.

Parts replaced during the repair include:

- Disc: New S/N N97499-46-0122
- Nozzle: New S/N N97498-33-0012
- Eductor Gasket: MC 56230461
- Two Inlet Studs: B7SLR

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity. A final steam seat tightness test was then done at 93% of set-pressure.

<u>5-5-07</u> Date	<u>NWS Technologies, LLC</u> (repair organization)	<u>T. P. NEDEROSTEK</u> <u>T. P. Nederostek</u> <u>for C.V. SIEGMA</u> (authorized representative)	<u>Manager, QA</u> (title)
<u>5/5/07</u> Date	<u>[Signature]</u> Inspector's Signature		<u>NB# 8462, A,N,I NC# 1073</u> Commissions (NB (incl endorsements), jurisdiction, & no.)



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

MS-RV-1A, S/N N63790-00-0050 *Dudip Suply* 7/3/07

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves

FOR INFORMATION ONLY

- Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address
Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A
General Electric Company, 175 Curtner Ave.,
- Manufactured For San Jose, CA 95125 Order No. 205-AJ986
Name and Address
- Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address
- Location of Plant Hanford Reservation, Richland, Washington 99352
- Valve Identification MPL #B22-F013 Serial No. N63790-00-0050 Drawing No. DS-A-63790 Rev. C
Type Safety Relief Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Inch Inch Inch Inch
Power Actuated
- Set Pressure (psig) 1175 575° F
Rated Temperature
- Stamped Capacity 884,314 @ 3 X Overpressure -- Blowdown (psig) 2% to 11%
Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve)
1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Casing		
Body	<u>N93183-35-0069</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
Bonnet	<u>N93407-35-0032</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
b. Body		
Body Disc Insert	<u>N93185-34-0082</u>	<u>ASME SA637 Gr. 718</u>
Nozzle	<u>N93184-33-0054</u>	<u>ASME SA182 Gr. F316</u>
Disc Holder *K55484-35-0097	<u>*N89714-34-0101</u>	<u>AMS 5662B</u>
Spring Washers K62858-35-0032	<u>K62856-35-0088</u> <u>K62857-35-0053</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
Adjusting Bolt	<u>N93410-33-0057</u>	<u>ASME SA193 Gr. B6</u>
Spindle Point K62873-35-0050	<u>*N89720-34-0066</u>	<u>ASTM A564-71 Type 630</u> <u>ASME SA564 Type 630</u>
c. Spring K62858-35-0032	<u>*N89722-0008</u>	<u>ASTM A304-66 Gr. 4161H</u>
d. Bolting		
Spindle Ball		
e. Ball K62873-35-0050	<u>N93213-0050</u>	<u>Stellite #6</u>
Thrust Bearing Adapter	<u>N93409-32-0052</u>	<u>ASME SA193 Gr. B6</u>
Bonnet Stud (BW5, I17)	<u>N93207-0597 thru 0608</u>	<u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u>
Bonnet Stud Nut (J87)	<u>N93210-0817 thru 0828</u>	<u>ASME SA194 Gr. 2H</u>
Inlet Stud (BW6)	<u>N93216-0599 thru 0610</u>	<u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u>
Inlet Stud Nut (BW8)	<u>N93218-0603 thru 0614</u>	<u>ASTM A194-71 Gr. 2H</u> <u>ASME SA194 Gr. 2H</u>

2X00380116

valve originally built against Crosby order no. 110000, assembly... modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.

N163790-00-0050

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 & 1711. Class 1 (Date) Date 11-5-80 Signed Crosby Valve & Gage Co. by R.G. Casanova (N Certificate Holder) Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company 43 Kendrick Street, Wrentham, Massachusetts 02093 Design specifications certified by 1 Boyd P. Brooks PE State California Reg. No. 13655 Stress report certified by 1 W. D. Greenlaw PE State Massachusetts Reg. No. 14784

1 Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 12/5, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FOR INFORMATION ONLY

Date 12/5 1980 Signed John Empson (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. Identification Of System:** Main Steam (MS) System
- 5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
- 6. Identification Of Components**

Date: 07/07/2007
Sheet: 1 Of 2
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001B MS-RV-1B MS-RV-1B	WPPSS* Crosby Crosby	B22-G001B-P1 N63790-03-0140 N63790-03-0139	N/A N/A N/A	N/A N/A N/A	1983 1994 1976	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced existing relief valve MS-RV-1B The replacement work was performed as follows:
- 1) Removed twelve (12) existing standard (regular) nuts for the relief valve inlet joint.
 - 2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.
 - 3) Removed existing relief valve Serial No N63790-03-0140 (Previous/Original Serial No N63790-01-0140) with set pressure of 1165 Psig at rated temperature of 575°F.
 - 4) Performed VT-1 visual examination on twelve (12) new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
 - 5) Performed VT-1 visual examination on eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
 - 6) Installed replacement relief valve with Serial No N63790-03-0139 (Previous/Original Serial No N63790-00-0139) with set pressure of 1165 Psig at rated temperature of 575°F.
 - 7) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.
 - 8) Installed VT-1 visually examined eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint.
 - 9) Installed sixteen (16) new "Superbolt" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.
 - 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0139 (Previous/Original Serial No N63790-00-0139), 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) for relief valve Serial No N63790-00-0139, 3) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0100, 4) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/7/07 Date 7/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/8/07 to 7/16/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/16/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest **Date:** 07/07/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 2 Of 2
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001B MS-RV-1B MS-RV-1B	WPPSS* Crosby Crosby	B22-G001B-P1 N63790-03-0140 N63790-03-0139	N/A N/A N/A	N/A N/A N/A	1983 1994 1976	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Notes Continuation From Sheet 1 of 2

NOTES-

- 3) The existing ASME Code Stamped piping system in which the replacement valve Serial No N63790-03-0139 (Previous/Original Serial No N63790-00-0139) was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement relief valve Serial No N63790-03-0139 (Previous/Original Serial No N63790-00-0139) is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 6) The relief valve serial number in parenthesis is the old (previous/original) serial numbers. The relief valve serial number with out the parenthesis is the serial numbers of relief valve previously modified (upgraded) by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work on the relief valve was performed in accordance with NWS Technologies, LLC VR and NR programs.

Joe C. Hair 7/16/07 9496 W, A, B, E, N, C 9496 W

PLAN No. 2-2099

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES

Quincy Lewis

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9 7/8/07
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968
5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
 b: Name of manufacturer: Crosby Valve & Gage Co.
 c: Identifying nos.
HB-65-BP-FN new s/n: N63790-03-0139 N/A steam 6 x 10 1976
 (type) (mfr's S/N) (NB#) (service) (size) (yr.built)
- d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1
 (name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 N/A
 (edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 N/A
 (edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1971 N/A N/A
 (edition) (addenda) (Code Case(s))
9. Design responsibilities: N/A MS-RV-1B, S/N N63790-03-0139.
10. Opening pressure: 1165 psig
 Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): See attachment 1.

12. Remarks: See attachment 1. (PAGE 1 OF 1) 4/28/07

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.
 National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

4/28/07 NWS Technologies, LLC *Cesar Sierra* Manager, QA
 Date Repair Organization Authorized representative Title

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 28 APRIL 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/28/07 *Charles F. Toegel Jr.* NB # 8462, A, N, I NC# 1073
 Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0139

11. Description of work:

NWS Traveler # 02-149

The valve was disassembled. The nozzle and disc were removed and returned to site.

Parts replaced during the repair include:

Disc: New S/N N97499-46-0124

Nozzle: New S/N N97498-33-0014

Eductor Gasket: MC 56230461

Nine Inlet Studs: B7SLR

After reassembly, the valve set-pressure was certified using steam as the lift medium.

The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

4/28/07 NWS Technologies, LLC *[Signature]* Manager, QA
Date (repair organization) (authorized representative) (title)

4/28/07 *[Signature]* NB# 8462, A,N,I NC# 1073
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

Repair Shop

Q.C.-292, REV
 SHEET 1 OF 2

7/6/07.

**REPAIR AND REPLACEMENT
 TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS**

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
 (Name and Address)
 (Repair organization's P.O. No., Job No., etc.) NV400020

2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968
 (Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND, WA

5. a. Identifying Nos. N63790-00-0139 -MS-RV-1B ----- 1973
 (Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
 b. Identification of component repaired or replacement component --
 c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic Pneumatic Design Pressure Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
 Addenda NO Code Case --

9. Description of work N56000-01-0100 WAS MODIFIED TO N63790-00-0139
 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI, 1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: **THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:**

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-45-0128
BONNET	N89717	N93407-46-0057
SPINDLE ASSY	K55465	K62873-42-0056
SPR. WASHER	N89724	K62856-46-0205
SPR. WASHER	N89723	K62857-46-0205
SPRING ASSY	K55466	K62858-31-0004
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0158
DISC INSERT	N89715	N93185-52-0200
THR. BRG. ADAPT.	N89725	N93409-34-0010
ADJ. BOLT	N89726	N93410-36-0139
ADJ. BOLT BUTT. COMMERCIAL		N93411-33-0009
ADJ. BOLT ASSY COMMERCIAL		K63618-31-0002

E 2/23/74

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. _____ conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Loria QA Eng Manager 24 Feb, 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Factory Mutual Systems

Date 2/25, 1994

Signed W. P. Giller
(Inspector)

Commissions 194155
(Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-2099.

Quair Sup's
7/6/07.

<u>WPPSS S/N</u>	<u>WPPSS Set</u>	<u>Bally S/N</u>	<u>Bally Set</u>
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1185	N56000-01-0100	1130

MS-RV-1B, S/N N63790-00-0139

PLAN No. 2-2099.



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Philip Engle

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44C
7/6/07.

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
HB-65-BP- Name and Address

Model No. FN Order No. N-51726 Contract Date 1/27/75 National Board No. _____
General Electric Co., 175 Curtner Ave.,

2. Manufactured For San Jose, California 95125 Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I
Name and Address

4. Location of Plant Baileytown, Indiana MS-RV-1B
Spare

5. Valve Identification MPL#B22-F013 Serial No. N56000-01-0100 Drawing No. H-56000 Rev. C

Type Safety Relief Orifice Size R Pipe Size _____ Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch

6. Set Pressure (PSIG) 1130 575° F
Rated Temperature

Stamped Capacity 850500#/Hr. Sat. 3 % Overpressure Blowdown (PSIG) 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971, Addenda Date Summer 1972, Case No. _____

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. CROSSBY Forging		
Body	<u>N90118-35-0031</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
Bonnet	<u>N89717-36-0086</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
b. Bar Stock and Forgings		
STOODY Disc Insert	<u>N89715-36-0107</u>	<u>ASTM A564-71 Type 630</u> <u>ASME SA564 Type 630</u>
Nozzle	<u>N89713-33-0051</u>	<u>ASTM A182-71 Type 316</u> <u>ASME SA182 Type 316</u>
Disc Holder K55484-39-0134	<u>N89714-35-0146</u>	<u>AMS 5662B</u>
Spring Washers K55466-36-0095	<u>N89724-36-0111</u> <u>N89723-38-0129</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
Adjusting Bolt	<u>N89726-40-0133</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Spindle K55465-35-0104	<u>N89720-38-0126</u>	<u>ASTM A564 Type 630</u> <u>ASME SA564 Type 630</u>
Spindle Ball	<u>N89721-0204</u>	<u>Stoody No. 6</u>
Thrust Bearing Adapter	<u>N89725-34-0104</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	<u>N89722-0069</u>	<u>ASTM A304-66</u>
d. Bolting	_____	_____
e. Other Parts such as Pilot Components	_____	_____
Inlet Stud	<u>N89727-1215 thru 1226</u>	<u>ASME SA193 Gr. B7</u>
Inlet Nut	<u>N89728-1209 thru 1220</u>	<u>ASME SA194 Gr. 2H</u>
Bonnet Stud	<u>N89718-1234 thru 1245</u>	<u>ASME SA193 Gr. B7</u>
Bonnet Nut	<u>N89719-1228 thru 1239</u>	<u>ASME SA194 Gr. 2H</u>

We certify that the statements made in this report are correct.

Date 6-22 19 76 Signed Crosby Valve & Gage Co. B. [Signature]
 Manufacturer QA Manager

Certificate of Authorization No. 926 expires October 28, 1977

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on _____ 19____ and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 6/22/76
 [Signature] _____
 (Inspector) _____

Commissions Mass 1209
 National Board, State, Province and No. _____

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Division.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Date: 07/07/2007

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 2

2. **Plant:** Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Main Steam (MS) System

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001B MS-RV-2B MS-RV-2B	WPPSS* Crosby Crosby	B22-G001B-P1 N63790-03-0049 N63790-03-0134	N/A N/A N/A	N/A N/A N/A	1983 1980 1973	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-2B The replacement work was performed as follows:

- 1) Removed twelve (12) existing standard (regular) nuts for the relief valve inlet joint.
- 2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.
- 3) Removed existing relief valve Serial No N63790-03-0049 (Previous/Original Serial No N63790-00-0049) with set pressure of 1175 Psig at rated temperature of 575°F.
- 4) Performed VT-1 visual examination on twelve (12) new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
- 5) Performed VT-1 visual examination on eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
- 6) Installed replacement relief valve with Serial No N63790-03-0134 (Previous/Original Serial No N63790-00-0134) with set pressure of 1175 Psig at rated temperature of 575°F.
- 7) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.
- 8) Installed VT-1 visually examined eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint.
- 9) Installed sixteen (16) new "Superbolt" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.
- 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0134 (Previous/Original Serial No N63790-00-0134), 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) for relief valve Serial No N63790-00-0134, 3) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0037, 4) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/7/07 Date 7/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/9/07 to 7/16/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS C 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/16/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Date: 07/07/2007

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 2 Of 2

2. **Plant:** Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Main Steam (MS) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Case(s):** None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001B MS-RV-2B MS-RV-2B	WPPSS* Crosby Crosby	B22-G001B-P1 N63790-03-0049 N63790-03-0134	N/A N/A N/A	N/A N/A N/A	1983 1980 1973	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Notes Continuation From Sheet 1 of 2

NOTES -

3) The existing ASME Code Stamped piping system in which the replacement valve Serial No N63790-03-0134 (Previous/Original Serial No N63790-00-0134) was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

4) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

5) The replacement relief valve Serial No N63790-03-0134 (Previous/Original Serial No N63790-00-0134) is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

6) The relief valve serial number in parenthesis is the old (previous/original) serial numbers. The relief valve serial number with out the parenthesis is the serial numbers of relief valve previously modified (upgraded) by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work on the relief valve was performed in accordance with NWS Technologies, LLC VR and NR programs.

Joe C. Hair 7/16/07 9496 N, A, B, I, NS, C 9496W

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES

Dulip Singh

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9/16/07
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968
5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.
HB-65-BP-FN new s/n: N63790-03-0134 N/A steam 6 x 10 1971
(type) (mfr's S/N) (NB#) (service) (size) (yr. built)
- d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1971 N/A N/A
(edition) (addenda) (Code Case(s))
9. Design responsibilities: N/A MS-RV-2B, SIN N63790-03-0134
10. Opening pressure: 1175 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): See attachment 1.
12. Remarks: See attachment 1. (PAGE 1 OF 1) 4/28/07

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

4/28/07 NWS Technologies, LLC *Cesar V. Sierra* Manager, QA
Date Repair Organization Authorized representative Title

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 25 APRIL 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/28/07 *Charles F. Toegel Jr.* NB # 8462, A, N, I NC# 1073
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0134

The S/N for this valve was N63790-00-0134 The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

11. Description of work:

NWS Traveler # 02-146

The valve was disassembled. The nozzle and disc were removed and returned to site. NWS machined the Disc Ring per Crosby Instruction Procedure FS-5335 Rev. 1.

Parts replaced during the repair include:

Disc: New S/N N97499-46-0127

Nozzle: New S/N N97498-33-0016

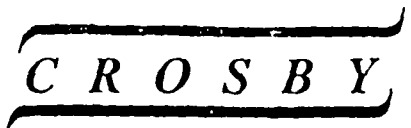
Eductor Gasket: MC 56230461

After reassembly, the valve set-pressure was certified using steam as the lift medium.

The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

<u>4/23/07</u> Date	<u>NWS Technologies, LLC</u> (repair organization)	<u><i>[Signature]</i></u> (authorized representative)	<u>Manager, QA</u> (title)
<u>4/23/07</u> Date	<u><i>[Signature]</i></u> Inspector's Signature	<u>NB# 8462, A,N,I NC# 1073</u> Commissions (NB (incl endorsements), jurisdiction, & no.)	



CROSBY VALVE & GAGE COMPANY

WRENTHAM, MA

David Sully

Q.C.-292, REV. A
SHEET 1 OF 2

7/6/07.

**REPAIR AND REPLACEMENT
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS**

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.) NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND, WA

5. a. Identifying Nos. N63790-00-0134 ✓ MS-RV-2B ----- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component ---
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO Code Case ---

9. Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 ✓
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC. XI 1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: **THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:**

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-43-0126
BONNET	N89717	N93407-41-0052
SPINDLE ASSY	K55465	K62873-46-0060
SPR. WASHER	N89724	K62856-41-0200
SPR. WASHER	N89723	K62857-41-0200
SPRING ASSY	K55466	K62858-31-0006
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0156
DISC INSERT	N89715	N93185-52-0202
SPRING	NX2689	NX2689-0134
THR. BRG. ADAPT.	N89725	N93409-34-0008
ADJ. BOLT	N89726	N93410-36-0132
ADJ. BOLT BUTT. COMMERCIAL		N93411-33-0008
ADJ. BOLT ASSY COMMERCIAL		K63618-31-0001
INLET STUD	N89727	N93216/NAD QTY 10

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Rice QA Eng Manager 24 Feb, 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 24, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2/24, 1994 Factory Mutual Systems
Signed M. W. P. C. J. Commissions 12345
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-2100
Dudip Sup's
7/6/67.

<u>WPPSS S/N</u>	<u>WPPSS Set</u>	<u>Bailly S/N</u>	<u>Bailly Set</u>
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

MS-RV-2B, 81N N 6 3790-00-0134.



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Chadip Sings
a.c. 444

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

7/6/07.

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
Name and Address

Model No. HB-65-BP-FN Order No. N-105286 Contract Date 6/28/71
General Electric Company

2. Manufactured For San Jose, California Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I,
Name and Address Baileytown, Indiana

4. Location of Plant Baileytown, Indiana MS-RV-2B

5. Valve Identification MPL #B-22-F013 Serial No. N56000-01-0037 Drawing No. H-56000 Rev. C

Type Safety Relief Orifice Size R Pipe Size - Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch

6. Set Pressure (PSIG) 1175 575° F
Rated Temperature

Stamped Capacity 883950 Lbs. Hr. : 3 % Overpressure - Blowdown (PSIG) 5%
Sat. Steam

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class I Edition 1971 Addenda Date Summer 1972

~~XXXX~~

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. XXXXXX Forgings		
Body	<u>N90118-32-0008</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
Bonnet XXXXXX	<u>N89717-32-0021</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
b. Bar Stock and Forgings		
XXXXXX Disc Insert	<u>N89715-31-0028</u>	<u>ASTM A-461-65 Type 630</u>
Nozzle	<u>N89713-32-0039</u>	<u>ASTM A-182-71 F316</u> <u>ASME SA-182 F316</u>
Disc Holder	<u>N89714-32-0037</u>	<u>AMS 5662 B</u>
Spring Washers	Top <u>N89724-32-0037</u> Bottom <u>N89723-31-0008</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
Adjusting XXXX Bolt	<u>N89726-33-0046</u>	<u>ASTM A-193-71 Gr. B6</u> <u>ASME SA-193 Gr. 36</u>
Spindle Point	<u>N89720-32-0046</u>	<u>ASTM A-564-72 Type 630</u>



3.3.75



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Main Steam (MS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/07/2007
 Sheet: 1 Of 2
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001B	WPPSS*	B22-G001B-P1	N/A	N/A	1983	See Item 7 Below Removed Installed	Yes, Code Class 1
MS-RV-3B	Crosby	N63790-03-0053	N/A	N/A	1980		Yes, Code Class 1
MS-RV-3B	Crosby	N63790-03-0138	N/A	N/A	1973		Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-3B The replacement work was performed as follows:

- 1) Removed twelve (12) existing standard (regular) nuts for the relief valve inlet joint.
- 2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.
- 3) Removed existing relief valve Serial No N63790-03-0053 (Previous/Original Serial No N63790-00-0053) with set pressure of 1185 Psig at rated temperature of 575°F.
- 4) Performed VT-1 visual examination on twelve (12) new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
- 5) Performed VT-1 visual examination on eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
- 6) Installed replacement relief valve with Serial No N63790-03-0138 (Previous/Original Serial No N63790-00-0138) with set pressure of 1185 Psig at rated temperature of 575°F.
- 7) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.
- 8) Installed VT-1 visually examined eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint.
- 9) Installed sixteen (16) new "Superbolt" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.
- 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0138 (Previous/Original Serial No N63790-00-0138), 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) for relief valve Serial No N63790-00-0138, 3) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0038, 4) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/7/07 Date 7/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/9/07 to 7/16/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, F, NS, C 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/16/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 07/07/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 2 Of 2
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001B MS-RV-3B MS-RV-3B	WPPSS* Crosby Crosby	B22-G001B-P1 N63790-03-0050 N63790-03-0138	N/A N/A N/A	N/A N/A N/A	1983 1980 1973	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Notes Continuation From Sheet 1 of 2

NOTES -

- 3) The existing ASME Code Stamped piping system in which the replacement valve Serial No N63790-03-0138 (Previous/Original Serial No N63790-00-0138) was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement relief valve Serial No N63790-03-0138 (Previous/Original Serial No N63790-00-0138) is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 6) The relief valve serial number in parenthesis is the old (previous/original) serial numbers. The relief valve serial number with out the parenthesis is the serial numbers of relief valve previously modified (upgraded) by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work on the relief valve was performed in accordance with NWS Technologies, LLC VR and NR programs.

Joe P. Hair 7/16/07 9496N, A, B, F, NS, C 9496W

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES

Audrey Smith

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9 7/7/07
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968
5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
 b: Name of manufacturer: Crosby Valve & Gage Co.
 c: Identifying nos.
HB-65-BP-FN new s/n: N63790-03-0138 N/A steam 6 x 10 1971
 (type) (mf's S/N) (NB#) (service) (size) (yr.built)
- d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1
 (name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 N/A
 (edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 N/A
 (edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1971 N/A N/A
 (edition) (addenda) (Code Case(s))
9. Design responsibilities: N/A MS-RV-3B, S/N N63790-03-0138
10. Opening pressure: 1185 psig
 Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): See attachment 1.
12. Remarks: See attachment 1. (PAGE 1 OF 1) @ 4/28/07

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.

4/28/07 NWS Technologies, LLC *Cesar Sierra* Manager, QA
Date Repair Organization Authorized representative Title

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 28 APRIL 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/28/07 *Charles F. Toegel Jr.* NB # 8462, A, N, I NC# 1073
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0138

The S/N for this valve was N63790-00-0138 The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

11. Description of work:

NWS Traveler # 02-148

The valve was disassembled. The nozzle and disc were removed and returned to site. Disc Ring removed from Valve S/N N63790-00-0046 and installed in this valve. This disc ring had been previously machined per Crosby Procedure FS-5335 Rev. 1.

Parts replaced during the repair include:

Disc: New S/N N97499-46-0121

Nozzle: New S/N N97498-33-0011

Disc Ring: N63790-00-0046

Eductor Gasket: MC 56230461

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity. A final steam seat tightness test was then done at 93% of set-pressure.

4/28/07 NWS Technologies, LLC [Signature] Manager, QA
Date (repair organization) (authorized representative) (title)

4/25/07 [Signature] NB# 8462, A,N,I NC# 1073
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

Q.C.-292, REV.A
 SHEET 1 OF 2

Dudip Gupta
~~3/10/94~~ 7/7/07

REPAIR AND REPLACEMENT
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
 (Name and Address)
 (Repair organization's P.O. No., Job No., etc.) NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968
 (Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND, WA

5. a. Identifying Nos. N63790-00-0138 -- MS-RV-3B ----- 1973
 (Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
 b. Identification of component repaired or replacement component --
 c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
 Addenda NO Code Case --

9. Description of work N56000-01-0038 WAS MODIFIED TO N63790-00-0138
 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: **THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:**

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-44-0127
BONNET	N89717	N93407-45-0056
SPINDLE ASSY	K55465	K62873-43-0057
SPR.WASHER	N89724	K62856-45-0204
SPR.WASHER	N89723	K62857-45-0204
SPRING ASSY	K55466	K62858-31-0002
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0154
DISC INSERT	N89715	N93185-52-0201
THR.BRG.ADAPT.	N89725	N93409-34-0011
ADJ.BOLT	N89726	N93410-31-0004
ADJ.BOLT BUTT. COMMERCIAL		N93411-33-0011
ADJ.BOLT ASSY COMMERCIAL		K63618-31-0004

2/23/07

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Lina QA Eng Manager 24 Feb, 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employe shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Factory Mutual Systems

Date 2/25, 1994
Signed Will P. Gills Commissions MA 1455
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-2101.

<u>WPPSS S/N</u>	<u>WPPSS Set</u>	<u>Bally S/N</u>	<u>Bally Set</u>
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

MS-RV-3B, S/N N63790-00-0138

Quip Swip
7/7/07



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Quadrup Sample
3/10/74

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44A 7/7/07

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
Name and Address

Model No. HB-65-BP-FN Order No. N-105286 Contract Date 6/28/71
General Electric Company

2. Manufactured For San Jose, California Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I,
Name and Address Baileytown, Indiana

4. Location of Plant Baileytown, Indiana, MS-RV-3B

5. Valve Identification MPL #B-22-F013 Serial No. N56000-01-0038 Drawing No. H-56000 Rev. C

Type Safety Relief Orifice Size R Pipe Size - Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch

6. Set Pressure (PSIG) 1175 575° F
Rated Temperature

Stamped Capacity 883950 Lbs. Hr. 3 % Overpressure - Blowdown 5%
Sat. Steam ~~XXXX~~

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971 Addenda Date Summer 1972
I or II

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. XXXXXX Forgings		
Body	<u>N90118-32-0009</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
Bonnet XXXXXX	<u>N89717-32-0022</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
b. Bar Stock and Forgings		
XXXXXX Disc Insert	<u>N89715-32-0018</u>	<u>ASTM A-461-65 Type 630</u> <u>ASTM A-182-71 F316</u> <u>ASME SA-182 F316</u>
Nozzle	<u>N89713-32-0028</u>	<u>ASME SA-182 F316</u>
Disc Holder	<u>N89714-32-0038</u>	<u>AMS 5662 B</u>
Spring Washers	Top <u>N89724-32-0038</u> Bottom <u>N89723-31-0023</u>	<u>ASTM A-105-71 Gr. II</u> <u>ASME SA-105 Gr. II</u>
Adjusting XXXXXX Bolt	<u>N89726-32-0015</u>	<u>ASTM A-193-71 Gr. B6</u> <u>ASME SA-193 Gr. B6</u>
Spindle Point	<u>N89720-32-0044</u>	<u>ASTM A-564-72 Type 630</u>



3-3-75



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. Identification Of System:** Main Steam (MS) System
- 5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
- 6. Identification Of Components**

Date: 07/07/2007
Sheet: 1 Of 2
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001A	WPPSS*	B22-G001A-P1	N/A	N/A	1983	See Item 7 Below Removed Installed	Yes, Code Class 1
MS-RV-4A	Crosby	N63790-03-0059	N/A	N/A	1980		Yes, Code Class 1
MS-RV-4A	Crosby	N63790-03-0135	N/A	N/A	1976		Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced existing relief valve MS-RV-4A The replacement work was performed as follows:
- 1) Removed twelve (12) existing standard (regular) nuts for the relief valve inlet joint.
 - 2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.
 - 3) Removed existing relief valve Serial No N63790-03-0059 (Previous/Original Serial No N63790-00-0059) with set pressure of 1205 Psig at rated temperature of 575^oF.
 - 4) Performed VT-1 visual examination on twelve (12) new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
 - 5) Performed VT-1 visual examination on eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
 - 6) Installed replacement relief valve with Serial No N63790-03-0135 (Previous/Original Serial No N63790-00-0135) with set pressure of 1205 Psig at rated temperature of 575^o F.
 - 7) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.
 - 8) Installed VT-1 visually examined eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint.
 - 9) Installed sixteen (16) new "Superbolt" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.
 - 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0135 (Previous/Original Serial No N63790-00-0135), 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) for relief valve Serial No N63790-00-0135, 3) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0099, 4) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/7/07 Date 7/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/8/07 to 7/16/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496N, A, I, NSC 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/16/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Main Steam (MS) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Case(s):** None

6. **Identification Of Components**

Date: 07/07/2007

Sheet: 2 Of 2

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001A MS-RV-4A MS-RV-4A	WPPSS* Crosby Crosby	B22-G001A-P1 N63790-03-0059 N63790-03-0135	N/A N/A N/A	N/A N/A N/A	1983 1980 1976	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Notes Continuation From Sheet 1 of 2

NOTES-

3) The existing ASME Code Stamped piping system in which the replacement valve Serial No N63790-03-0135 (Previous/Original Serial No N63790-00-0135) was installed is Main Steam (MS) piping system B22-G001A-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

4) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

5) The replacement relief valve Serial No N63790-03-0135 (Previous/Original Serial No N63790-00-0135) is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

6) The relief valve serial number in parenthesis is the old (previous/original) serial numbers. The relief valve serial number with out the parenthesis is the serial numbers of relief valve previously modified (upgraded) by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work on the relief valve was performed in accordance with NWS Technologies, LLC VR and NR programs.

Joe C. Hair 7/16/07 9496 N, A, B, F, W, C 9496 W

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES *Quais Suib*

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9 7/1/07
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968
5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.
HB-65-BP-FN new s/n: N63790-03-0135 N/A steam 6 x 10 1976
(type) (mfr's S/N) (NB#) (service) (size) (yr. built)
- d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 N/A
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1971 N/A N/A
(edition) (addenda) (Code Case(s))
9. Design responsibilities: N/A MS-RV-4A, SIN N63790-03-0135
10. Opening pressure: 1205 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): See attachment 1.
12. Remarks: See attachment 1. (PAGE 1 OF 1) @ 4/28/07

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.
National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2009.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2009.
4/28/07 NWS Technologies, LLC *[Signature]* Manager, QA
Date Repair Organization Authorized representative Title

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 28 APRIL 2007 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.
By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/28/07 *[Signature]* NB # 8462, A, N, I NC# 1073
Date Inspector's Signature Commissions (NB (Incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 9
131 Venture Boulevard, Spartanburg, SC 29301
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0135

The S/N for this valve was N63790-00-0135 The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

11. Description of work:

NWS Traveler # 02-147

The valve was disassembled. The nozzle and disc were removed and returned to site. Disc Ring and Bellows removed from Valve S/N N63790-00-0062 and installed in this valve. NWS machined the Disc Ring per Crosby Instruction Procedure FS-5335 Rev. 1.

Inlet flange hole #8 were repaired using heli-coils.

Parts replaced during the repair include:

Disc: New S/N N97499-46-0123

Nozzle: New S/N N97498-33-0013

Disc Ring: N63790-00-0062

Bellows Assembly: K55483-35-0103

Eductor Gasket: MC 56230461

Six Inlet Studs B7SLR

After reassembly, the valve set-pressure was certified using steam as the lift medium.

The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

4/23/07 NWS Technologies, LLC *[Signature]* Manager, QA
Date (repair organization) (authorized representative) (title)

4/25/07 *[Signature]* NB# 8462, A,N,I NC# 1073
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

Q.C.-292, REV.A
SHEET 1 OF 2

Rudip Saif's
~~3/10/74~~ 7/7/07

REPAIR AND REPLACEMENT
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.) NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND, WA

5. a. Identifying Nos. N63790-00-0135 - MS-RV-4A ----- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component --
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO Code Case --

9. Description of work N56000-01-0099 WAS MODIFIED TO N63790-00-0135
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-46-0129
BONNET	N89717	N93407-42-0053
SPINDLE ASSY	K55465	K62873-45-0059
SPR.WASHER	N89724	K62856-42-0201
SPR.WASHER	N89723	K62857-42-0201
SPRING ASSY	K55466	K62858-31-0003
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0155
DISC INSERT	N89715	N93185-52-0199
SPRING	NX2689	N89722-0072
THR.BRG.ADAPT.	N89725	N93409-32-0006
ADJ.BOLT	N89726	N93410-32-0005
ADJ.BOLT BUTT. COMMERCIAL		N93411-33-0012
ADJ.BOLT ASSY COMMERCIAL		K63618-31-0005

R. Saif

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. _____ conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Rice QA Eng Manager 24 Feb 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Factory Mutual Systems

Date 2/25, 1994

Signed Paul H. Glick
(Inspector)

Commissions MA 1455
(Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-2102.

<u>WPPSS S/N</u>	<u>WPPSS Set</u>	<u>Bailly S/N</u>	<u>Bailly Set</u>
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

MS-RV-4A, S/N N63790-00-0135

Audip Suph
7/2/07

Rudip Sux⁵

7/7/07 3/10/74



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44C

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
HB-65-BP- Name and Address

Model No. FN Order No. N-51726 Contract Date 1/27/75 National Board No. _____
General Electric Co., 175 Curtner Ave.,

2. Manufactured For San Jose, California 95125 Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I
Name and Address

4. Location of Plant Baileytown, Indiana MS-RV-4A.
Spare

5. Valve Identification MPL#B22-F013 Serial No. N56000-01-0099 Drawing No. H-56000 Rev. C

Type Safety Relief Orifice Size R Pipe Size _____ Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch

6. Set Pressure (PSIG) 1130 _____ 575° _____ F
Rated Temperature

Stamped Capacity 850500#/Hr. Sat. 3 % Overpressure _____ Blowdown (PSIG) 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971, Addenda Date Summer 1972, Case No. _____

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Casting Forging		
Body	<u>N90118-35-0032</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
Bonnet	<u>N89717-36-0083</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
b. Bar Stock and Forgings		
Substrate Disc Insert	<u>N89715-36-0106</u>	<u>ASTM A564-71 Type 630</u> <u>ASME SA564 Type 630</u>
Nozzle	<u>N89713-36-0106</u>	<u>ASTM A182-71 Type 316</u> <u>ASME SA182 Type 316</u>
Disc Holder K55484-39-0135	<u>N89714-35-0173</u>	<u>AMS 5662B</u>
Spring Washers K55466-36-0093	<u>N89724-36-0122</u> <u>N89723-38-0131</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
Adjusting Bolt	<u>N89726-40-0119</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Spindle K55465-35-0106	<u>N89720-38-0129</u>	<u>ASTM A564 Type 630</u> <u>ASME SA564 Type 630</u>
Spindle Ball	<u>N89721-0206</u>	<u>Stoody No. 6</u>
Thrust Bearing Adapter	<u>N89725-34-0116</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	<u>N89722-0072</u>	<u>ASTM A304-66</u>
d. Bolting	_____	_____
e. Other Parts such as Pilot Components	_____	_____
Inlet Stud	<u>N89727-1203 thru 1214</u>	<u>ASME SA193 Gr. B7</u>
Inlet Nut	<u>N89728-1197 thru 1208</u>	<u>ASME SA194 Gr. 2H</u>
Bonnet Stud	<u>N89718-1222 thru 1233</u>	<u>ASME SA193 Gr. B7</u>
Bonnet Nut	<u>N89719-1216 thru 1227</u>	<u>ASME SA194 Gr. 2H</u>

We certify that the statements made in this report are correct.

Date 6-22 1976 Signed Crosby Valve & Gage Co. By *Ch. Herman*
 Manufacturer QA Manager

Certificate of Authorization No. 926 expires October 28, 1977

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on _____ 19____ and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 6/22/76 19____
RB Commissions *MA 1209*
 Inspector National Board, State, Province and No.

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Division.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 07/07/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 2
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001B MS-RV-4B MS-RV-4B	WPPSS* Crosby Crosby	B22-G001B-P1 N63790-03-0137 N63790-03-0126	N/A N/A N/A	N/A N/A N/A	1983 1973 1981	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced existing relief valve MS-RV-4B The replacement work was performed as follows:
- 1) Removed twelve (12) existing standard (regular) nuts for the relief valve inlet joint.
 - 2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.
 - 3) Removed existing relief valve Serial No N63790-03-0137 (Previous/Original Serial No N63790-00-0137) with set pressure of 1195 Psig at rated temperature of 575°F.
 - 4) Performed VT-1 visual examination on twelve (12) new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
 - 5) Performed VT-1 visual examination on eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
 - 6) Installed replacement relief valve with Serial No N63790-03-0126 (Previous/Original Serial No N63790-00-0126) with set pressure of 1195 Psig at rated temperature of 575°F.
 - 7) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.
 - 8) Installed VT-1 visually examined eight (8) new "Jackbolts" associated with new "Superbolt" nuts for the relief valve inlet joint.
 - 9) Installed sixteen (16) new "Superbolt" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.
 - 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0126 (Previous/Original Serial No N63790-00-0126), 2) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N63790-00-0126, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/7/07 Date 7/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/14/07 to 7/16/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, I, B, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements

Date 7/16/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 07/07/2007
Sheet: 2 Of 2
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B22-G001B MS-RV-4B MS-RV-4B	WPPSS* Crosby Crosby	B22-G001B-P1 N63790-03-0137 N63790-03-0126	N/A N/A N/A	N/A N/A N/A	1983 1973 1981	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Notes Continuation From Sheet 1 of 2

NOTES -

- 3) The existing ASME Code Stamped piping system in which the replacement valve Serial No N63790-03-0126 (Previous/Original Serial No N63790-00-0126) was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
- 5) The replacement relief valve Serial No N63790-03-0126 (Previous/Original Serial No N63790-00-0126) is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 6) The relief valve serial number in parenthesis is the old (previous/original) serial numbers. The relief valve serial number with out the parenthesis is the serial numbers of relief valve previously modified (upgraded) by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work on the relief valve was performed in accordance with NWS Technologies, LLC VR and NR programs.

Joe C. Hair 7/16/07 9496 N.A.B.I, NS,C 9496W

PLAN No. 2-2103

FORM NVR-1 REPORT OF REPAIR REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES

Delia Rupp

1. Work performed by: **NWS Technologies, LLC** Purchase Order # 0000313236 7/7/07
131 Venture Boulevard, Spartanburg, SC 29306

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
 b: Name of manufacturer: Crosby Valve & Gage Co.
 c: Identifying nos.

<u>HB-65-BP-FN</u> (type)	<u>new s/n: N63790-03-0126</u> (mfr's S/N)	<u>N/A</u> (NB#)	<u>steam</u> (service)	<u>6 x 10</u> (size)	<u>1981</u> (yr. built)
d: Construction Code: <u>ASME Sec. III Div. 1</u> (name/section/division)	<u>1971</u> (edition)	<u>N/A</u> (addenda)	<u>N/A</u> (Code Cases(s))	<u>1</u> (Code Class)	

6. ASME Code Section XI applicable for inservice inspection: 1989 N/A N/A
 (edition) (addenda) (Code Case(s))

7. ASME Code Section XI used for repairs, replacements: 1989 N/A N/A
 (edition) (addenda) (Code Case(s))

8. Construction Code used for repairs, replacements: 1971 N/A N/A
 (edition) (addenda) (Code Case(s))

9. Design responsibilities: N/A MS-RV-4B, S/N N63790-03-0126

10. Opening pressure: 1195 psig
 Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): See attachment 1.

12. Remarks: See attachment 1.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2006.

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2006.

1/17/05 NWS Technologies, LLC *Cesar V. Sierra* Manager, QA
 Date Repair Organization Authorized representative Title

CERTIFICATE OF INSPECTION

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 17 JAN 2005 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

1/17/05 *Charles F. Toegel Jr.* NB # 8462, A, N, I NC# 1073
 Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 0000313236
131 Venture Boulevard, Spartanburg, SC 29301
2. Work performed for: Energy Northwest - Columbia Generating Station
- 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia
Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0126

11. Description of work:

NWS Traveler # 03-172

The valve was disassembled. The nozzle and disc were replaced (CEAR 05-1). The nozzle ring pin/set screw was replaced (CEAR 05-2).

New disc: N97499-34-0032 was installed.

Nozzle: N97498-52-0165 was installed.

Both disc and nozzle were polished by NWS prior to installation.

Other parts replaced during the repair include:

Disc Holder Spiral Pins (2): MC 54407794

Eductor Gasket: MC 56230461

Inlet Stud(s): n/a

Ring Pin Gasket(s) 2: MC 56221543

Disc Pin: MC 54400402

Nozzle ring pin MC 25520005

After reassembly, the valve set-pressure was certified using steam as the lift medium.

Due to leakage after certification testing the valve was jacked and lapped.

A final steam seat tightness test was then done at 93% of set-pressure.

<u>1/17/05</u> Date	<u>NWS Technologies, LLC</u> (repair organization)	<u><i>Cesar Leung</i></u> (authorized representative)	<u>Manager, QA</u> (title)
<u>1/17/05</u> Date	<u><i>Charles F. Sturge</i></u> Inspector's Signature	<u>NB# 8462, A,N,I NC# 1073</u> Commissions (NB (incl endorsements), jurisdiction, & no.)	



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

MS-RV-4B SIN N 63790-00-0126

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-440

Richard Sump
7/7/07

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address
- Model No. HB-65-BP-FN Order No. N94281 Contract Date 4/24/79 National Board No. N/A
General Electric Company, 175 Curtner Ave.,
2. Manufactured For San Jose, CA 95125 Order No. 205-A1986
Name and Address
3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address
4. Location of Plant Hanford Reservation, Richland, Washington 99352
5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0126 Drawing No. DS-A-63790 Rev. C
- Type Safety Relief Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Inch Inch Inch Inch
Power Actuated
6. Set Pressure (psig) 1195 575° F
Rated Temperature
- Stamped Capacity 899,185 @ 3 Overpressure -- Blowdown (psig) 2% to 11%
- Hydrostatic Test (psig) Inlet 2370 Outlet 1100 psig (Assembled Valve)
975 psig (Body Only)

(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Pressure Retaining Pieces		
Bar Stock & Forgings		
Body	<u>N93183-36-0089</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
Bonnet	<u>N93407-36-0095</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
b. Pressure Retaining Pieces		
Supports Disc Insert	<u>N93185-37-0159</u>	<u>ASME SA637 Gr. 718</u>
Nozzle	<u>N93184-33-0074</u>	<u>ASME SA182 Gr. F316</u>
Disc Holder K55484-31-0002	<u>N89714-31-0003</u>	<u>AMS 5662B</u>
Spring Washers K62858-36-0105	<u>K62856-36-0114</u> <u>K62857-36-0101</u>	<u>ASME SA105 Gr. II</u>
Adjusting Bolt	<u>N93410-33-0074</u>	<u>ASME SA193 Gr. B6</u>
Spindle Point K62873-37-0134	<u>N89720-43-0154</u>	<u>ASME SA564 Type 630</u>
c. Spring K62858-36-0105	<u>*N89722-0056</u>	<u>ASTM A304-66 Gr. 4161H</u>
d. Bolting		
Spindle Ball	<u>N93213-0201</u>	<u>Stoody #6</u>
e. Pressure Retaining Pieces		
Thrust Bearing Adapter	<u>N93409-32-0067</u>	<u>ASME SA193 Gr. B6</u>
Bonnet Stud (BW19)	<u>N93207-1534 thru 1545</u>	<u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u>
Bonnet Stud Nut (J87)	<u>N93210-1057 thru 1068</u>	<u>ASME SA194 Gr. 2H</u>
Inlet Stud (BW18)	<u>N93216-1685 thru 1696</u>	<u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u>
Inlet Stud Nut (BW22)	<u>N93218-1401 thru 1412</u>	<u>ASTM A194-71 Gr. 2H</u> <u>ASME SA194 Gr. 2H</u>
Adjusting Bolt But.on	<u>N93411-33-0079</u>	<u>ASME SA193 Gr. B6</u>
<u>K62618-22-0070</u>		

Valve originally built against Crosby Order No. N51727, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.

N63790-00-018

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 & 1711
Class I (Date)

Date 11-5-80 Signed Crosby Valve & Gage Co. by R.G. Calverton
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1878 to use the NV
symbol expires September 30, 1983.
(Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by ¹Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by ¹W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

¹Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 1/14, 1981 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1/14 19 81

Signed John E. M. M. M. Commissions MASS 1266
(Inspector) (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Fuel Pool Cooling (FPC) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1972 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
- 6. **Identification Of Components**

Date: 05/22/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
FPC-V-112A	Anchor Darling	3N-381	N/A	N/A	1975	Corrected (Repaired)	Yes, Code Class 3

7. Description Of Work Performed: Machined existing hinge pins for valve FPC-V-112A, Serial No 3N-381. The work was performed as follows:

- 1) Machined the existing hinge pin(s).
- 2) Surface finished the machined surfaces on as needed basis for the existing hinge pin(s).
- 3) Extended the back stop (or stop pad) on the disc by welding.
- 4) Performed visual examination on the final welded surfaces. Visual examination results acceptable.
- 5) Reinstall the disc.
- 6) Reinstall the existing hinge pin(s).
- 7) Reinstalled existing studs for the valve body to bonnet joint.
- 8) Reinstalled existing nuts for the valve body to bonnet joint.
- 9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve body to bonnet joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Report.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 101 Psig Test Temperature: 102^o F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 5/22/07 Date 5/22/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/12/07 to 5/24/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

J. C. Hair Commissions 9496 N.A.B.I., N.S.C., 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 5/24/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** High Pressure Core Spray (HPCS) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Case(s):** None

6. **Identification Of Components**

Date: 06/29/2007

Sheet: 1 Of 1

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2 HPCS-P-1 HPCS-P-1	WPPSS* Ingersoll Rand Flowserve	HPCS(1)-4CL2-P3 473126 RLSA06032	N/A 28 N/A	N/A N/A N/A	1983 1974 2006	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing pump HPCS-P-1. The replacement work was performed as follows:

- 1) Removed existing pump HPCS-P-1, Serial No 473126.
- 2) Installed replacement pump HPCS-P-1, Serial No RLSA06032.
- 3) Installed replacement gland plate.
- 4) Installed eight (8) replacement gland plate studs.
- 5) Installed eight (8) replacement gland plate nuts.
- 6) Installed sixty (60) replacement support flange plate studs.
- 7) Installed sixty (60) replacement support flange plate nuts.
- 8) Performed VT-1 visual examination on the pump casing (shell) welds for ISI (PSI). VT-1 visual examination results acceptable.
- 9) Performed magnetic particle (MT) examination on the pump discharge head welds for ISI (PSI). Magnetic particle (MT) examination results acceptable.
- 10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the pump to shell (support flange plate) bolted joint. No evidence of leakage during the pressure test.
- 11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the pump gland plate bolted joint. No evidence of leakage during the pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement pump HPCS-P-1, Serial No RLSA06032 was installed is High Pressure Core Spray (HPCS) piping system HPCS(1)-4CL2-P3. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement valve pump HPCS-P-1, Serial No RLSA06032 is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Summer 1971 Addenda requirements.
- 5) OEM/OES Ingersoll Rand pumps are now being manufactured by OEM/OES Flowserve.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: See Note 3 Test Temperature: See Note 3

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached NPV-1 Code Data Report for the replacement pump HPCS-P-1, Serial No RLSA06032, 2) See attached N-2 Code Data Report for the replacement pump discharge head associated with replacement pump HPCS-P-1, Serial No RLSA06032, 3) Test pressure of 10 to 15 Psig and test temperature of 70 to 80 degrees F for the pump to shell (support flange plate) bolted joint. Test pressure of 455 Psig and test temperature of 86 degrees F for the pump gland plate bolted joint.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/20/07 to 8/1/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Jaec Hair Commissions 9496 N.A.B.I. W.S.C 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 8/1/07

** AMENDED 8/30/2006

ANI SIGNATURE [Signature]

FORM NPV-1 (Back - Pg. 2 of 2)

FLOWSERVE REP Tamer Keek

RLSA06032

Certificate Holder's Serial No _____

NA

8 Design conditions _____ 1715 _____ 40-212 _____ °F or valve pressure class _____ (1)
(pressure) NA (temperature)

9 Cold working pressure _____ psi at 100°F
2580/2600 NA

10 Hydrostatic test _____ psi Disk differential test pressure _____ psi
Name Plate attached with drive screws

11 Remarks: _____
Material, Body: Carbon Steel (ASME SA 516/ ASME SA 3507/ ASME SA 106/ ASME SA 234)
Material, Bolting: Alloy 4140 (ASME SA 193 GR. B7/ ASME SA 194 GR. 7)

* * SEE N-2 CODE DATA REPORT FOR DISCHARGE HEAD, SERIAL NUMBER 4118-1, NATIONAL BOARD NUMBER 454

CERTIFICATION OF DESIGN

Design Specification certified by Fred J. Mollerus, Jr P E State Washington Reg. no. 8273
Design Report certified by Dave Kraft P E State New Jersey Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code Section III, Division 1

N Certificate of Authorization No N-1130 Expires June 10, 2008

Date 7/14/2006 Name Flowserve Pump Division, Nuclear Products Operations Signed Tamer Keek
(N Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIF and employed by HOB-CT of HARTFORD, CT have inspected the pump, or valve, described in this Data Report on 7-14-06, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Date 7-14-06 Signed [Signature] Commissions NB 12050-N / CA-1969
(Authorized Inspector) (Nat'l Bd (incl endorsements) and state or prov and no)

(1) For manually operated valves only

SATISFACTORY UNSATISFACTORY _____
[Signature] 9.18.06
RECEIPT INSPECTOR / LEVEL / DATE

PLAN No. 2.2105

CORRECTED COPY

ERP 5/26/06
SL 5/26/06

Judith Swift
6/29/07.

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Penn Iron Works, Inc, 700 Old Fritztown Road, Sinking Spring, PA 19608
(name and address of NPT Certificate Holder)
2. Manufactured for Flowsolve Pump Corp., 2300 East Vernon Avenue, Vernon, CA 90058
(name and address of purchaser)
3. Location of installation Unknown
(name and address)
4. Type F-12X20KD361BX2E, Rev. N SA-106 70 ksi Min. NA 2005
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: See Remarks 1 Below See Remarks 1 Below 2 NA
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision NA Date NA
(no.)
7. Remarks: * Penn Iron Works, Inc. not responsible for design
1. 1971 Edition, Summer 1971 Addenda for fabrication, NDT and stamping; 1998 Edition, 2000 Addenda for materials
8. Nom. thickness (in.) 1.312" Min. design thickness (in.) ERP 5/26/06 SL 5/26/06 Dia. ID (ft & in.) 1' Length overall (ft & in.) 2'-6.75"
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 4118-1	454	(28)	
(2)		(27)	
(3)		(28)	
(4) PUMP MPCS-P-1,		(29)	
(5) SERIAL NO. 4118-1		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 1715 psi. Temp. 40-212 °F. Hydro. test pressure 2580 at temp. °F
(when applicable)
ERP 5/26/06 SL 5/26/06 ERP 5/26/06 SL 5/26/06

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

SATISFACTORY UNSATISFACTORY
J. De II 8.23.06
RECEIPT INSPECTOR / LEVEL / DATE

Certificate Holder's Serial Nos. 4118-1 through 4118-1

CERTIFICATION OF DESIGN			
Design specifications certified by	NA <small>(when applicable)</small>	P.E. State	NA
Reg. no.			NA
Design report* certified by	NA <small>(when applicable)</small>	P.E. State	NA
			NA
CERTIFICATE OF COMPLIANCE			
We certify that the statements made in this report are correct and that this (these) <u>Discharge Head</u>			
conforms to the rules of construction of the ASME Code, Section III, Division 1.			
NPT Certificate of Authorization No.	N-2927	Expires	November 11, 2005
Date	<u>5/26/06</u>	Name	Penn Iron Works, Inc.
		Signed	<u><i>Earl R. Peters</i></u> <small>(Authorized Representative)</small>
CERTIFICATE OF INSPECTION			
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>PA</u> and employed by <u>HSB CE</u>			
of <u>HARTFORD, CT</u> have inspected these items described in this Data Report on <u>9/15/05</u> and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.			
By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.			
Date	<u>5/26/06</u>	Signed	<u><i>Scott R. Foley</i></u> <small>(Authorized Nuclear Inspector)</small>
		Commissions	<u>NIS 9364 (NFI) PA 2372</u> <small>(N.B.'s 50, (incl. endorsements) and state or prov. and no.)</small>

SATISFACTORY UNSATISFACTORY 4/8/06
Wilde II 8-23-06
 RECEIPT INSPECTOR / LEVEL / DATE



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 06/29/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: High Pressure Core Spray (HPCS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2	WPPSS*	HPCS(1)-4CL2-P3	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2

7. Description Of Work Performed: Replaced studs and nuts for pump HPCS-P-1 discharge piping bolted joint. The replacement work was performed as follows:
 1) Installed twenty (20) replacement studs.
 2) Installed forty (40) replacement nuts.
 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the bolted joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) ASME Section XI Plan No 2-2105 installed replacement pump HPCS-P-1, Serial No RLSA06032. The studs and nuts were also replaced for pump discharge piping bolted joint during the replacement of the pump.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 455 Psig Test Temperature: 86° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/20/07 to 8/1/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I.N.S.C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 8/1/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 07/05/2007

Sheet: 1 Of 1

Unit: Not Applicable

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: High Pressure Core Spray (HPCS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS(2)-1	WPPSS*	HPCS(2)-1-P3	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2

7. Description Of Work: Replaced existing suction vent piping material for pump HPCS-P-1. The replacement work was performed as follows:

- 1) Removed existing suction vent piping material such as elbows, flanges and pipe.
- 2) Installed replacement suction vent piping material such as elbows, flanges and pipe.
- 3) Made required socket welds.
- 4) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.
- 6) Installed replacement studs and nuts for the bolted flange joint.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/5/07 Date 7/5/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
Inspector's Signature National Board, State, and Endorsements.

Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: High Pressure Core Spray (HPCS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1971 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/05/2007
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS-P-1* Seal Piping*	Ingersoll-Rand Ingersoll-Rand	0473126* 0473126*	28* 29*	N/A N/A	1974 1974	See Item 7 Below See Item 7 Below	Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing seal piping material for pump HPCS-P-1. The replacement work was performed as follows:

- 1) Removed existing seal piping material such as elbows, flanges and pipe.
- 2) Installed replacement seal piping material such as elbows, flanges and pipe.
- 3) Made required socket welds.
- 4) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.
- 6) Installed replacement cap screws and nuts for the bolted flange joints.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Seal bleed off piping material is listed on the N-2 Code Data Report as an attachment to NPV-1 Code Data Report for existing pump HPCS-P-1, Serial No 473126.
- 3) ASME Section III, Code Class 2, 1971 Edition with Summer 1971 Addenda is based on the N-2 Code Data Report and NPV-1 Code Data Report for existing pump HPCS-P-1, Serial No 473126.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Exempt Pneumatic Test Pressure: Psig Nominal Operating Pressure Other Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 7/5/07 Date 7/5/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller Commissions
Inspector's Signature National Board, State, and Endorsements
Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** High Pressure Core Spray (HPCS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Summer 1971 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 07/05/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS-P-1* Seal Piping*	Ingersoll-Rand Ingersoll-Rand	0473126* 0473126*	28* 29*	N/A N/A	1974 1974	See Item 7 Below See Item 7 Below	Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing seal bleed off piping material for pump HPCS-P-1. The replacement work was performed as follows:

- 1) Removed existing seal bleed off piping material such as elbows, flanges and pipe.
- 2) Installed replacement seal bleed off piping material such as elbows, flanges and pipe.
- 3) Made required socket welds.
- 4) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.
- 6) Installed replacement studs and nuts for the bolted flange joints.
- 7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Seal bleed off piping material is listed on the N-2 Code Data Report as an attachment to NPV-1 Code Data Report for existing pump HPCS-P-1, Serial No 473126.
- 3) ASME Section III, Code Class 2, 1971 Edition with Summer 1971 Addenda is based on the N-2 Code Data Report and NPV-1 Code Data Report for existing pump HPCS-P-1, Serial No 473126.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [X] Other []
Exempt [] Test Pressure: 10 to 15 Psig Test Temperature: 70 to 80° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 7/5/07 Date 7/5/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/20/07 to 8/1/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 8/1/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
Date: 06/23/07
Sheet: 1 Of 1
2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
Unit: Not Applicable
3. (a) **Work Performed By:** Energy Northwest
 (b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
 (c) **Type Code Symbol Stamp:** Not Applicable
 (d) **Certificate Of Authorization No.:** Not Applicable
 (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) Tubing
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
 (b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
 (c) **Applicable ASME Section XI Code Case(s):** None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-IR-81-3 Valve Valve	JCI Dragon Dragon	PI(1)-ST-IR-81-3 GP1310 PB1401	N/A N/A N/A	N/A N/A N/A	1983 1981 2003	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. **Description Of Work:** Replaced existing valve IR-V-IR-81/V5*. The replacement work was performed as follows:
- 1) Removed existing valve IR-V-IR-81/V5*, Serial No GP1310.
 - 2) Removed tubing material associated with valve IR-V-IR-81/V5*.
 - 3) Installed new replacement valve IR-V-IR-81/V5*, Serial No PB1401.
 - 4) Installed replacement tubing material.
 - 5) Made required socket welds.
 - 6) Performed visual examination on the final socket welds. Visual examination results acceptable.
 - 7) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing ASME Code Stamped Process Instrumentation (PI) Tubing in which the new replacement valve IR-V-IR-81/V5*, Serial No PB1401 was installed is PI(1)-ST-IR-81-3. This process instrumentation tubing is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda requirements.
- 3) The new replacement valve IR-V-IR-81/V5* Serial No PB1401 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda requirements.
- 4) * This valve has two (2) EPN's. Valve EPN No IR-V-IR-81/V5* appears on PASSPORT and valve EPN No IR-81-V-3C appears on Dwg No D-220-15.0-PED-I-0563, CVI No 220-01,1248.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve IR-V-IR-81/V5*, Serial No PB1401.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code, Section III, Div. 1

Richard S. ...

- 1. Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA. 90650 *6/7/07*
(Name and Address of N Certificate Holder)
- 2. Manufactured for Energy Northwest, P.O. Box 968, Richland, WA. 99352-0968
(Name and Address of Purchaser or Owner)
- 3. Location of Installation Energy Northwest, Columbia Generating Station, Richland, WA. 99352
(Name and Address)
- 4. Pump or Valve Valve Nominal Inlet Size 1/2 (inch) Outlet Size 1/2 (inch)

(a) Model No. (b) N Certificate Holder's Serial No. (c) Canadian Registration No. (d) Drawing No. (e) Class (f) Nat'l. Bd. No. (g) Year Built

(1)	7N058SWD	PB1398	N/A	10580	2	N/A	2003
(2)		Thru		Rev. C			
(3)		PB1410					
(4)							
(5)							
(6)							
(7)	VALVE IR-V-IR81/VS (IR-81-V-3C) S/N PB1401						
(8)							
(9)							
(10)							

5. Instrument Valve (13 Pcs.)
(Brief description of service for which equipment was designed)

- 6. Design Conditions _____ psi _____ °F or Valve Pressure Class 1500 (1)
- 7. Cold Working Pressure 3600 psi at 100°F.
- 8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings N/A			
(b) Forgings			
HT. 4234H	ASME SA182 Gr. F316	Ajax Forge Co.	Body
HT. A19167	ASME SA182 GR. F316	Ajax Forge Co.	Bonnet Yoke

(1) For manually operated valves only.
* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting N/A			
(d) Other Parts			
HT. 712678	ASME SA564 GR. 630	Carpenter Tech. Corp.	Disc

9. Hydrostatic test 5400 psi. Disk Differential test pressure 3600 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. I., Edition 1974, Addenda S'75 (Date), Code Case No. N/A, Date February 25, 2003.
 Signed Dragon Valves, Inc. by Mark A. Snyder (N Certificate Holder)
 Our ASME Certificate of Authorization No. N-1033 to use the N (N) symbol expires 5/6/05 (Date)

CERTIFICATION OF DESIGN

Design information on file at Energy Northwest
 Stress analysis report (Class 1 only) on file at N/A
 Design specifications certified by (1) Abbas A. Mostala
 PE State WA. Reg. No. 28777
 Stress analysis certified by (1) N/A
 PE State _____ Reg. No. _____
 (1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by HSB CT of HARTFORD, CT. have inspected the pump, or valve, described in this Data Report on 2-25 to 03, and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.
 By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
 Date 2-25 to 03
[Signature] Commissions MS 12050-N / 02-1969



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. Identification Of System:** Service Water (SW) System
- 5. (a) Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
- 6. Identification Of Components**

Date: 07/07/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2 SW-V-165A SW-V-165A	BF Shaw Allis-Chalmers Enertech	SW(22)-2-8 73912-1 11375	N/A N/A N/A	N/A N/A N/A	1979 1978 2007	See Item 7 Below Removed Installed	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 3

- 7. Description Of Work Performed:** Replaced existing valve SW-V-165A. The replacement work was performed as follows:
- 1) Removed existing valve SW-V-165A, Serial No 73912-1.
 - 2) Installed replacement valve SW-V-165A, Serial No 11375.
 - 3) Installed replacement studs.
 - 4) Installed replacement nuts.
 - 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing ASME Code Stamped piping system in which the replacement valve SW-V-165A, Serial No 11375 was installed is Service Water (SW) piping system SW(22)-2-8. This piping system is certified to comply with ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda requirements.
- 3) The replacement valve SW-V-165A, Serial No 11375 is certified to comply with ASME Section III, Code Class 3, 1998 Edition with no requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 207 Psig Test Temperature: 60° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve SW-V-165A, Serial No 11375.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/7/07 Date 7/7/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/13/07 to 7/12/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

J. C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 7/12/07

11375 thru
Certificate Holder's Serial No. 11378

8. Design conditions _____ 309 _____ psi _____ 150 _____ °F or valve pressure class _____ 300 _____ (1)
(pressure) (temperature)
9. Cold working pressure _____ 740 _____ psi at 100°F
10. Hydrostatic test _____ 1125 _____ psi. Disk differential test pressure _____ 340 _____ psi
11. Remarks: Qty. 4, Enertech Project Number 810086

End Cap Mat'l: SA-516 Grade 70, S/Ns: LCX-10176 thru LCX-10179

CERTIFICATION OF DESIGN					
Design Specification certified by _____	Jack R. Cole, Jr.	P.E. State _____	WA	Reg. no. _____	20653
Design Report certified by _____	Ira J. Silverman	P.E. State _____	CA	Reg. no. _____	23241

CERTIFICATE OF COMPLIANCE			
We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.			
N Certificate of Authorization No. _____	N-2826	Expires _____	10/11/08
Date _____	3/29/07	Name _____	Enertech, Curtiss-Wright Flow Control Corp., Commercial Power & Services
		Signed _____	<i>[Signature]</i>
		(authorized representative)	

CERTIFICATE OF INSPECTION			
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ California _____ and employed by _____ HSB CT _____ of _____ Connecticut _____ have inspected the pump, or valve, described in this Data Report on _____ 3-29-2007 _____, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.			
By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.			
Date _____	3/29/07	Signed _____	<i>[Signature]</i>
		Commissions _____	CA 494
		(Nat'l. Bd. (Incl. endorsements) and state or prov. and no.)	

(1) For manually operated valves only.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Service Water (SW) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Date: 07/05/2007

Sheet: 1 Of 1

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2 SW-V-165B SW-V-165B	BF Shaw Allis-Chalmers Enertech	SW(22)-2-9 73912-2 11377	N/A N/A N/A	N/A N/A N/A	1979 1978 2007	See Item 7 Below Removed Installed	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work Performed: Replaced existing valve SW-V-165B. The replacement work was performed as follows:

- 1) Removed existing valve SW-V-165B, Serial No 73912-2.
- 2) Installed replacement valve SW-V-165B, Serial No 11377.
- 3) Installed replacement studs.
- 4) Installed replacement nuts.
- 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing ASME Code Stamped piping system in which the replacement valve SW-V-165B, Serial No 11377 was installed is Service Water (SW) piping system SW(22)-2-9. This piping system is certified to comply with ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda requirements.
- 3) The replacement valve SW-V-165B, Serial No 11377 is certified to comply with ASME Section III, Code Class 3, 1998 Edition with no requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 208/210 Psig Test Temperature: 65/58° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve SW-V-165B, Serial No 11377.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/5/07 Date 7/5/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/13/07 to 7/12/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/12/07

11375 thru
11378
Certificate Holder's Serial No. _____

8. Design conditions _____ 309 _____ psi _____ 150 _____ °F or valve pressure class _____ 300 _____ (1)
(pressure) (temperature)
9. Cold working pressure _____ 740 _____ psi at 100°F
10. Hydrostatic test _____ 1125 _____ psi. Disk differential test pressure _____ 340 _____ psi

11. Remarks: Qty. 4, Enertech Project Number 810086

End Cap Mat'l: SA-516 Grade 70, S/Ns: LCX-10176 thru LCX-10179

CERTIFICATION OF DESIGN					
Design Specification certified by _____	Jack R. Cole, Jr.	P.E. State _____	WA	Reg. no. _____	20653
Design Report certified by _____	Ira J. Silverman	P.E. State _____	CA	Reg. no. _____	23241

CERTIFICATE OF COMPLIANCE			
We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.			
N Certificate of Authorization No. _____	N-2826	Expires _____	10/11/08
Date <u>3/29/07</u>	Name _____	Signed _____	(authorized representative)
Enertech, Curtiss-Wright Flow Control Corp., Commercial Power & Services		(N Certificate Holder)	

CERTIFICATE OF INSPECTION			
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ California _____ and employed by _____ HSB CT _____			
of _____ Connecticut _____ have inspected the pump, or valve, described in this Data Report on _____ 3-29-2007 _____, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.			
By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.			
Date <u>3/29/07</u>	Signed _____	Commissions _____	CA 494
(Authorized Inspector)		[Nat'l. Bd. (Incl. endorsements) and state or prov. and no.]	

(1) For manually operated valves only.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Service Water (SW) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 07/11/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(21)-2	BF Shaw	SW(21)-2-10	N/A	N/A	1979	See Item 7 Below Removed Installed	Yes, Code Class 3
SW-V-170B	Allis-Chalmers	73912-4	N/A	N/A	1978		Yes, Code Class 3
SW-V-170B	Allis-Chalmers	73912-2	N/A	N/A	1978		Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing valve SW-V-170B. The replacement work was performed as follows:
- 1) Removed existing valve SW-V-170B, Serial No 73912-4.
 - 2) Installed replacement valve SW-V-170B, Serial No 73912-2.
 - 3) Installed replacement studs.
 - 4) Installed replacement nuts.
 - 5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing ASME Code Stamped piping system in which the replacement valve SW-V-170B, Serial No 73912-2 was installed is Service Water (SW) piping system SW(21)-2-10. This piping system is certified to comply with ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda requirements.
- 3) The replacement valve SW-V-170B, Serial No 73912-2 is certified to comply with ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 208 Psig Test Temperature: 65° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve SW-V-170B, Serial No 73912-2.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 7/11/07 Date 7/11/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/22/07 to 7/16/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I NS C 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 7/16/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 07/19/2007

Sheet: 1 Of 1

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Low Pressure Core Spray (LPCS) System

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
LPCS(1)-2	WPPSS*	LPCS(1)-2-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2
LPCS-V-707	Borg Warner	22594	N/A	N/A	1977	Removed	Yes, Code Class 1
LPCS-V-707	Dragon	PB 1022	N/A	N/A	1983	Installed	Yes, Code Class 2
LPCS-V-708	Borg Warner	22612	N/A	N/A	1977	Removed	Yes, Code Class 1
LPCS-V-708	Dragon	PB 1027	N/A	N/A	1983	Installed	Yes, Code Class 2

7. **Description Of Work:** Replaced existing valve LPCS-V-707 and valve LPCS-V-708. The replacement work was performed as follows:

- 1) Removed existing valve LPCS-V-707, Serial No 22594.
- 2) Removed existing valve LPCS-V-708, Serial No 22612.
- 3) Installed replacement piping material.
- 4) Installed replacement valve LPCS-V-707, Serial No PB 1022.
- 5) Installed replacement valve LPCS-V-708, Serial No PB 1027.
- 6) Made required socket welds.
- 7) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 8) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement valve LPCS-V-707, Serial No PB 1022 and replacement valve LPCS-V-708, Serial No PB 1027 were installed is Low Pressure Core Spray (LPCS) piping system LPCS(1)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement valve replacement valve LPCS-V-707, Serial No PB 1022 and replacement valve LPCS-V-708, Serial No PB 1027 are certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1976 Addenda requirements.
- 5) Existing valve LPCS-V-707, Serial No 22594 and existing valve LPCS-V-708, Serial No 22612 are ASME Section III, Code Class 1 valves for ASME Section III, Code Class 2 application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Reports for the following replacement valves:

EPN No	Serial No
LPCS-V-707	PB 1022
LPCS-V-708	PB 1027

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/19/07 Date 7/19/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____

CORRECTED DATA REPORT

WVPS 5-17-83 GAS/STEAM

FORM NPV-1 IN CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES 1 of 2
As Required by the Provisions of the ASME Code, Section III, Div. 1

1 Manufactured by Dragon Valves, Inc., 13457 Excelstor Dr., Norwalk, CA 90650
(Name and Address of Manufacturer)
2 Manufactured for WVPS, 3000 George Washington Way, Richland, WA 99352-0568
(Name and Address of Purchaser or Owner)
3 Location of Installation WPN-2 Plant, Richland, WA 99352
(Name and Address)
4 Pump or Valve Valve Nominal Inlet Size 1 1/2 Outlet Size 1 1/2
INCH INCH

	1a) Model No. 1b) M Certificate Holder's		1c) Canadian		1f) Part Id No	1g) Year Built
	Series No or Type	Serial No.	Registration No	1d) Drawing No		
11)	502FM05755-02	PB1002	None	12753	2	None 1983
12)		chr				
13)		PB1027				
14)						
15)						
16)						
17)						
18)						
19)						
20)						

VALVE LPCS-V-707, S/N PB1027

Richard Simpson

5 Instrument Shut-off and Drain Valves (25 Pcs.) 7/19/07
(Brief description of service for which equipment was designed)

6 Design Conditions Pressure psi Temperature °F or Valve Pressure Class 2500 (1)
7 Cold Working Pressure 6000 psi at 100°F.
8 Pressure Retaining Flange

Part No	Material Spec No	Manufacturer	Remarks
1a) Castings <u>None</u>			
1b) Forgings			
<u>Flange</u>	<u>ASME SA182 Gr. F316</u>	<u>Alex Forge Co.</u>	<u>N7 163555</u>

(1) For manually operated valves only

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) one is 8-1/2" x 11", (2) information in Items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of file form.

BEC
3

U 2 4 U

FORM NPV-1 (Rev. 1)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Bolting None			
(b) Other Parts			
Disc	Stellite Alloy 62	Cobalt Corp.	NY 1818-3-1085
Bracket	ASME SA479 TT 316	Carborundum Steel	NY 849465
Union Nut	ASME SA479 TT 316	Crucible Spec. Mfg.	NY A19463

8. Hydrostatic test 9000 psi. (See differential test pressure 6000 psi.)

***Addenda 6730776** **CERTIFICATE OF COMPLIANCE** **DVI** **5-17-82**
API **5-17-82**

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1974.

Reference 12-21-80 Code Case No. None Date May 12, 1983

Signed DRAGON VALVES, INC. by [Signature]

Our ASME Certificate of Authorization No. N-1033 to use the ASME Symbol implies 5-6-84

CERTIFICATION OF DESIGN

Design information on file at Washington Public Power Supply System

Stress analysis report (Class I only) on file at not applicable

Design specifications certified by (1) Shafiq H. Rifay

PE State VA Reg. No. 17626

Stress analysis certified by (1) not required

PE State _____ Reg. No. _____

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by DOEH of CALIFORNIA have inspected the pump, or valve, described in this Data Report on May 12, 1983, and state that to the best of my knowledge and belief, this Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 5-12-83 [Signature] Commission EA158
(Don't list State, Name and No.)

INTEL
20

***CORRECTED DATA REPORT**

Sup. 5-17-83 945/11/83 HML

FORM NPV-1 IN CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES 1 of 2
As Required by the Provisions of the ASME Code, Section III, Div. 1

1. Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA 90650
(Name and Address of N Certificate Holder)

2. Manufactured for WPPSS, 3000 George Washington Way, Richland, WA 99352-0968
(Name and Address of Purchaser or Owner)

3. Location of Installation WPH-2 Plant, Richland, WA 99352
(Name and Address)

4. Pump or Valve Valve Nominal Inlet Size 1 1/2 Outlet Size 1 1/2
(Inch) (Inch)

	1a) Model No. 1b) N Certificate Holder's		1c) Canadian		1f) Date	1g) Year Built
	Series No. or Type	Serial No.	Registration No.	1d) Drawing No.		
(11)	502FMO5755-D2	PB1003	None	12753	2	None 1983
(12)		thru				
(13)		PB1027				
(14)						
(15)						
(16)						
(17)						
(18)						
(19)						

VALVE LPCS-V-70B, SIN PB 1027

Julius Rupp

5. Instrument Shut-off and Drain Valves (25 Pcs.) 7/19/07
(Brief description of service for which equipment was designed)

6. Design Conditions Procedural psi Temperature T or Valve Pressure Class 2500 (1)

7. Cold Working Pressure 6000 psi at 100°F.

8. Pressure Retaining Parts

Part No	Material Spec No	Manufacturer	Remarks
1a) Coatings <u>None</u>			
1b) Forgings			
<u>Body</u>	<u>ASME SA182 Gr. F116</u>	<u>Alex Forge Co.</u>	<u>HT 16355</u>

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 8 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of sheets form.

BEC
3

0 0 U 2 4 U

FORM NPV-1 (Rev. 4)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting None			
(d) Other Parts			
Disc	Stainless Alloy 62	Coboc Corp.	NY 1816-S-1085
Bracket	ASME SA479 TT 316	Carborundum Steel	NY 849465
Union Nut	ASME SA479 TT 316	Crucible Spec. Mfg.	NY A19603

2. Hydrostatic test 2000 psi. Shot differential test pressure 6000 psi.

***Addenda 6730776** **CERTIFICATE OF COMPLIANCE** DWI 10/15 J-28-52
 ANI CA 3-17-84

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1974.

Authorized 12-21-84 Code Case No. None Date May 12, 1983

Signed DRAGON VALVES, INC. by [Signature]

Our ASME Certificate of Authorization No. H-1033 to use the [Symbol] symbol expires 5-6-84

CERTIFICATION OF DESIGN

Design information on file at Washington Public Power Supply System

Stress analysis report (Class 1 only) on file at not applicable

Design specifications certified by (1) Shafik H. Rifay

PE State VA Reg. No. 17626

Stress analysis certified by (1) not required

PE State _____ Reg. No. _____

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by DOEH

of CALIFORNIA have inspected the pump, or valve, described in this Data Report on May 16, 1983, and state that to the best of my knowledge and belief, the H Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 5-12-1983 [Signature] Commission EAGSO

INTEL
20



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Process Instrumentation (PI) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 07/11/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-(H22-P001)-A6	JCI	PI(1)-ST-(H22-P001)-A6	N/A	N/A	1982	See Item 7 Below	Yes, Code Class 2
PI(1)-ST-(H22-P001)-A7	JCI	PI(1)-ST-(H22-P001)-A7	N/A	N/A	1982	See Item 7 Below	Yes, Code Class 2

7. Description Of Work: Replaced existing tubing material associated with valve LPCS-V-707 and valve LPCS-V-708. The replacement work was performed as follows:

- 1) Removed existing tubing material.
- 2) Installed replacement tubing material.
- 3) Made required socket welds.
- 4) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Exempt Pneumatic Test Pressure: P_{sig} Nominal Operating Pressure Test Temperature: °F Other

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/14/07 Date 7/14/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
Inspector's Signature National Board, State, and Endorsements

Date _____



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 07/26/2007
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 2
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Reactor Closed Cooling (Water) (RCC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RCC(3)-1 RCC(36)-1	WPPSS* WPPSS*	RCC(3)-1-P1 RCC(36)-1-P1	N/A N/A	N/A N/A	1983 1983	See Item 7 Below See Item 7 Below	Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work: Replaced piping material. The replacement work was performed as follows:

DWG No RCC-2036-1 - TOP CONNECTION

- 1) Removed existing piping material.
- 2) Installed replacement piping material such as coupling and pipe.
- 3) Made required welds.
- 4) Performed visual examination on the final welds. Visual examination results acceptable.
- 5) Installed four (4) replacement studs.
- 6) Installed eight (8) replacement nuts.

DWG No RCC-2036-1 - BOTTOM CONNECTION

- 1) Removed existing piping material.
- 2) Installed replacement piping material such as coupling and pipe.
- 3) Made required welds.
- 4) Performed visual examination on the final welds. Visual examination results acceptable.
- 5) Installed four (4) replacement studs.
- 6) Installed eight (8) replacement nuts.

DWG No RCC-2038-1 - TOP CONNECTION

- 1) Removed existing piping material.
- 2) Installed replacement piping material such as coupling, elbow and pipe.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Exempt [X] Pneumatic [] Nominal Operating Pressure [] Other [] Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 2/28/07 Date 2/28/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of ... and employed by ... have inspected the components described in this Owner's Report during the period ... to ... and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller Commissions
Inspector's Signature National Board, State, and Endorsements

Date



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 07/26/2007

Sheet: 2 Of 2

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Closed Cooling (Water) (RCC) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RCC(3)-1 RCC(36)-1	WPPSS* WPPSS*	RCC(3)-1-P1 RCC(36)-1-P1	N/A N/A	N/A N/A	1983 1983	See Item 7 Below See Item 7 Below	Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work: Continuation From Sheet 1 of 2

DWG No RCC-2038-1 - TOP CONNECTION

- 3) Made required welds.
- 4) Performed visual examination on the final welds. Visual examination results acceptable.
- 5) Installed four (4) replacement studs.
- 6) Installed eight (8) replacement nuts.

DWG No RCC-2038-1 - BOTTOM CONNECTION

- 1) Removed existing piping material.
- 2) Installed replacement piping material such as coupling, elbow and pipe.
- 3) Made required welds.
- 4) Performed visual examination on the final welds. Visual examination results acceptable.
- 5) Installed four (4) replacement studs.
- 6) Installed eight (8) replacement nuts.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Service Water (SW) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/26/2007
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
SW(21)-2 SW-V-761 SW-V-761	BF Shaw Borg Warner Borg Warner	SW(21)-2-2 17087 16998	N/A N/A N/A	N/A N/A N/A	1979 1977 1976	See Item 7 Below Removed Installed	Yes, Code Class 3 Yes, Code Class 2 Yes, Code Class 2

- 7. Description Of Work:** Replaced existing valve SW-V-761. The replacement work was performed as follows:
- 1) Removed existing valve SW-V-761, Serial No 17087.
 - 2) Installed replacement valve SW-V-761, Serial No 16998.
 - 3) Made required socket welds.
 - 4) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing ASME Code Stamped piping system in which the replacement valve SW-V-761, Serial No 16998 was installed is Service Water (SW) piping system SW(22)-2-2. This piping system is certified to comply with ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda requirements.
- 3) The replacement valve SW-V-761, Serial No 16998 is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 requirements.
- 4) ASME Section III, Code Class 2 valve for ASME Section III, Code Class 3 application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve SW-V-761, Serial No 16998.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 7/28/07 Date 7/28/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____

00014

PLAN No. 2-2124

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code Rules *Quidip Sup*

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Avenue, Van Nuys, Ca. Order No. 47713
(Name & Address of Manufacturer)

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 Order No. 215-3261Q
(Name and Address)

3. Owner WPPSS Hanford #2 Job Site *SW-V-261, S/N 16998*

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification Nuclear Valve Div., P/N 76700-1, 3/4 Inch Gate Valve, CS
 Serial Numbers 16997 Thru 17021 (25 Valves)
(Brief description of service for which equipment was designed)

(a) Drawing No. 76700 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No. _____

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

7. The material, design, construction, and workmanship complies with ASME Code Section III. Class 2
 Edition 1971, Addenda Date Winter '73, Case No. _____

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Gate - Code 1P14, 1M62	SA487 Gr. CA6NM		
Casting - 75347		Rex Precision	
Machined - 75346		NV Division	
REVIEWED			
MAY 10 1992			
BECHTEL QUALITY CONTROL			
BY: _____			
(b) Forgings			
Body - Code 1K69	SA 105		
Forging - 70453		Pacific Forge	
Machined - 70474		NV Division	
Assembly - 75349		NV Division	
Bonnet - Code 1M28	SA 105		
Forged Stock		Compton Forge	
Machined - 73973-11		NV Division	
Assembly 73973		NV Division	

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1, 2, 5a and 5b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

2 1 2 2 3 1 2 5 7

3

FORM NPV-1 (back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
(d) Other Parts			
Stem - Code	1M35	SA564 Type 630	
Bar Stock		Jorgensen Steel	
Machined -	75323	NV Division	

8. Hydrostatic test 5400 - 5450 psi.

CERTIFICATION OF DESIGN

Design information on file at Nuclear Valve Div. of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca.
 Stress analysis report on file at N/A
 Design specifications certified by David J. Murphy (I) Prof. Eng. State Wash. Reg. No. 12542
 Stress analysis report certified by N/A (I) Prof. Eng. State _____ Reg. No. _____
 (I) Signature not required. List name only.

We certify that the statements made in this report are correct.
 Nuclear Valve Div.
 Date December 30 19 76 Signed of Borg Warner By RVPalmer
 (Manufacturer)

Certificate of Authorization No. 1254 expires October 27, 1978

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of California and employed by Dept. of Bldg. & Safety of City of Los Angeles have inspected the equipment described in this Data Report on December 30 19 76 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.
 By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date December 30 19 76

[Signature] (Inspector) Commission California (National Board, State, Province and No.)

WBG BR 215-18536A

2 1 2 9 2 1 2 5 8

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code Rules

Quincy Smith
2/26/07

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409 (Name & Address of Manufacturer) Order No. 47713/04180

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 (Name and Address) Order No. 215-3261Q

3. Owner WPPSS Hanford #2 Jobsite SW-V-761, S/N 16998

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification NVD Part Number 76700-1, 3/4 Inch Gate Valve, 1500W, CS
Serial Numbers 16997 thru 17003, 17005 thru 17019 and 17021 (23 Valves)
(Brief description of service for which equipment was designed)

(a) Drawing No. 76700-1 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No. N/A

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

7. The material, design, construction, and workmanship complies with ASME Code Section III. Class 2

Edition 1971, Addenda Date Winter '73, Case No. N/A

MODIFIED NPV-1

Original NPV-1 was dated and signed on December 30, 1976

Seat replaced and weld material removed from seal weld - re-welded with Weld Material N-Code 2E17

Hydrostatic Tested.

REVIEWED

MAY 10 1982

BECHTEL QUALITY CONTROL

BY [Signature]

REVIEWED

APR 28 1982

BECHTEL QUALITY CONTROL

BY [Signature]

WBG BR 215-18536A



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest **Date:** 06/24/07
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1AB	A/G*	VB 7891	N/A	N/A	1983	See Item 7 Below Removed Installed	Yes, Code Class 2 No, Code Class 1 No, Code Class 1
Rear Snubber	Pacific Scientific	30889	N/A	N/A	-----		
Rear Snubber	Pacific Scientific	30924	N/A	N/A	-----		

7. Description Of Work Performed: Replaced rear snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1AB. The replacement work was performed as follows:

- 1) Removed existing rear snubber Serial No 30889 from the valve.
- 2) Installed new replacement rear snubber Serial No 30924 for the valve.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Anderson Greenwood and Company.
- 3) ASME Section III, Code Class 2 for valve CVB-V-1AB, Serial No VB 7891.
- 4) ASME Section III, Code Class NF(1) for snubber Serial No 30924. ASME Section III, Code Class NF(1) snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [X] Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/24/07 Date 6/24/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/23/07 to 7/2/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, R, T, N, S, C 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 7/2/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
- 6. **Identification Of Components**

Date: 06/27/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4A	WPPSS*	MS(1)-4A-P4	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 2

- 7. Description Of Work Performed:** Replaced U bolts for support MS-954N. The replacement work was performed as follows:
- 1) Installed two (2) replacement U bolts.
 - 2) Installed four (4) replacement full nuts which came with the U bolts. Four (4) replacement full nuts for each U bolt.
 - 3) Installed four (4) replacement jam (1/2 nuts) nuts. Two (2) replacement jam (1/2 nuts) nuts for each U bolt.
 - 4) Perform VT-3 visual examination on the support. VT-3 visual examination results acceptable

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) ASME Section III, Code Class NF(2), 1971 Edition with Winter 1973 Addenda for support MS-954N.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/27/07 Date 6/27/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/18/07 to 7/2/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I. NSC 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/2/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 07/05/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4C MS-(1)-4D	WPPSS* WPPSS*	MS(1)-4C-P3 MS-(1)-4D-P3	N/A N/A	N/A N/A	1983 1983	See Item 7 Below See Item 7 Below	Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Removed arc strikes on Main Steam (MS) lines "C" and "D" near MS-1000N and MS-1009N. The work was performed as follows:

<u>Arc Strike Location No</u>	<u>MT Report No</u>	<u>UT Report No</u>
Location No 1D	6-07-1-85	6-07-1-86
Location No 4D	6-07-1-85	6-07-1-86
Location No 2D	Not Applicable	6-07-1-86
Location No 3D	Not Applicable	6-07-1-86
Location No 5D	Not Applicable	6-07-1-86
Location No 6D	Not Applicable	6-07-1-86
Location No 1C	6-07-1-85	6-07-1-86
Location No 2C	6-07-1-85	6-07-1-86
Location No 3C	Not Applicable	6-07-1-86
Location No 4C	Not Applicable	6-07-1-86
Location No 5C	Not Applicable	6-07-1-86
Location No 6C	Not Applicable	6-07-1-86
Location No 7C	Not Applicable	6-07-1-86
Location No 8C	Not Applicable	6-07-1-86
Location No 9C	Not Applicable	6-07-1-86

- 1) Removed Arc Strike Location Nos 1D, 4D, 1C and 2C by mechanical means. No grinding was permitted.
- 2) Blended (faired) the area into surrounding surfaces for Arc Strike Location Nos 1D, 4D, 1C and 2C.
- 3) Performed magnetic particle (MT) examination on the final blended (faired) surfaces for Arc Strike Location Nos 1D, 4D, 1C and 2C. Magnetic particle (MT) examination results acceptable.
- 4) Performed ultrasonic (UT) examination for wall thickness verification for all arc strike locations. Ultrasonic (UT) examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): None

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/5/07 Date 7/5/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/19/07 to 7/17/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, & 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/17/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** High Pressure Core Spray (HPCS) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Case(s):** N-663

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2	WPPSS*	HPCS(1)-4CL2-P1	N/A	N/A	1983	Corrected (Repaired)	Yes, Code Class 2

7. **Description Of Work Performed:** Adjusted misalignment in discharge piping to pump HPCS-P-1. The repair work was performed as follows:

Elbow To Reducer Weld

The following work was performed for Weld No XI-1R1 (Weld No XI-1) - The weld between 16" NPS long radius elbow and 16"X12" NPS eccentric reducer:

- 1) Cut existing 16" NPS elbow to 16"X12" NPS eccentric reducer weld.
- 2) Trimmed 16"X12" NPS eccentric reducer to make up the required dimensional adjustments.
- 3) Beveled cut elbow end.
- 4) Beveled cut eccentric reducer end.
- 5) Made required circumferential butt weld.
- 6) Performed visual examination on the circumferential butt weld. Visual examination results acceptable.
- 7) Surface finished the circumferential butt weld in accordance with the ISI weld finish details.
- 8) Stamped ISI weld numbers adjacent to circumferential butt weld.
- 9) Performed radiographic (RT) examination on the final circumferential butt weld. Radiographic (RT) examination results acceptable except at local area.
- 10) Removed (locally) unacceptable RT indication by mechanical means.
- 11) Prepared the excavation/cavity for weld repair.
- 12) Performed magnetic particle (MT) examination on the final excavated/cavity area. Magnetic particle (MT) examination results acceptable.
- 13) Mapped the excavation/cavity.
- 14) Weld repaired the excavation/cavity.
- 15) Performed visual examination on the repaired the excavation/cavity. Visual examination results acceptable.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 455 Psig Test Temperature: 86.8° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.
 Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/31/07 Date 7/31/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/3/07 to 8/7/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
 By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, F, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 8/7/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** High Pressure Core Spray (HPCS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** N-663
- 6. **Identification Of Components**

Date: 07/31/2007
Sheet: 2 Of 3
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2	WPPSS*	HPCS(1)-4CL2-P1	N/A	N/A	1983	Corrected (Repaired)	Yes, Code Class 2

7. Description Of Work Performed: Continuation From Sheet 1 of 3

- 16) Blended the weld repaired area with the surrounding weld metal.
- 17) Surface finished the weld repaired areas per the ISI weld finish details.
- 18) Performed radiographic (RT) examination on the final weld repaired area. Radiographic (RT) examination results acceptable.
- 19) Performed ultrasonic (UT) examination on the final circumferential butt weld for ISI (PSI). Ultrasonic (UT) examination results acceptable.
- 20) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

Reducer To Flange Weld

The following work was performed for Weld No XI-2 - The weld between 16"X12" NPS eccentric reducer and 12" NPS flange:

- 1) Cut existing 16"X12" NPS eccentric reducer to flange weld.
- 2) Weld built up the existing flange end on as needed basis.
- 3) Beveled the flange end.
- 4) Beveled cut eccentric reducer end.
- 5) Made required circumferential butt weld.
- 6) Performed visual examination on the circumferential butt weld. Visual examination results acceptable.
- 7) Surface finished the circumferential butt weld in accordance with the ISI weld finish details.
- 8) Stamped ISI weld numbers adjacent to circumferential butt weld.
- 9) Performed radiographic (RT) examination on the final circumferential butt weld. Radiographic (RT) examination results acceptable.

8/7/07 Joe C. Hair 9496 N.A.B.I.N.S.C 94964



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: High Pressure Core Spray (HPCS) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Case(s): N-663</p> <p>6. Identification Of Components</p> | <p>Date: 07/31/2007
 Sheet: 3 Of 3
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2	WPPSS*	HPCS(1)-4CL2-P1	N/A	N/A	1983	Corrected (Repaired)	Yes, Code Class 2

7. Description Of Work Performed: Continuation From Sheet 2 of 3

- 10) Performed ultrasonic (UT) examination on the final circumferential butt weld for ISI (PSI). Ultrasonic (UT) examination results acceptable.
- 11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) Surface examination for ISI (PSI) is not required in accordance with ASME Section XI Code Case N-663 "Alternative Requirements for Classes 1 and 2 Surface Examinations Section XI, Division 1".

8/7/07 *Joe C. Hair* 9496 N. A.B., JMS, C 9496W



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Reactor Closed Cooling (Water) (RCC) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 07/28/2007
 Sheet: 1 Of 2
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RCC(3)-1 RCC(36)-1	WPPSS* WPPSS*	RCC(3)-1-P1 RCC(36)-1-P1	N/A N/A	N/A N/A	1983 1983	See Item 7 Below See Item 7 Below	Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work Performed: Replaced piping material. The replacement work was performed as follows:

DWG No RCC-831-27.29 - UPPER CONNECTION

- 1) Installed four (4) replacement studs.
- 2) Installed eight (8) replacement nuts.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

DWG No RCC-831-27.29 - LOWER CONNECTION

- 1) Installed four (4) replacement studs.
- 2) Installed eight (8) replacement nuts.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

DWG No RCC-830-22.26 - UPPER CONNECTION

- 1) Installed four (4) replacement studs.
- 2) Installed eight (8) replacement nuts.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 74 Psig Test Temperature: 64° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): NONE

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/28/07 Date 7/28/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/7/07 to 8/16/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joc. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 8/26/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Energy Northwest
 (b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
 (c) **Type Code Symbol Stamp:** Not Applicable
 (d) **Certificate Of Authorization No.:** Not Applicable
 (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Reactor Closed Cooling (Water) (RCC) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
 (b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
 (c) **Applicable ASME Section XI Code Case(s):** None
6. **Identification Of Components**

Date: 07/28/2007
Sheet: 2 Of 2
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RCC(3)-1 RCC(36)-1	WPPSS* WPPSS*	RCC(3)-1-P1 RCC(36)-1-P1	N/A N/A	N/A N/A	1983 1983	See Item 7 Below See Item 7 Below	Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work: Continuation From Sheet 1 of 2

DWG No RCC-830-22.26 - LOWER CONNECTION

- 1) Installed four (4) replacement studs.
- 2) Installed eight (8) replacement nuts.
- 3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.

8/6/07 J.C. Hair 9496 N. A, B, E, NS, C 9496W



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Process Sampling Radioactive (PSR) System.
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 06/27/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X77Ac PSR-V-X77A/1 PSR-V-X77A/1	JCI Target Rock Target Rock	PI(1)-4S-X77Ac 6 11	N/A N/A N/A	N/A N/A N/A	1983 1998 2007	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

- 7. Description Of Work:** Replaced existing valve PSR-V-X77A/1. The replacement work was performed as follows:
- 1) Removed existing valve PSR-V-X77A/1, Serial No 6, Model No 96T-001.
 - 2) Installed replacement valve PSR-V-X77A/1, Serial No 11, Model No 96T-001.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing ASME Code Stamped piping system in which the replacement valve PSR-V-X77A/1, Serial No 11, Model No 96T-001 was installed is Process Sampling Radioactive (PSR) System PI(1)-4S-X77Ac. This piping system is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) The replacement valve PSR-V-X77A/1, Serial No 11, Model No 96T-001 is certified to comply with ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NPV-1 Code Data Report for the replacement valve PSR-V-X77A/1, Serial No 11, Model No 96T-001.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/27/07 Date 6/27/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Repair/Replacement 1" NPS And Smaller _____ Commissions _____
 Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN No. 2-2134

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

Handwritten signature

- 1. Manufactured and certified by Target Rock; 1966E Broadhollow Road; E. Farmingdale, NY 11735
(name and address of N Certificate Holder) 6/27/07
- 2. Manufactured for Energy Northwest; North Power Plant Loop; Richland, WA
(name and address of Purchaser)
- 3. Location of installation Columbia Generating Station; North Power Plant Loop; Richland, WA
(name and address)
- 4. Model No., Series No., or Type 96T-001 Drawing 96T-001 Rev. D CRN N/A
- 5. ASME Code, Section III, Division 1: 1980 Winter 1981 1 None
(edition) (addenda date) (class) (Code Case no.)
- 6. Pump or valve Valve Nominal inlet size 1 Outlet size 1
(in.) (in.)
- 7. Material: Body SA479 316 Bonnet SA479 XM-19 Disc SA479 347 Bolting SA453 660

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disc Serial No.
11	N/A	71	119	116
12	N/A	78	121	123
N/A				

VALVE PSR-V-X77A/1, SIN 11

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

FORM NPV-1 (BACK - Pg. 2 of 2)

Certificate Holder's Serial No. 96T-001, s/n 11 & 12

8. Design conditions 1550 psi 575 °F or valve pressure class N/A (1)
 (pressure) (temperature)
9. Cold working pressure 3600 psi at 100 °F
10. Hydrostatic test 6575 psi. Disc differential test pressure N/A psi
11. Remarks: Clamp Ring SA479 316 S/N 721, 652
Indicator Tube SA479 316 S/N 5515, 5534
Lap Joint Stub End SA182 F316 S/N 21, 22, 23, 24
Lap Joint Flange SA182 F316 S/N 21, 22, 23, 24

CERTIFICATION OF DESIGN

Design Specification certified by Abbas A. Mostala P.E. State WA Reg. No. 28777
 Design Report certified by S. Karidas P.E. State NY Reg. No. 056047

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1947 Expires 12/12/2007

Date 5/10/2007 Name Target Rock Signed R. E. Glazier FOR
 (N Certificate Holder) (R. E. Glazier, QA Manager
 (authorized representative))

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of New York and employed by OneBeacon America Insurance Co. of Boston, MA have inspected the pump, or valve, described in this Data Report on 5/10/2007 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 5/10/07 Signed [Signature] Commissions N.Y. 5102
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Containment
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 07/04/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
Containment Equipment Hatch C-X-15	PDM	12764	790	N/A	1976	See Item 7 Below	Yes, Code Class MC

- 7. Description Of Work Performed:** Replaced nuts and bolts for the Containment Equipment Hatch C-X-15 bolted joint. The replacement work was performed as follows:
- 1) Performed VT-1 visual examination on replacement bolt for ISI (PSI). VT-1 visual examination results acceptable.
 - 2) Performed VT-3 visual examination on replacement bolt for ISI (PSI). VT-3 visual examination results acceptable.
 - 3) Installed one (1) replacement VT-1 and VT-3 visually examination bolt.
 - 4) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 38.73 Psig Test Temperature: 82° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): * VT-2 visual examination to confirm pressure boundary integrity of the Containment Equipment Hatch C-X-15 bolted joint was performed during 10CFR50, Appendix J Local Leak Rate Test (LLRT).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 7/5/07 Date 7/5/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/3/07 to 7/12/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N A B I N S, C 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/12/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Reactor Feedwater (RFW) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Case(s):** None

6. **Identification Of Components**

Date: 06/26/2007

Sheet: 1 Of 1

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
RFW-V-10B	Anchor Darling	1N257	N/A	N/A	1977	See Item 7 Below	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced studs and nuts for hinge pin cover for valve RFW-V-10B. The replacement work was performed as follows:

- 1) Remove existing studs and nuts from the valve hinge pin cover..
- 2) Performed VT-1 visual examination on replacement studs to satisfy ISI (PSI) requirements. VT-1 visual examination results acceptable.
- 3) Performed VT-1 visual examination on replacement nuts to satisfy ISI (PSI) requirements. VT-1 visual examination results acceptable.
- 4) Performed VT-1 visual examination on existing studs to satisfy ISI (PSI) requirements. VT-1 visual examination results acceptable.
- 5) Performed VT-1 visual examination on existing nuts to satisfy ISI (PSI) requirements. VT-1 visual examination results acceptable.
- 6) Reinstalled existing hinge pin cover on the valve.
- 7) Installed two (2) VT-1 visually examined replacement studs.
- 8) Installed two (2) VT-1 visually examined replacement nuts.
- 9) Reinstalled four (4) VT-1 visually examined existing studs.
- 10) Reinstalled four (4) VT-1 visually examined existing nuts.
- 11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): * The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/26/07 Date 6/26/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/12/07 to 7/2/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements

Date 7/2/07



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Containment Supply Purge (CSP) System/Process Instrument (PI) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Case(s):** None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-(IR-64)-1A CSP-RV-52 CSP-RV-52	JCI Lonergan Crosby	PI(1)-ST-(IR-64)-1A 7903330-2-2 N99933-00-0002	N/A N/A N/A	N/A N/A N/A	1983 1983 2006	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing relief valve CSP-RV-52. The replacement work was performed as follows:

- 1) Removed existing relief valve CSP-RV-52, Serial No 7903330-2-2.
- 2) Installed replacement relief valve CSP-RV-52, Serial No N99933-00-0002.
- 3) Installed replacement studs for replacement relief valve inlet joint.
- 4) Installed replacement nuts for replacement relief valve inlet joint.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing ASME Code Stamped piping system in which the replacement relief valve CSP-RV-52, Serial No N99933-00-0002 was installed is Containment Supply Purge (CSP) System/Process Instrument (PI) piping system PI(1)-ST-(IR-64)-1A. This piping system is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda requirements.
- 3) The replacement relief valve CSP-RV-52, Serial No N99933-00-0002 is certified to comply with ASME Section III, Code Class 2, 1995 Edition with 1996 Addenda requirements.
- 4) OEM/OES Lonergan relief valves are now being manufactured by OEM/OES Anderson Greenwood Crosby.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NV-1 Code Data Report for the replacement relief valve CSP-RV-52, Serial No N99933-00-0002.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/17/07 to 7/2/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N A B T N S C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 7/02/07

Duane Ship

6/29/07.

FORM NV-1, CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES

As required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093
(Name and Address of NV Certificate Holder)

Crosby Factory Order No. G000820000 Customer Order No. 00320228

2. Manufactured for ENERGY NORTHWEST
(Name and Address of Purchaser)

3. Location of Installation COLUMBIA GENERATING STA.
(Name and Address)

4. Valve 9511817D Orifice size 0.328 Nom. Inlet size 3/4 Outlet size 1
(Model No./Series No.) (in.) (in.) (in.)

5. ASME Code, Section III, Division 1: 1995 1996 2 --
(Edition) (Addenda Date) (Class) (Code Case No.)

6. Type SAFETY RELIEF Valve I.D./Tag No. CSP-RV-52
(Spring, Pilot or Power Operated)

150 20% OF S.P. 150 425 at 70 °F
(Set Pressure, psig) (Blowdown, psi) (Rated Relieving Temperature) (Hydro Test psig, Inlet)

7. Ident. N99933-00-0002 N/A DS-C99933 REV. A --- 2006
(Cert. Holder's serial no.) (CRN) (Drawing No.) (Nat'l Bd. No.) (Yr. Built)

8. Control Ring Settings N/A

9. Pressure Retaining Items: CSP-RV-52, SERIAL NO. N99933-00-0002

	Serial No. or Identification	Material Spec. Including Type or Grade	Tensile Strength (psi)
Body	---	---	---
Bonnet	---	---	---
Support Rods	---	---	---
Nozzle	---	---	---
Disc Insert	N99595-NHBR	ASME SA479 TYPE 316	75,000
	N95899-NHCG		
Spring Washer	N95899-NHCA	ASME SA193 GR. B6	110,000
Adjusting Bolt	N95900-08-1016	ASME SA193 GR. B6	110,000
Spindle	N95898-22-1037	ASME SA193 GR. B6	110,000
Spring	NX5485-0260	ASTM A313 TYPE 316	N/A
Bolting	---	---	---
Other Items			
Base	N900145-33-0006	ASME SA479 TYPE 316	75,000
Lap Jt. Stub End	N900342-31-0002	ASME SA182 TYPE 316	75,000
Lap Jt. Flange	N96542-59-0137	ASME SA182 TYPE 316	75,000
Cylinder	N900285-31-0002	ASME SA216 GR. WCB	70,000

10. Relieving capacity 244 SCFM AIR @ 60 DEG.F @ 10 overpressure as certified by the National Board 02/14/90
(steam or fluid, lb/hr) (date)

11. Remarks: _____

CERTIFICATE OF DESIGN

Design Specification certified by JACK R. COLE, JR. PE State WA Reg. No. 20653

Design Report certified by CHARLES R. DOWD PE State MA Reg. No. 39103

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

NV Certificate of Authorization No. N-1878 Expires 30-Sep-07

Date 19 July 06 Name Anderson Greenwood Crosby Signed Sybil A. Morris
Wrentham, MA (NV Certificate Holder) (Authorized Representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by HSB - CT of Hartford, CT have inspected the valve described in this Data Report on 7-12, 2006 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date July 19, '06 Signed [Signature] Commissions MA-1420 A, N, I
(Authorized Inspector) (Nat'l. Bd. (incl. Endorsements) and state or prov. and no.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Case(s): None
- 6. **Identification Of Components**

Date: 06/28/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4B MS-162(B) MS-162(B)	WPPSS* Pacific Scientific Pacific Scientific	MS(1)-4B-P1 9825 8766	N/A N/A N/A	N/A PSA-10 PSA-10	1983 1981 1981	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

- 7. Description Of Work Performed:** Replaced existing snubber for pipe support. The replacement work was performed as follows:
- 1) Removed existing snubber.
 - 2) Installed pretested replacement snubber.
 - 3) Torqued the fasteners to the required torque value.
 - 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(1)-4B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements.
- 5) ASME Section III, Code Class NF(1) replacement snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 8766.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 7/9/07

WOT No. 01107615 01

Dudip Supp

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*

As Required by the Provisions of the ASME Code Rules, Section III, Division 1 #10

6/29/07 #10

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 92803 EWZ
(Name and address of NPT Certificate Holder)

2. Manufacturer for ITT Grinnell Corporation 621 Dana Street N.E. Warren, Ohio 44481
(Name and address of purchaser or owner)

3. Location of Installation Unknown

4. Identification

(a) Component Support I. D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year
(1) 8761-8860	None	1801103-07-H	DR-1352-Rev. B	Linear	1	None	1981
(2)							
(3)							
(4)							
(5)	<u>MS-162(B), S/N 8766</u>						
(6)							
(7)							
(8)							
(9)							
(10)							

5. Remarks:

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter '77

Code Case No. 1644-7

Date 3/20/81 Signed Pacific Scientific by Paul A. Nason
(INPT Certificate Holder) (Date)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)

Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at:

Pacific Scientific

Filed Per NA 3256

Design Specifications Certified by (1) Leo E. Ay PE State California

Reg. No. 13533

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg. No. 13533

(1) name only, signature not required.

16
7 Oct 8-1152

FORM NF-1 (Back)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the Province of California and employed by ESBI&I Co. of Hartford, CT

3/20 have inspected the component supports described in this Data Report on 3/20 1981 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accord with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3/20/81

Signed William Meyer Commissions Ca #1494
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the Province of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 06/28/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4B MS-162(T) MS-162(T)	WPPSS* Pacific Scientific Pacific Scientific	MS(1)-4B-P1 9903 7121	N/A N/A N/A	N/A PSA-10 PSA-10	1983 1981 1980	See Item 7 Below Removed Installed	Yes, Code Class 2 No, Code Class 1 Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing snubber for pipe support. The replacement work was performed as follows:
- 1) Removed existing snubber.
 - 2) Installed pretested replacement snubber.
 - 3) Torqued the fasteners to the required torque value.
 - 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(1)-4B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements.
- 5) ASME Section III, Code Class NF(1) replacement snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 7121.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N A B T N S, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 7/9/07

WOT No 01107615 01

Quadrup Support

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

#10

1. Manufactured by Pacific Scientific 1346 S. State College Blvd Anaheim, CA 92803
(Name and address of NPT Certificate Holder)

6/29/07 E-WZ-210

2. Manufacturer for ITT Grinnell Corp. 621 Dana Street N.E. Warren, Ohio 44481
(Name and address of purchaser or owner)

3. Location of Installation Unknown

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Bui
-----------------------------------	----------------------------------	--	--	----------------------------------	--------------	------------------------	-----------------

(1) 7082-7137 None 1801103-07-E DR-1352-Rev. B Linear 1 None 1980

(2) _____

(3) _____

(4) _____

(5) MS-162(T), S/N 7121

(6) _____

(7) _____

(8) _____

(9) _____

(10) _____

5. Remarks: _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter '77
(Date)

Code Case No. 1644-7
Date 22 April 1980 Signed Pacific Scientific by Bill Jenkins
(NPT Certificate Holder)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)

Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at:
Pacific Scientific

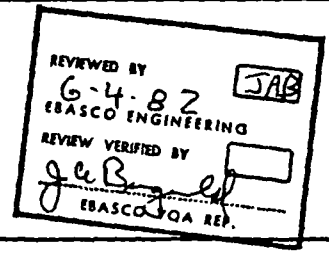
Filed Per NA 3256
Design Specifications Certified by (1) Leo E. Ay PE State California

Reg. No. 13533

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg. No. 13533

(1) List name only, signature not required.



* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in., (2) information in items 1, 2, 4c, 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of California and employed by HSBT&T Co. of Hartford, CT

_____ have inspected the component supports described in this Data Report on 4/23/80 19 __ and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4/23/80

Signed William Meyer Commissions Ca. # 1494
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ Province of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Date: 06/28/2007

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4A MS-91(E) MS-91(E)	WPPSS* Pacific Scientific Pacific Scientific	MS(1)-4A-P1 294 9891	N/A N/A N/A	N/A PSA-3 PSA-3	1983 1976 1979	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for pipe support. The replacement work was performed as follows:

- 1) Removed existing snubber.
- 2) Installed pretested replacement snubber.
- 3) Torqued the fasteners to the required torque value.
- 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(1)-4A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1974 Edition with Winter 1976 Addenda requirements.
- 5) ASME Section III, Code Class NF(1) replacement snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 9891.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.A.B.I.N.S.C 9496W
Inspector's Signature National Board, State, and Endorsements
Date 7/9/07

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS

As Required by the Provisions of the ASME Code Rules, Section III, Division 1 E-WY-52L

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 9: (Name and address of NPT Certificate Holder)

Manufacturer for ITT Grinnell Corp. 621 Dana Street N.E. Warren, Ohio 44481 (Name and address of purchaser or owner)

3. Location of Installation Unknown

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) 9867-9910	None	1801106-05-H	DR-1350- Rev. B	Linear	1	None	1979
(2)							
(3)							
(4)							
(5)	MS-9(E), SERIAL No. 9891						
(6)							
(7)							
(8)							
(9)							
(10)							

5. Remarks: 6/29/07

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition '74, Addenda Winter '76.

Code Case No. 1644-5 & 1686 Date 12 December 1979 Signed Pacific Scientific by [Signature] (NPT Certificate Holder)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports (NPT)

Symbol expires Aug. 4, 1981 (Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at:

Pacific Scientific

Filed Per NA 3256

Design Specifications Certified by (1) Leo E. Ay PE State: California

Reg. No. 13533

Stress Analysis Report or Load Capacity Data Sheets Certified by (1)

Leo E. Ay

PE State: California Reg. No. 13533

List name only, signature not required.

REVIEWED BY [Signature]

EBASCO ENGINEERING REVIEW VERIFIED BY [Signature]

EBASCO VQA REP.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in., (2) information in items 1, 2, 4c, 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by HSBI&I Co. of Hartford, CT have inspected the component supports described in this Data Report on 12/12 19 79 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 12/12/79

Signed William G. Mey Commissions A. J. Comm. & Ohio Comm.
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ and employed by _____ of _____ have compared the statements in this Data Report with the described component supports and that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Date: 06/28/2007

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4A MS-91(W) MS-91(W)	WPPSS* Pacific Scientific Pacific Scientific	MS(1)-4A-P1 3927 9881	N/A N/A N/A	N/A PSA-3 PSA-3	1983 1977 1979	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for pipe support. The replacement work was performed as follows:

- 1) Removed existing snubber.
- 2) Installed pretested replacement snubber.
- 3) Torqued the fasteners to the required torque value.
- 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(1)-4A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1974 Edition with Winter 1976 Addenda requirements.
- 5) ASME Section III, Code Class NF(1) replacement snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [X] Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 9881.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 7/9/07

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*

As Required by the Provisions of the ASME Code Rules, Section III, Division 1 *E-Wy-520*

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 91
(Name and address of NPT Certificate Holder)

Manufacturer for ITT Grinnell Corp. 621 Dana Street N.E. Warren, Ohio 44481
(Name and address of purchaser or owner)

3. Location of Installation Unknown

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) 9867-9910	None	1801106-05-H	DR-1350- Rev. B	Linear	1	None	1979
(2)							
(3)							
(4)							
(5)	<u>MS-91(W), SERIAL NO. 9881</u>						
(6)							
(7)							
(8)							
(9)				<u>Quadrup Supp</u>			
(10)							

5. Remarks: 6/29/07

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition '74, Addenda Winter '76.
(Date)

Code Case No. 1644-5 & 1686
 Date 12 December 1979 Signed Pacific Scientific by Bill Jenkins
(NPT Certificate Holder)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)

Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at:

Pacific Scientific

Filed Per NA 3256

Design Specifications Certified by (1) Leo E. Ay PE State California

Reg. No. 13533

Stress Analysis Report or Load Capacity Data Sheets Certified by (1)

Leo E. Ay

PE State California Reg. No. 13533

1 List name only, signature not required.

REVIEWED BY	<u>[Signature]</u>
EBASCO ENGINEERING	
REVIEW VERIFIED BY	<u>[Signature]</u>
EBASCO VQA REP.	

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in., (2) information in items 1, 2, 4c, 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by HSBI&I Co. of Hartford, CT have inspected the component supports described in this Data Report on 12/12 19 79 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date: 12/12/79

Signed: William G. Meyer Commissions A.2. Comm. ; Ohio Comm.
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ and employed by _____ of _____ have compared the statements in this Data Report with the described component supports and _____ that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date: _____

Signed: _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Main Steam (MS) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Case(s):** None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4A MS-954N MS-954N	WPPSS* Pacific Scientific Pacific Scientific	MS(1)-4A-P1 2366 12281	N/A N/A N/A	N/A PSA-3 PSA-3	1983 1977 1980	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing snubber for pipe support. The replacement work was performed as follows:

- 1) Removed existing snubber.
- 2) Installed pretested replacement snubber.
- 3) Torqued the fasteners to the required torque value.
- 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(1)-4A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements.
- 5) ASME Section III, Code Class NF(1) replacement snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 12281.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, T, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 7/9/07

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

CORRECTED REPORT

#3

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 92803
(Name and address of NPT Certificate Holder)

2. Manufacturer for ITT Grinnell Corporation 621 Dana Street N.E. Warren, Ohio 44481
(Name and address of purchaser or owner)

3. Location of Installation Unknown E-WY-340

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) <u>12203-</u>	<u>None</u>	<u>1801106-05-J</u>	<u>DR-1350-Rev. B</u>	<u>Linear</u>	<u>1</u>	<u>None</u>	<u>1980</u>
(2) <u>12285</u>							
(3)							
(4)							
(5) <u>MS-954N, SERIAL No. 12281</u>							
(6)							
(7)							
(8)				<u>Supp</u>			
(9)				<u>6/29/07</u>			
(10)							

5. Remarks: Corrected to include Authorized Nuclear Inspector's commission number

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter '77
Code Case No. 1644-7 (Date)

Date 5-21-80 Signed Pacific Scientific by D. J. G...
(NPT Certificate Holder)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)

Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at:

Pacific Scientific

Filed Per NA 3256

Design Specifications Certified by (1) Leo E. Ay PE State California

Reg. No. 13533

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg. No. 13533

1) List name only, signature not required.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in., (2) information in items 1, 2, 4c, 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM NF-1 (Back)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State Province of California and employed by ESBI&I Co. of Hartford, CT

_____ have inspected the component supports described in this Data Report on 5/21 1980 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 5/21/80

Signed William Meyer Commissions Ca. #1494
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Date: 06/28/2007

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4B MS-177(S) MS-177(S)	WPPSS* Pacific Scientific Pacific Scientific	MS(1)-4B-P1 224 10641	N/A N/A N/A	N/A PSA-3 PSA-3	1983 1976 1980	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for pipe support. The replacement work was performed as follows:

- 1) Removed existing snubber.
- 2) Installed pretested replacement snubber.
- 3) Torqued the fasteners to the required torque value.
- 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(1)-4B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1974 Edition with Winter 1976 Addenda requirements.
- 5) ASME Section III, Code Class NF(1) replacement snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 10641.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 7/9/07

W07 No. 01107615 01

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS

As Required by the Provisions of the ASME Code for Construction III, Division 1 E-WZ-79C

Manufactured by Pacific Scientific 1345 S. State College Blvd. Anaheim, Ca. 92803
(Name and address of NPT Certificate holder)

Manufacturer for ITT Grinnell Corp. 621 Dana Street NE Warren, Ohio 44481
(Name and address of purchaser or owner)

Location of Installation Unknown

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) 10629-10661	None	1801106-05-H	DR-1350-Rev. B	Linear	1	None	1980
(2)							
(3)							
(4)							
(5)	MS-177(S), SERIAL NO. 10641						
(6)							
(7)							
(8)				Audip Supb			
(9)							
(10)					6/29/07		

5. Remarks:

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1974, Addenda Winter '76 Code Case No. 1644-5 & 1686 (Date)

Date 25 January 1980 Signed Pacific Scientific by Bill Jenkins (NPT Certificate holder)

Our ASME Certificate of Authorization No. 1198 to use the Component Supports (NPT)

Symbol expires Aug. 4, 1981 (Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at: Pacific Scientific

Filed Per NA 3256

Design Specifications Certified by (1) Leo E. Ay PE State California

Reg. No. 13533

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE California Reg. No. 13533

(1) List name only, signature not required.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of New York and employed by HSB&I of Hartford, CT

_____ have inspected the component supports described in this Data Report on 1/25

19 80 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1/25/80

Signed William Meyer Commissions N.Y. Comm #2770 / Ohio Comm
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Main Steam (MS) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Case(s):** None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4C MS-27(T) MS-27(T)	WPPSS* Pacific Scientific Pacific Scientific	MS(1)-4C-P3 681 8860	N/A N/A N/A	N/A PSA-10 PSA-10	1983 1977 1981	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing snubber for pipe support. The replacement work was performed as follows:

- 1) Removed existing snubber.
- 2) Installed pretested replacement snubber.
- 3) Torqued the fasteners to the required torque value.
- 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(1)-4C-P3. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements.
- 5) ASME Section III, Code Class NF(1) replacement snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 8860.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, I, NS, C 9496W
Inspector's Signature National Board, State, and Endorsements
Date 7/9/07

W07 NO 0110761501

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code Rules, Section III, Division 1 #10

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 92803 EWZ
(Name and address of NPT Certificate Holder)

2. Manufacturer for ITT Grinnell Corporation 621 Dana Street N.E. Warren, Ohio 44481
(Name and address of purchaser or owner)

3. Location of Installation Unknown

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capa- city Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year
(1) 8761-8860	None	1801103-07-H	DR-1352-Rev. B	Linear	1	None	1981
(2)							
(3)							
(4)							
(5)	<u>MS-27(T), SERIAL NO. 8860</u>						
(6)							
(7)							
(8)							
(9)				<u>Audip Sup</u>			
(10)							

5. Remarks: 6/29/07

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construct of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter '77
Code Case No. 1644-7 (Date)
Date 3/20/81 Signed Pacific Scientific by Paulie A. Norton
(NPT Certificate Holder)
Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)
Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific
Stress Report or Load Capacity Data Sheets on File at:
Pacific Scientific
Filed Per NA 3256
Design Specifications Certified by (1) Leo E. Ay PE State California
Reg. No. 13533
Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay
PE State California Reg. No. 13533

(1) name only, signature not required.

16
11-11-82

FORM NF-1 (Back)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the Province of California and employed by HSBI&I Co. of Hartford, CT

3/20 have inspected the component supports described in this Data Report on 3/20 1981 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3/20/81

Signed William Meyer Commissions Ca #1494
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the Province of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Main Steam (MS) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Case(s):** None
- 6. **Identification Of Components**

Date: 06/28/2007
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4C MS-27(B) MS-27(B)	WPPSS* Pacific Scientific Pacific Scientific	MS(1)-4C-P3 714 8769	N/A N/A N/A	N/A PSA-10 PSA-10	1983 1977 1981	See Item 7 Below Removed Installed	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing snubber for pipe support. The replacement work was performed as follows:
- 1) Removed existing snubber.
 - 2) Installed pretested replacement snubber.
 - 3) Torqued the fasteners to the required torque value.
 - 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(1)-4C-P3. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements.
- 5) ASME Section III, Code Class NF(1) replacement snubber for ASME Section III, Code Class NF(2) application.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 8769.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.I.N.S.C 9496W
Inspector's Signature National Board, State, and Endorsements
Date 7/9/07

WOT No. 01107615 01

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code Rules, Section III, Division 1 #10

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 92803 EWZ
(Name and address of NPT Certificate Holder)

2. Manufacturer for ITT Grinnell Corporation 621 Dana Street N.E. Warren, Ohio 44481
(Name and address of purchaser or owner)

3. Location of Installation Unknown

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year
(1) 8761-8860	None	1801103-07-H	DR-1352-Rev. B	Linear	1	None	1981
(2)							
(3)							
(4)	<u>MS-27(B), SERIAL NO. 8769</u>						
(5)							
(6)							
(7)							
(8)				<u>Always Supp</u>			
(9)							
(10)					<u>6/29/07</u>		

5. Remarks:

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter '77
Code Case No. 1644-7 (Date)
Date 3/20/81 Signed Pacific Scientific by Frank A. Norton
(NPT Certificate Holder)
Our ASME Certificate of Authorization No. 1198 to use the Component Supports
(NPT)
Symbol expires Aug. 4, 1981
(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific
Stress Report or Load Capacity Data Sheets on File at:
Pacific Scientific
Filed Per NA 3256
Design Specifications Certified by (1) Leo E. Ay PE State California
Reg. No. 13533
Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay
PE State California Reg. No. 13533

(1) name only, signature not required.

10
Oct 8-1182

FORM NF-1 (Back)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the Province of California and employed by ESBI&I Co. of Hartford, CT

3/20 have inspected the component supports described in this Data Report on 3/20 1981 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accord with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the compo supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3/20/81

Signed William Meyer Commissions Ca #1494
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the Province of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and st that the parts referred to as data items _____, not included in the certificate of shop inspection, have inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accn ce with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the compon supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any perso injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 08/20/2007

Sheet: 1 Of 1

Unit: Not Applicable

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4	WPPSS*	MS(9)-4-P1	N/A	N/A	1983	See Item 7 Below	Yes, Code Class 1
MS-1368-13	Pacific Scientific	2470	N/A	PSA-1/2	1978	Removed	Yes, Code Class 1
MS-1368-13	Pacific Scientific	16711	N/A	PSA-1/2	1982	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for pipe support. The replacement work was performed as follows:

- 1) Removed existing snubber.
- 2) Installed pretested replacement snubber.
- 3) Torqued the fasteners to the required torque value.
- 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(9)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1978 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Report for the replacement snubber, Serial No 16711.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 8/20/07 Date 8/20/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 8/21/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.A.B.I., N.S.C. 9496W
Inspector's Signature National Board, State, and Endorsements
Date 8/21/07

WOT No. 01107615-01

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS

As Required by the Provisions of the ASME Code Rules, Section III, Division 1 E-WZ-550

~~Kin-Tech Division~~

Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 92803

(Name and address of NPT Certificate Holder)

Manufacturer for ITT Grinnell Corporation 621 Dana Street N.E. Warren, Ohio 44481

(Name and address of purchaser or owner)

Unknown

3. Location of Installation

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capac- ity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) 16676	None	1801104-07-J	DR 1413 Rev.0	Linear	1	None	1982
(2) thru							
(3) 16716							
(4)							
(5)	MS-1368-13, SERIAL NO. 16711						
(6)	Kulap Supp						
(7)							
(8)							
(9)							6/29/01
(10)							

5. Remarks: Inspection Test Reports, CMTR's and Certificate of Conformance reviewed and meet ASME Sec III 1974 Edition, Summer '76 Addenda and Code Case 1644-6.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977 Addenda Winter '78

Code Case No. 1644-7

Date 9-21-82 Signed Pacific Scientific

(NPT Certificate Holder)

by Rosalie G. Nava (Date)

Our ASME Certificate of Authorization No. 1198

to use the "NPT"

(NPT)

Symbol expires Aug. 4, 1984

(Date)

CERTIFICATION OF DESIGN

Design Information on File at

Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at:

Pacific Scientific

Filed Per NCA 3256

Design Specifications Certified by (1) Leo E. Ay

PE State California

Reg. No. 13533

REVIEWED BY

JAB

1-20-83
EBASCO ENGINEERING

REVIEW VERIFIED BY

J.B. Boyd
EBASCO VQA REP.

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California

Reg. No. 13533

ITT GRINNELL CORP.
Warren Quality Assurance

(1) Last name only, signature not required.

OCT 05 1982

Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in., (2) information in items 1, 2, 4, 6 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of OHIO and employed by HSBI&T Co. of Hartford, CT have inspected the component supports described in this Data Report on SEP. 21 1982

I do and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date SEP. 21 1982

Signed *Eugene M. Regala* Commissions GA-1513/Ohio Commission
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ and employed by _____ of _____ have compared the statements in this Data Report with the described component supports and state

that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 06/28/2007

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
MS(18)-2-12 MSRV-3B-2 MSRV-3B-2	WPPSS* Pacific Scientific Pacific Scientific	MS(18)-2-12-P1 316 9841	N/A N/A N/A	N/A PSA-10 PSA-10	1983 1979 1981	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for pipe support. The replacement work was performed as follows:

- 1) Removed existing snubber.
- 2) Installed pretested replacement snubber.
- 3) Torqued the fasteners to the required torque value.
- 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Main Steam (MS) piping system MS(18)-2-12-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 9841.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496W
Inspector's Signature National Board, State, and Endorsements

Date 7/9/07

WOT No. 01167615 01

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code Rules, Section III, Division 1 470

E-WZ-767-00

M. Manufactured by Pacific Scientific 1346 S. State College Blvd Anaheim, CA 92803
(Name and address of NPT Certificate Holder)
L. Manufacturer for ITT Grinnell Corp. 621 Dana Street N.E. Warren, Ohio 44481
(Name and address of purchaser or owner)

Location of Installation Unknown

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) 9775-9802,	None	1801103-07-H	DR-1352-Rev. B	Linear	1	None	1981
(2) 9803-9854,	"	"	"	"	"	"	"
(3) 9855-9868	"	"	"	"	"	"	"

(4) _____
(5) _____
(6) MSRV-3B-2, SERIAL No. 9841
(7) _____
(8) _____

(9) Headup Supp
(10) 6/29/07
Remarks: _____

REVIEWED
8-30-83 BY [Signature]
SEALING ENGINEERING
[Signature]
ASME VQA REP.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter '77, Code Case No. 1644-7 (Date)
Date 17 March 1981 Signed Pacific Scientific by Bill Jenkins
(NPT Certificate Holder)
Our ASME Certificate of Authorization No. 1198 to use the Component Supports (NPT)
Symbol expires Aug. 4, 1981 (Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific
Stress Report or Load Capacity Data Sheets on File at:
Pacific Scientific
Filed Per NA 3256
Design Specifications Certified by (1) Leo E. Ay PE State California
Reg. No. 13533
Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay
PE State California Reg. No. 13533

(1) Last name only, signature not required.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by HSB&T Co. of Bartford, CT

have inspected the component supports described in this Data Report on 3/17 1981 and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date: 3/17/81

Signed: William Meyer Commissions: C. #1494
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date: _____

Signed: _____ Commissions: _____
(Nat'l Bd., State, Prov., and No.)

REVIEWED
8.30.83 BY [Signature]
SEASCO ENGINEERING
REVIEW VERIFIED BY
[Signature]
SEASCO QA REP



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

Date: 06/28/2007

Sheet: 1 Of 1

Unit: Not Applicable

4. Identification Of System: Reactor Recirculation Cooling (RRC) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
B35-G001A RRC-SA-4 RRC-SA-4	WPPSS* Pacific Scientific Pacific Scientific	B35-G001A-P1 618 1254	N/A N/A N/A	N/A PSA-100 PSA-100	1983 1979 1981	See Item 7 Below Removed Installed	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for pipe support. The replacement work was performed as follows:

- 1) Removed existing snubber.
- 2) Installed pretested replacement snubber.
- 3) Torqued the fasteners to the required torque value.
- 4) Performed visual examination on the installed replacement snubber. Visual examination results acceptable.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) * Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest (EN) in 1999.
- 3) The existing ASME Code Stamped piping system in which the replacement snubber was installed is Reactor Recirculation Cooling (RRC) piping system G35-G001A-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
- 4) The replacement snubber is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [X] Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached NF-1 Code Data Reports for the replacement snubber, Serial No 1254.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/29/07 Date 6/29/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/14/07 to 7/9/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.A.B.I.N.S.C 9496W
Inspector's Signature National Board, State, and Endorsements
Date 7/9/07

W07 No. 01107615 01

As Required by the Provisions of the ASME Code Rules, Section III, Division 1 [#] E-WY-05

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 92803
(Name and address of NPT Certificate Holder)

2. Manufacturer for ITT Grinnell Corporation 621 Dana Street N.E. Warren, Ohio 44481
(Name and address of purchaser or owner)

3. Location of Installation Unknown

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) 1254 -	None	1801119-09-F	DR 1418 Rev.0	Linear	1	None	1981
(2) 1255							
(3)							
(4)							
(5)	<u>RRC-SA-4, SERIAL No. 1254</u>						
(6)							
(7)							
(8)				<u>Audip Supb</u>			
(9)							
(10)				<u>6/29/07</u>			

5. Remarks:

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter '77.

Code Case No. 1644-7
Date 10/22/81 Signed Pacific Scientific by Rosalie A. Nance
(NPT Certificate Holder) (Date)

Our ASME Certificate of Authorization No. 1198 to use the Component Support (NPT)

Symbol expires Aug. 4, 1984 (Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at: Pacific Scientific

Filed Per NA 3256
Design Specifications Certified by (1) Leo E. Ay PE State California

Reg. No. 13533 ITT GRINNELL CORP. Warren Quality Assurance

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

State California Reg. No. 13533 JAN 6 1982

(1) List name only, signature not required.

Multiple sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in., (2) information items T, Z, 4c, 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

REVIEWED BY DS

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of California and employed by HSBI&I Co. of Hartford, CT

have inspected the component supports described in this Data Report on NOV. 10, 81 19__ and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date NOV. 10, 1981

Signed *Augustine M. Regole*

Commissions CA-1513
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ and employed by _____ of _____

_____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Control Rod Drive (CRD)
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 10/21/06
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	7028	N/A	N/A	1975	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	7028	N/A	N/A	1975		Yes, Code Class 1
CT&F	General Electric	A9302	N/A	N/A	1996		Yes, Code Class 1

- 7. Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 7028. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
 - 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 7028. Liquid penetrant (PT) examination results unacceptable.
 - 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9302.
 - 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5608.
 - 5) Reinstalled existing ring flange Serial No 2281.
 - 6) Reinstalled existing piston tube nut Serial No 2732.
 - 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 7028 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9302 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9302.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9302.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions WA 12723 N. I.
 Inspector's Signature National Board, State, and Endorsements
 Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Philip S. [Signature]
10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9302 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D.L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By [Signature]
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 [Signature] NC 856
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location (Top Bottom, Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) _____
 (b) _____
 If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. # bar give dimensions, # bolts, describe or sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb
 8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) Top, bottom, ends _____
 (b) Channel _____
 If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb
 14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain) Number Dia. or Size Type Material Thickness Reinforcement Material How Attached

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)

3901 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9302 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

(Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F316
 3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.

3. Plug 159A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD

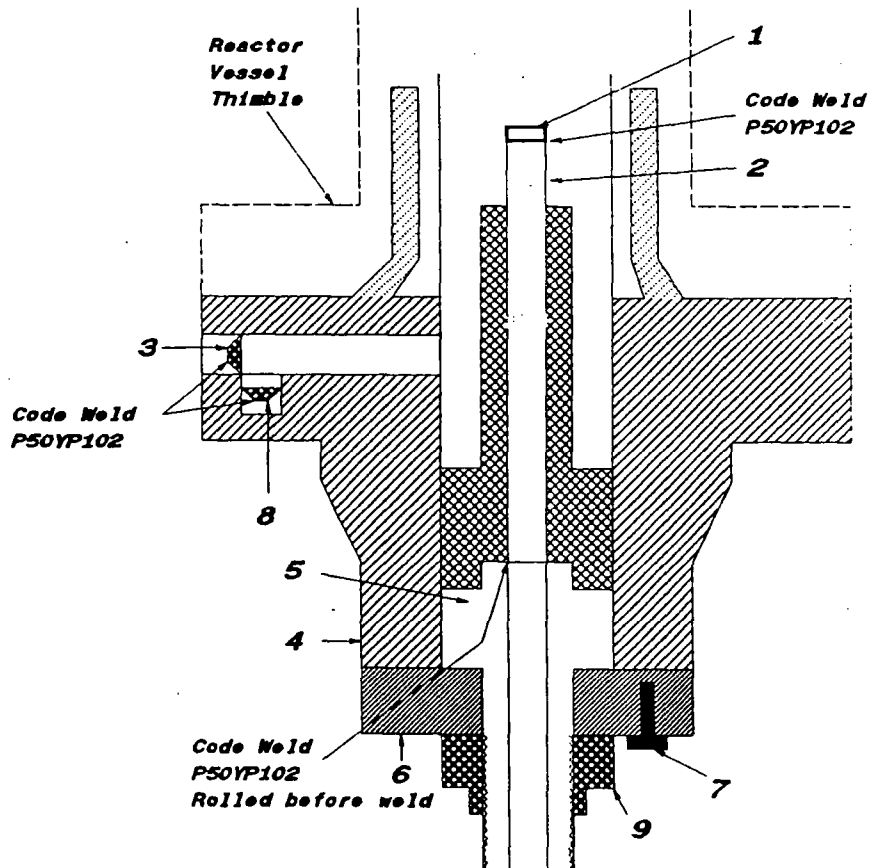
5. Head 129B3539P005
 SA182 - F304
 7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.

9. Nut 114B5460P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 10/21/06

Sheet: 1 Of 1

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD)

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6021	N/A	N/A	1974	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	6021	N/A	N/A	1974		Yes, Code Class 1
CT&F	General Electric	A9303	N/A	N/A	1996		Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 6021. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6021. Liquid penetrant (PT) examination results unacceptable.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9303.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5487.
- 5) Reinstalled existing ring flange Serial No 2081.
- 6) Reinstalled existing piston tube nut Serial No 2927.
- 7) Reinstalled existing ring flange cap screws.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6021 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9303 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9303.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9303.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Ramprasad S. Sachi Commissions W12723 N.I.
 Inspector's Signature National Board, State, and Endorsements
 Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Richard S. Gipe
10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9303 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *ES Bayart*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 *Thomas Furr* NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Allyp Supt
10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9303 Nat'l Bd. No. N/A

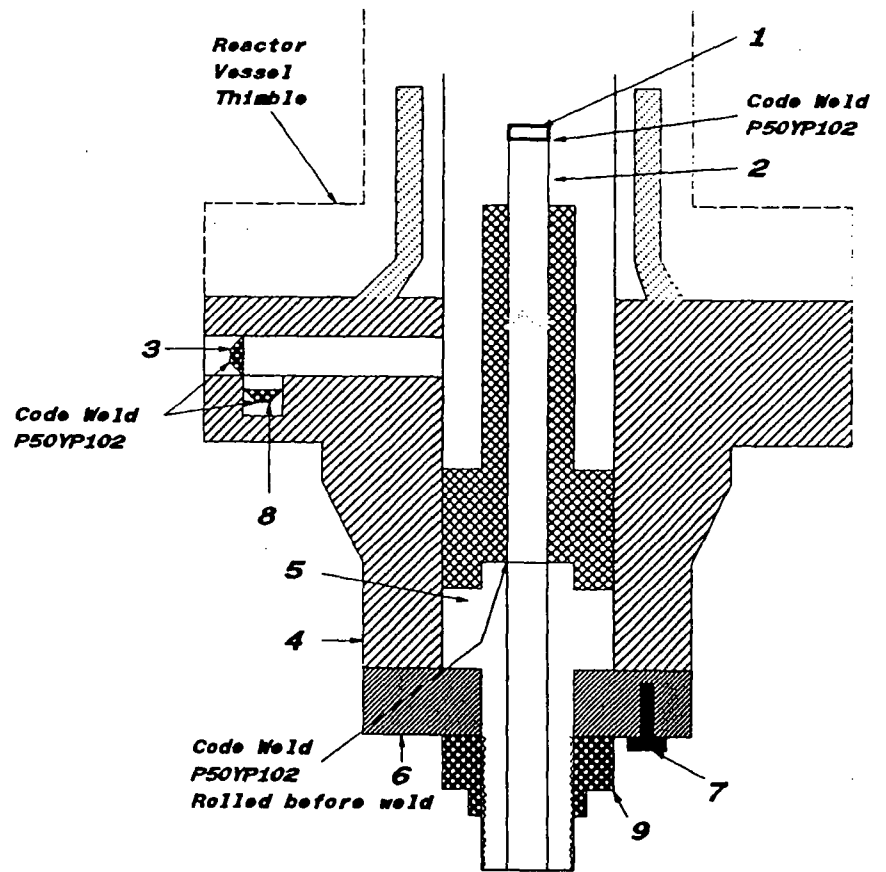
(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

- 1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD
- 2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.
- 3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD
- 4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD
- 5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.
- 6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID
- 7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle
- 8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.
- 9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 10/21/06

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6505	N/A	N/A	1975	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	6505	N/A	N/A	1975		Yes, Code Class 1
CT&F	General Electric	A9294	N/A	N/A	1996		Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6505. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6505. Liquid penetrant (PT) examination results unacceptable.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9294.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5314.
- 5) Reinstalled existing ring flange Serial No 2551.
- 6) Reinstalled existing piston tube nut Serial No 5314.
- 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6505 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9294 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9294.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: P_{sig} Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9294.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions W12723 N. I.
 Inspector's Signature National Board, State, and Endorsements
 Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Delroy King
10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9294 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *CB*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2

Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1

Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 *Thomas Furr* NC 856
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location (Top Bottom, Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) _____
 (b) _____
 If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogree and weld, bar, etc. if bar give dimensions, if bolts, describe or sketch)
 Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) Top, bottom, ends _____
 (b) Channel _____
 If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-lb

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

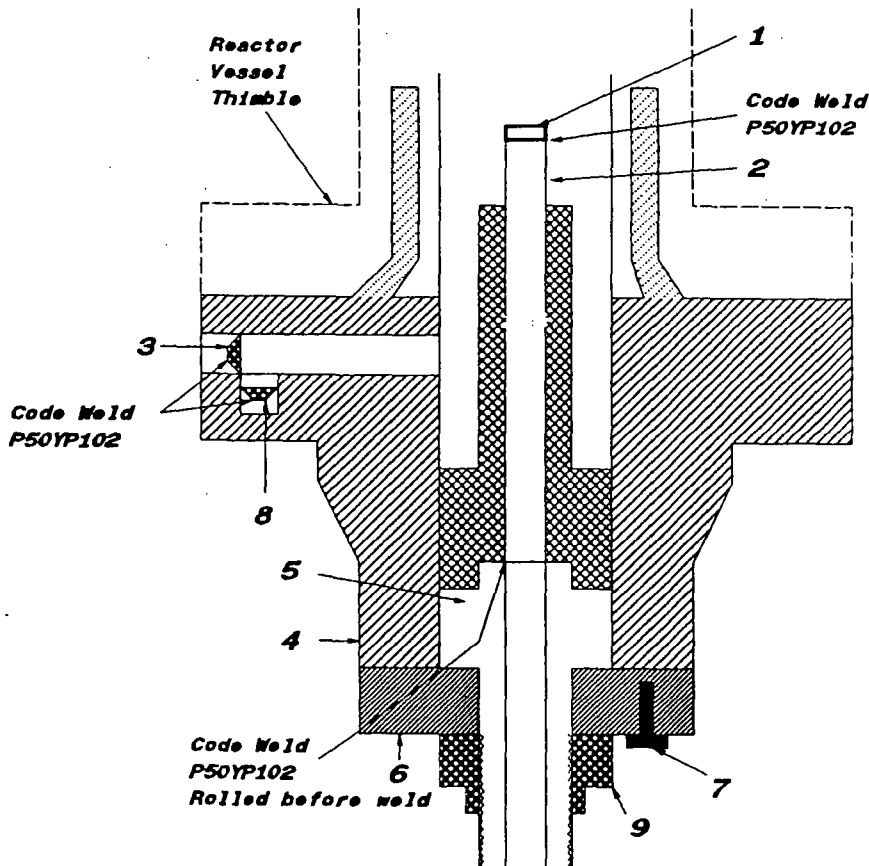
WOT NO. 01108551 IS

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Philip Swep
10/24/06

1. Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)
- (b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)
2. Identification - Certificate Holder's S/N of Part : A9294 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson
- (b) Description of Part Inspected: Cylinder Tube & Flange
- (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1
3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.
3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.
9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 10/21/06

Sheet: 1 Of 1

Unit: Not Applicable

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD)

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6433	N/A	N/A	1974	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	6433	N/A	N/A	1974		Yes, Code Class 1
CT&F	General Electric	A9317	N/A	N/A	1996		Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 6433. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6433. Liquid penetrant (PT) examination results unacceptable.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9317.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5342.
- 5) Reinstalled existing ring flange Serial No 2093.
- 6) Reinstalled existing piston tube nut Serial No 3062.
- 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6433 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9317 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9317.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9317.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions U12723 N.I.
 Inspector's Signature National Board, State, and Endorsements
 Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Richard Supt
10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9317 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *C. S. Bennett*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 *Thomas J. ...* NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain) _____ Number _____ Dia. or Size _____ Type _____ Material _____ Thickness _____ Reinforcement Material _____ How Attached _____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - if Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

WOT No. 01108357 16

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)

Judip Supb
10/24/06

3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9317 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

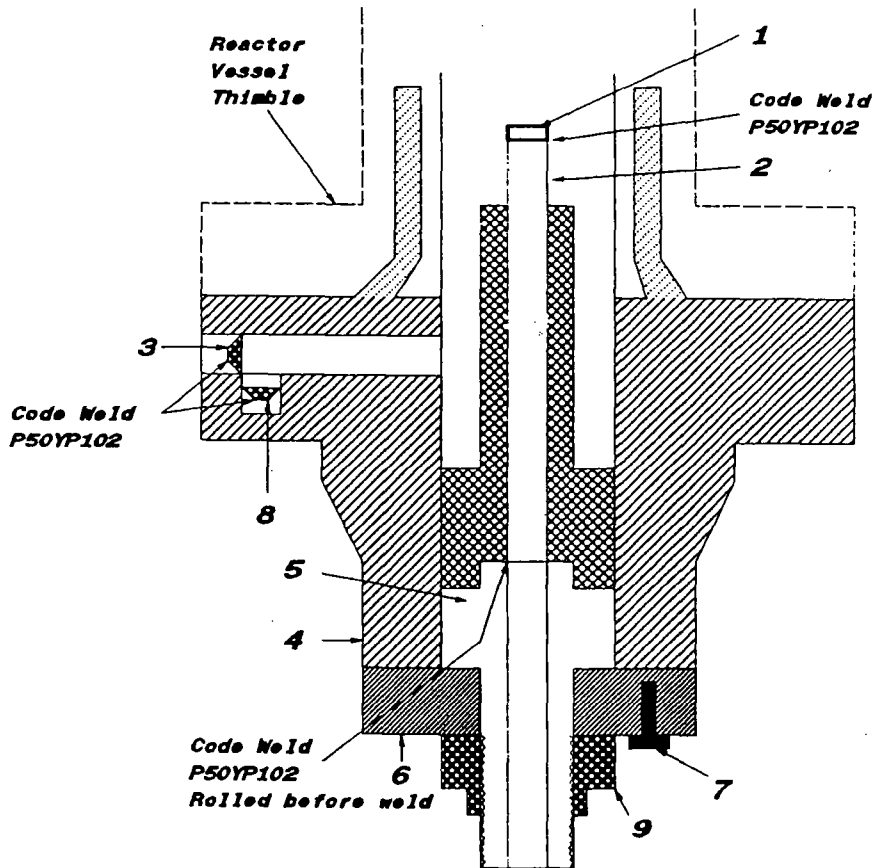
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 10/21/06

Sheet: 1 Of 1

Unit: Not Applicable

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD)

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Code Case(s):** None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6243	N/A	N/A	1974	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	6243	N/A	N/A	1974		Yes, Code Class 1
CT&F	General Electric	A9308	N/A	N/A	1996		Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 6243. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6243 was not required. The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6243 was visually unacceptable.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9308.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 3219.
- 5) Reinstalled existing ring flange Serial No 2349.
- 6) Reinstalled existing piston tube nut Serial No 2896.
- 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6243 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9308 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9308.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9308.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions W12323 N.I.
 Inspector's Signature National Board, State, and Endorsements
 Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Rudip Supb
10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9308 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By C. Baggett
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29-96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29 96 Thomas Turner NC 856
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)
5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____
6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
- | | | | | | | | | |
|----------------------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|--------------------------------------|
| Location (Top
Bottom, Ends) | Thickness | Crown
Radius | Knuckle
Radius | Elliptical
Ratio | Concial
Apex Angle | Hemispherical
Radius | Flat
Diameter | Side to Press.
(conv. or conc.) |
| (a) _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| (b) _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
- If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)
7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. if bar give dimensions, if bolts, describe or sketch)
8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F
 Drop Weight _____ ft-lb
 Charpy Impact _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
- Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____
10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)
12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____
13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
- | | | | | | | | | |
|-----------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|--------------------------------------|
| Location | Thickness | Crown
Radius | Knuckle
Radius | Elliptical
Ratio | Concial
Apex Angle | Hemispherical
Radius | Flat
Diameter | Side to Press.
(conv. or conc.) |
| (a) Top, bottom, ends | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| (b) Channel | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
- If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)
14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F
 Drop Weight _____ ft-lb
 Charpy Impact _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____
16. Nozzles: Purpose (Inlet, Outlet, Drain) _____ Number _____ Dia. or Size _____ Type _____ Material _____ Thickness _____ Reinforcement Material _____ How Attached _____
17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____
18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

Richard S. Smith
 10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9308 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F316
 3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.

3. Plug 159A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD

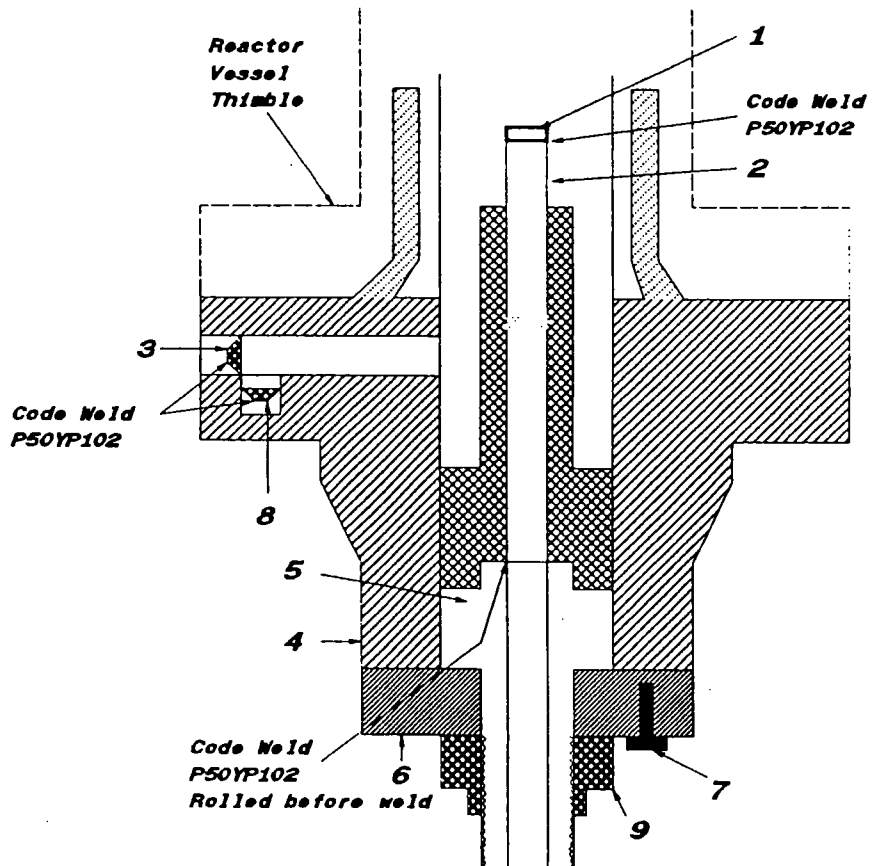
5. Head 129B3539P005
 SA182 - F304
 7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.

9. Nut 114B5460P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 10/21/06

Sheet: 1 Of 1

Unit: Not Applicable

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6431	N/A	N/A	1974	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	6431	N/A	N/A	1974		Yes, Code Class 1
CT&F	General Electric	A9305	N/A	N/A	1996		Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6431. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6431. Liquid penetrant (PT) examination results unacceptable.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9305.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5448.
- 5) Reinstalled existing ring flange Serial No 2038.
- 6) Reinstalled existing piston tube nut Serial No 2464.
- 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6431 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9305 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9305.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9305.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Ramkrishna S. Saha Commissions WA 12723 N.I.
 Inspector's Signature National Board, State, and Endorsements
 Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Handwritten signature
10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9305 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By C. L. Baggett
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29-96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29-96 Inspector's Signature NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location (Top Bottom, Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) _____
 (b) _____
 If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)
 Drop Weight _____ ft-lb
 Charpy Impact _____

8. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) Top, bottom, ends _____
 (b) Channel _____
 If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)
 Drop Weight _____ ft-lb
 Charpy Impact _____

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain) _____ Number _____ Dia. or Size _____ Type _____ Material _____ Thickness _____ Reinforcement Material _____ How Attached _____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Deirdre Supt
 10/24/06

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9305 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F316
 3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.

3. Plug 159A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD

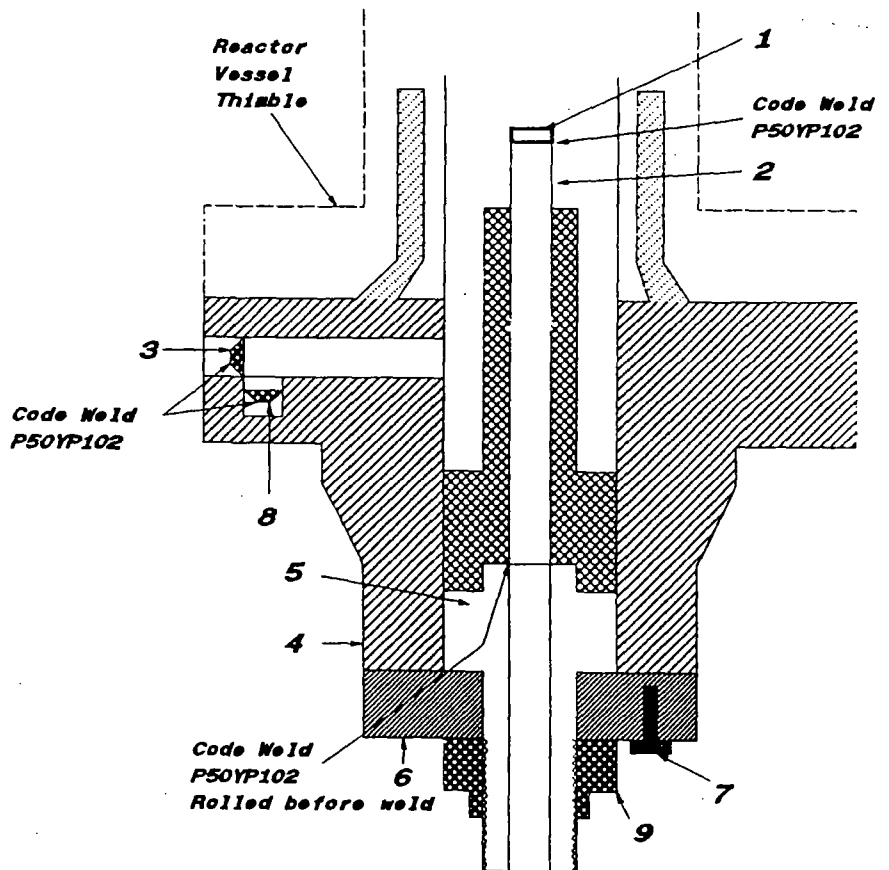
5. Head 129B3539P005
 SA182 - F304
 7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.

9. Nut 114B5460P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6542	N/A	N/A	1974	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	6542	N/A	N/A	1974		Yes, Code Class 1
CT&F	General Electric	A9297	N/A	N/A	1996		Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6542. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6542. Liquid penetrant (PT) examination results unacceptable.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9297.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5137.
- 5) Reinstalled existing ring flange Serial No 1841.
- 6) Reinstalled existing piston tube nut Serial No 2278.
- 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6542 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9297 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9297.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9297.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Alwayne L. Sichi Commissions WA 12723 N.T.
 Inspector's Signature National Board, State, and Endorsements
 Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Thadip Supt
10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9297 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *CS Baybutt*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 *Thomas Lee* NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-lb

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-lb

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain) _____ Number _____ Dia. or Size _____ Type _____ Material _____ Thickness _____ Reinforcement Material _____ How Attached _____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WOT No. 0110835724

1. Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)

3901 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

David S. Siple
10/24/06.

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9297 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

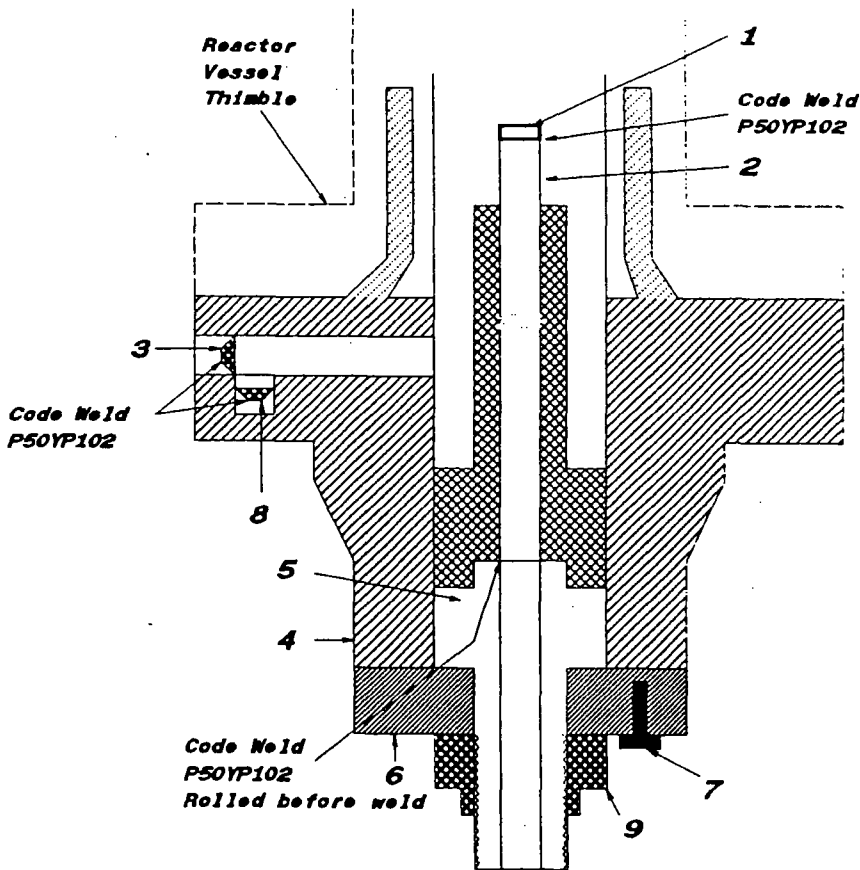
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 10/21/06

Sheet: 1 Of 1

Unit: Not Applicable

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6319	N/A	N/A	1974	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	6319	N/A	N/A	1974		Yes, Code Class 1
CT&F	General Electric	A9417	N/A	N/A	1996		Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6319. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6319. Liquid penetrant (PT) examination results unacceptable, however the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6319 was unacceptable being out of roundness.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9417.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5155.
- 5) Reinstalled existing ring flange Serial No 1849.
- 6) Reinstalled existing piston tube nut Serial No 2490.
- 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6319 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9417 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9417.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9417.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions WA 12723 N.I.
Inspector's Signature National Board, State, and Endorsements
Date 12/8/06

WOT No. 01108357 26

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Delip Singh
10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9417 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 . Addenda Date W75 . Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By CS Buzzitt
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29-96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29-96 Date *Shirley Furr* Inspector's Signature NC 856 National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F
Drop Weight _____ Charpy Impact _____ ft-lb

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F
Drop Weight _____ Charpy Impact _____ ft-lb

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

Quay Sup 5
 10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9417 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 . Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F316
 3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.

3. Plug 159A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD

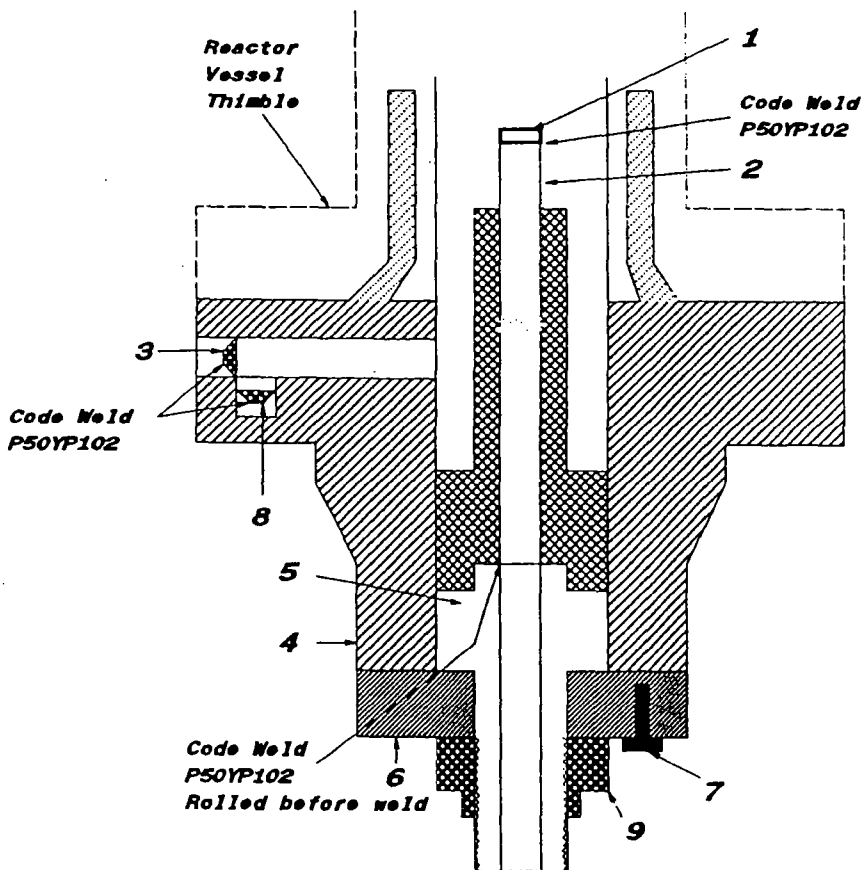
5. Head 129B3539P005
 SA182 - F304
 7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.

9. Nut 114B5460P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest

Date: 10/21/06

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. **Plant:** Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD)

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6592	N/A	N/A	1975	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	6592	N/A	N/A	1975		Yes, Code Class 1
CT&F	General Electric	A9315	N/A	N/A	1996		Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 6592. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6592 was not required. The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6592 was visually unacceptable being out of roundness.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9315.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5967.
- 5) Reinstalled existing ring flange Serial No 2810.
- 6) Reinstalled existing piston tube nut Serial No 2636.
- 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6592 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9315 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9315.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
 Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9315.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/12/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions WA 12725 N.I.
 Inspector's Signature National Board, State, and Endorsements
 Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Dudip Supt
10/24/06

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9315 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *CS Boyett*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 *Thomas Furr* NC 856
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Detrop Singh
 10/24/06

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9315 Nat'l Bd. No. N/A

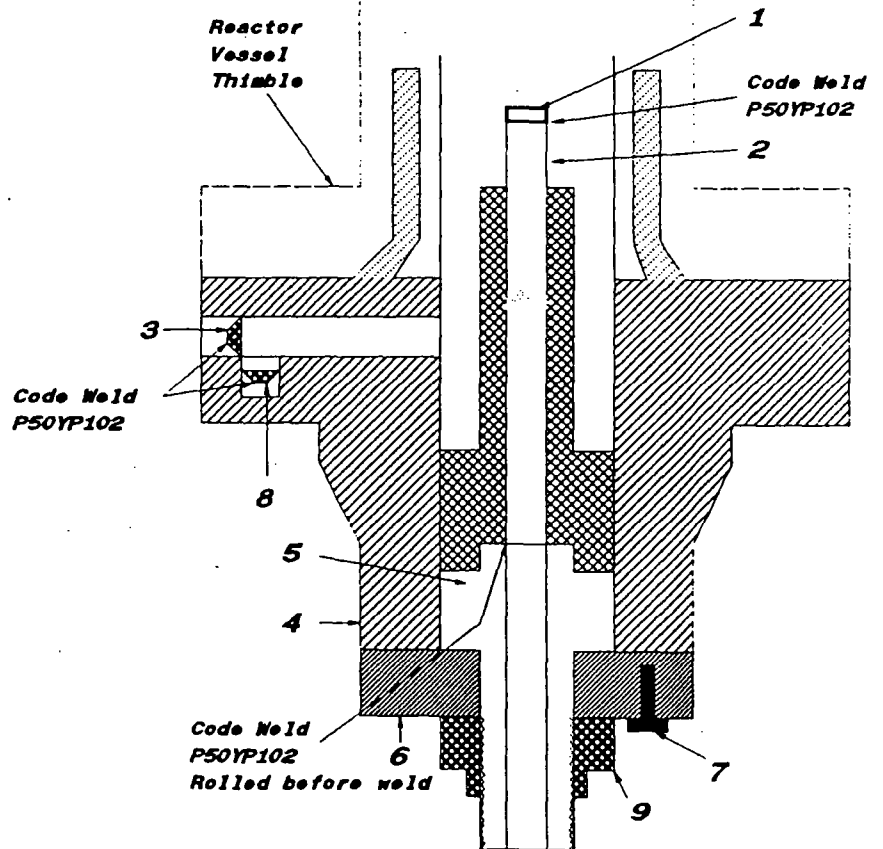
(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F316
 3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.
3. Plug 159A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD
5. Head 129B3539P005
 SA182 - F304
 7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.
9. Nut 114B5460P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Date: 10/21/06

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	5409	N/A	N/A	1974	See Item 7 Below Removed Installed	Yes, Code Class 1
CT&F	General Electric	5409	N/A	N/A	1974		Yes, Code Class 1
CT&F	General Electric	A9378	N/A	N/A	1996		Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 5409. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 5409. Liquid penetrant (PT) examination results unacceptable.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9378.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5458.
- 5) Reinstalled existing ring flange Serial No 2334.
- 6) Reinstalled existing piston tube nut Serial No 2846.
- 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 5409 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9378 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9378.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9378.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 10/24/06 Date 10/24/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/17/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions WA 12723 N. I.
Inspector's Signature National Board, State, and Endorsements

Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Dudip Singh
10/24/06.

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9378 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *C. Bazzett*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29-96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29-96 *Thomas Fern* NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location (Top Bottom, Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) _____
 (b) _____
 If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)
 Drop Weight _____
 Charpy Impact _____ ft-lb
 8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) Top, bottom, ends _____
 (b) Channel _____
 If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-lb

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (inlet, Outlet, Drain) Number Dia. or Size Type Material Thickness Reinforcement Material How Attached

Purpose (inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

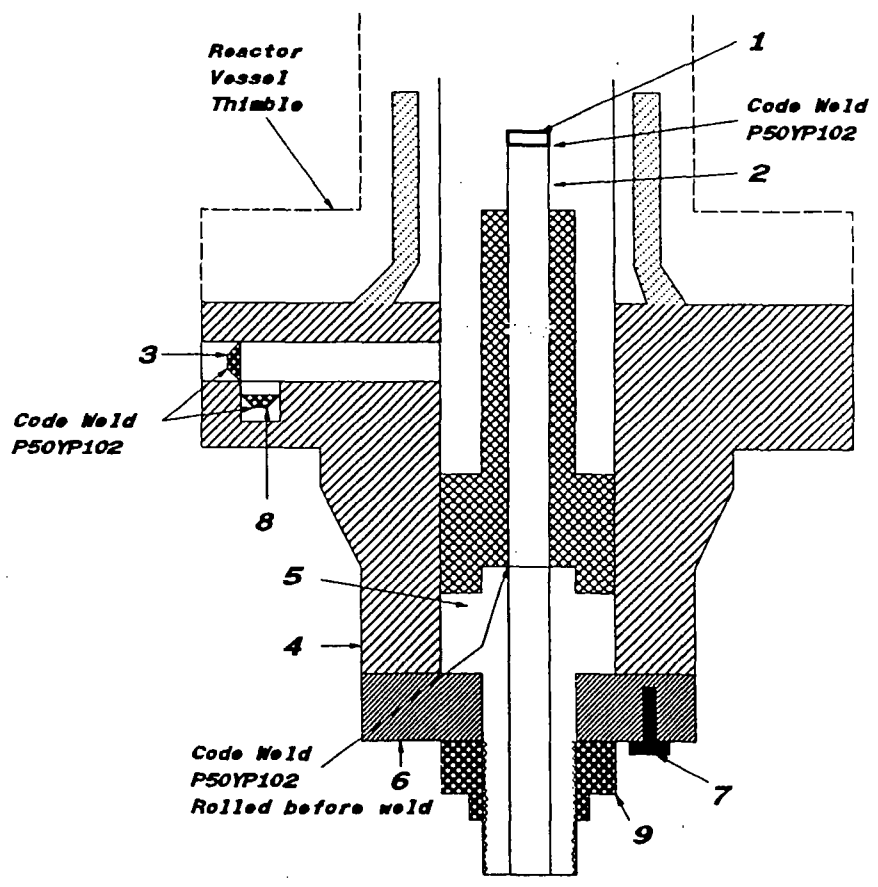
Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

Dudip Singh
 10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9378 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson
- (b) Description of Part Inspected: Cylinder Tube & Flange
- (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1
3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F316
 3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.
3. Plug 159A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD
5. Head 129B3539P005
 SA182 - F304
 7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.
9. Nut 114B5460P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. Owner:** Energy Northwest **Date:** 12/08/06
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Control Rod Drive (CRD)
5. (a) Applicable Construction Code: ASME Section III, Code Class 1 - See Notes For Code Edition, Addenda And Code Cases
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6158	N/A	N/A	1974	See Item 7 Below	Yes, Code Class 1
CT&F	General Electric	6158	N/A	N/A	1974	Removed	Yes, Code Class 1
CT&F	General Electric	A9406	N/A	N/A	1996	Installed	Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6158. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6158. Liquid penetrant (PT) examination results unacceptable.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9406.
- 4) Reinstalled existing Piston Tube (PT) assembly Serial No 5326.
- 5) Reinstalled existing ring flange Serial No 1910.
- 6) Reinstalled existing piston tube nut Serial No 2282.
- 7) Reinstalled existing ring flange cap screws.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6158 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.
- 3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9406 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.
- 4) ASME pressure boundary (retaining) parts and materials such as Piston Tube (PT) assembly, ring flange, ring flange cap screws and piston tube nut were reinstalled (reused) during CRD overhaul activities with the exception of Cylinder Tube And Flange (CT&F) assembly which was replaced.
- 5) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9406.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None
Test Pressure: Psig Test Temperature: °F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9406.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 12/8/06 Date 12/8/06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/7/06 to 12/8/06 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions WA 12723 N.I.
Inspector's Signature National Board, State, and Endorsements
Date 12/8/06

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Philip Sings
10/24/06

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9406 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By C. S. Bazzett
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3/29, 96, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3/29/96 Date *Edward Yoshio* Inspector's Signature NC 856 National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location (Top Bottom, Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) _____
 (b) _____
 If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. if bar give dimensions, if bolts, describe or sketch)
 Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U.)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) Top, bottom, ends _____
 (b) Channel _____
 If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-lb

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

Dudip Singh
 10/24/06

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9406 Nat'l Bd. No. N/A

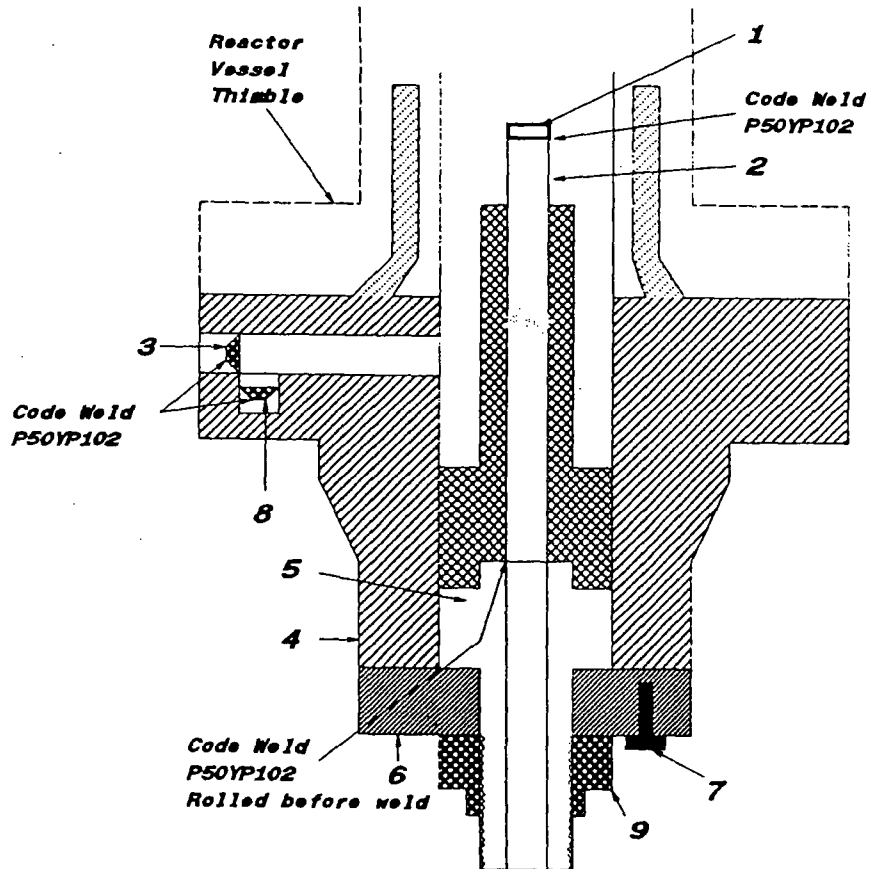
(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.
3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.
9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.



X



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Control Rod Drive (CRD) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 06/23/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7348	N/A	N/A	1975	Removed	Yes, Code Class 1
CRD	GE	A9378	N/A	N/A	1996	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 10-11. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 7348.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9378.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9378 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9378. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, S, NS 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Quedip Sup's
6/23/07

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9378 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By C. S. Bazzett
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29-96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29-96 Thomas Fern NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location (Top Bottom, Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) _____
 (b) _____
 If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-lb

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ Inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) Top, bottom, ends _____
 (b) Channel _____
 If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-lb

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

W01 01109670 05

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Handwritten signature
6/23/07

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9378 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

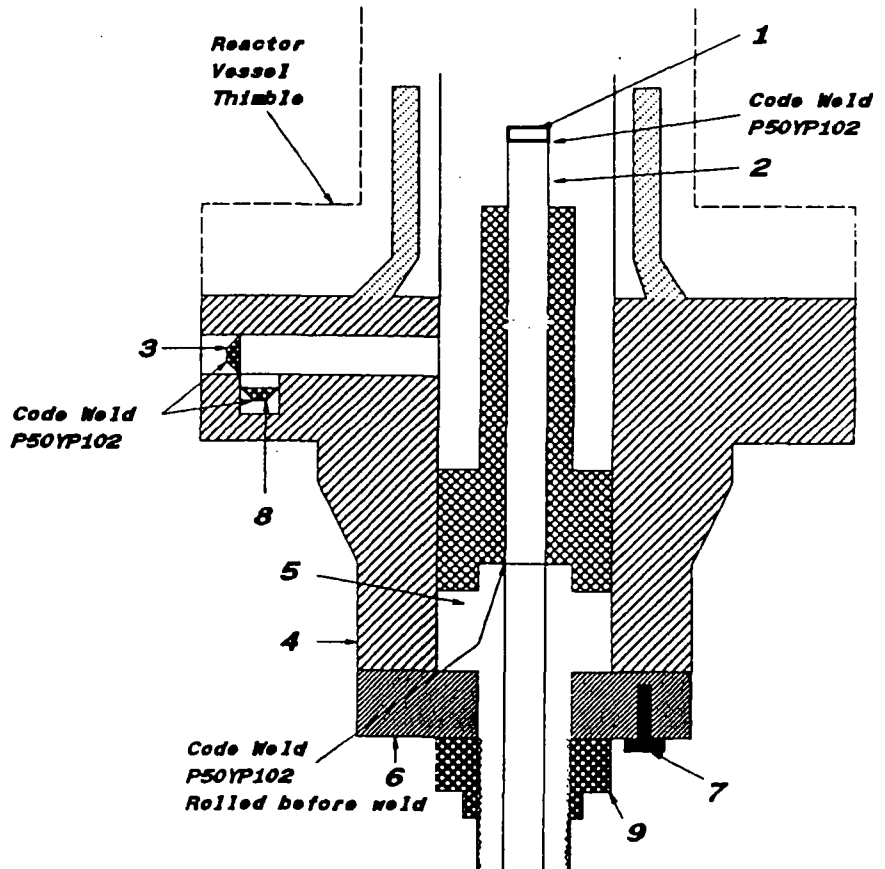
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

- 1. Owner:** Energy Northwest **Date:** 06/23/07
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Control Rod Drive (CRD) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6396	N/A	N/A	1974	Removed	Yes, Code Class 1
CRD	GE	6339	N/A	N/A	1974	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 06-47. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 6396.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No 6339.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No 6339 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 6339. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/18/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.A.B.I.C.N.S 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

WOT 01109670 06

As required by the Provisions of the ASME Code Rules

Quincy Supb

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C. 6/23/07
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 6339 Nat'l Hd. No. _____

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 Ci

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1825 psi
(Brief description of service for which component was designed)
minimum.

FOR INFORMATION ONLY

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date December 30 19 74 Signed GE, BWRSD - REM By *[Signature]*
(Manufacturer)

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 30 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date December 30 19 74

[Signature]
Inspector's Signature

Commissions NC 723, PA, NC 1766, Ohio
National Board, State, Province and No.

7X00367529

FORM N-2 (back)

Items 1-5 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
---------------------------------	-----------	-----------------	-------------------	---------------------	-----------------------	-------------------------	------------------	------------------------------------

(a) _____

(b) _____

If removable, bolts used _____ (Material, Spec. No., T.S., Size, Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bargive dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575 °F Drop Weight _____ Charpy Impact _____ at temp. of _____

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
----------	-----------	-----------------	-------------------	---------------------	-----------------------	-------------------------	------------------	------------------------------------

(a) Top, bottom, ends _____

(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____ Charpy Impact _____ at temp. of _____

FOR INFORMATION ONLY

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Manholes, No. _____ Size _____ Location _____

Openings: Handholes, No. _____ Size _____ Location _____

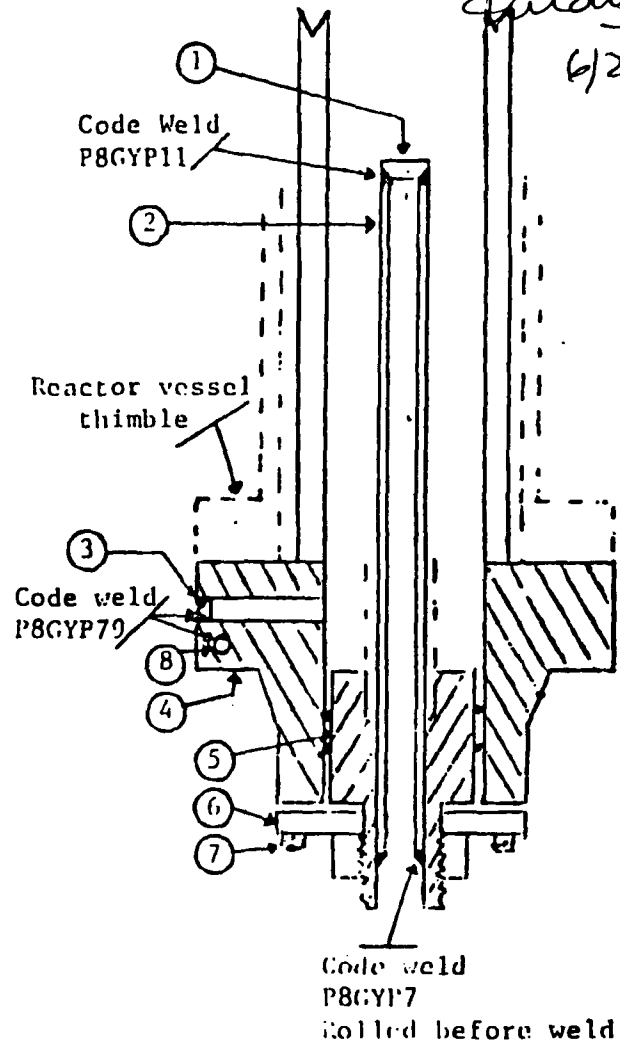
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

2X00367530

Judith Sue
6/23/07

1. Cap 167A2343P1
(167A2343)
SA182-F304
3/8 thick x 1.1/16 OD
2. Indicator Tube 104B1336P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Head 129B3539P1
SA182-F304
7/8 thick x 2.875 Dia.
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



ATTACHMENT TO
FORM N-2 MANUFACTURER'S DATA REPORT



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Date: 06/23/07

Sheet: 1 Of 1

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	A8652	N/A	N/A	1988	Removed	Yes, Code Class 1
CRD	GE	A8517	N/A	N/A	1987	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 22-47. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A8652.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8517.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A8517 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8517. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/18/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.

Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, N, S, C 5496 W
Inspector's Signature National Board, State, and Endorsements

Date 6/26/07

W07 01109670 07

David Rupp

... required by the provision of the ASME Code Rules, Section III, Div. 1

1. Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 2840 ^{6/23/07}
(Name and Address of NPT Certificate Holder)

(b) Manufactured for: WNP-2
(Name and Address of N Certificate Holder for completed nuclear compo)

2. Identification-Certificate Holders's S/N of Part: AB517 Nat'l Bd. No. N/

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Pete

(b) Description of Part Inspected: CYLINDER TUBE & FLANGE

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 C1

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurte as defined in the code conforms to the rules of construction of the ASME Code Section (The applicable Designed Specification and Stress Report are not the responsibility of th Certificate Holder for parts. An NPT Certification Holder for appurtenances is respons for furnishing a separate Design Specification and Stress Report if the appurtenance i included in the component Design Specification and Stress Report).

DATE: 11/10, 19 87 Signed GE-NEBG-NF&CM-QA By J. Etter
(NPT Certificate Holder)

Certificate Of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

ress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA
DC22A6253 Rev. 0

Design specification certified by BJORN HAABERG Prof. Eng. State CALIF. Reg. No. 155
DC22A6254 Rev. 0.

Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. MO1

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressu Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LAE of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in th Partial Data Report on 11-10 1987, and state that to the best of my knowlec and belief, the NPT Certificate Holder has constructed this part in accordance with the AS Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warrant expressed or implied, concerning the part described in the Partial Data Report. Furthermo neither the Inspector nor his employer shall be liable in any manner for any personal inju or property damages or a loss of any kind arising from or connected with this inspection.

11-10, 1987 J. Skowlsky NC 779. PAWC 2468 OHIO
DATE Inspector's Signature National Board, State, Province and

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size i: 8-1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

VERIFIED & APPROVED R. J. ...

Items 4-8 incl. to be completed for single well vessels, jackets vessels, or shells of heat exchangers

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Allowance _____ in. Dia. _____ ft. _____ in. L₁
 (Kind & Spec.No.) (Min.ofRange Specified) Corrosion

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b)Material _____ T.S. _____
 Location (Top Bottom,Ends) Thickness _____ Crown Radius _____ Knuckle Radius _____ Elliptical Ratio _____ Conical Apex Angle _____ Hemispherical Radius _____ Flat Diameter (conv.or conc.) _____
 (a) _____
 (b) _____
 If removable, bolts used _____ Other fastening _____
 (Material,Spec.No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
 (Describe as ogee and weld,bar,etc. If bar give dimensions, if bolts, describe or sketch)

8. Design Pressure ² _____ 1250 _____ psi at _____ 575 _____ °F
 Drop Weight _____
 Charpy Impact _____ ft-lb
 at temp. of _____ °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l. _____ Dia. _____ Thickness _____ in. Attachment _____
 (Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____
 inches

10. Tubes: Material _____ O.D. _____ in. Thickness _____ or gage. Number _____ Type _____
 (Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
 (Kind&Spec.No.) (Min.ofRange Specified) Corrosion

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b)Material _____ T.S. _____
 Location (a)Top, Bottom, Tickness _____ Crown Radius _____ Knuckle Radius _____ Elliptical Ratio _____ Conical Apex Angle _____ Hemispherical Radius _____ Flat Side to Press _____
 End _____ Diameter (Conv.or Conc.) _____
 (b)Channel _____
 If removable, bolts used (a) _____ (b) _____ (c) _____ Other Fastening _____
 (Describe or attach sketch)
 Drop Weight _____
 Charpy Impact _____ ft-lb
 at temp. of _____ °F

14. Design pressure² _____ psi at _____ °F
 at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet Outlet, Drain)	Number	Dia or Size	Type	Material	Thickness	Reinforcement Material	Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handles, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Shirt _____ Lugs _____ Legs _____ Other _____ Attached _____
 (Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.
² List other internal or external pressure with coincident temperature when applicalbe.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest **Date:** 06/23/07
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	A5697	N/A	N/A	1987	Removed	Yes, Code Class 1
CRD	GE	5951	N/A	N/A	1977	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 06-39. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A5697.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No 5951.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No 5951 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 5951. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N A, A, I, N, S, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

WOT No. 01109670 08

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

Richard S. Surr

- 1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C. 6/23/01.
(Name and address of Manufacturer of part)
- (b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)
- 2. Identification-Manufacturer's Serial No. of Part 5951 Nat'l Id. No. _____
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144 Ci
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 2
- 3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi
(Brief description of service for which component was designed)
minimum.

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date December 17 19 74 Signed GE, BWRSD - REM By *Wm. J. Deuel*
(Manufacturer)
Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington
Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington
Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488
Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 17 19 74 and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date December 17 19 74

E. R. Sherrill
Inspector's Signature

Commissions NC 723, PA 4766, Ohio
National Board, State, Province and No.

FOR INFORMATION ONLY

FORM No. 1 (back)

Items 1-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
---------------------------------	-----------	-----------------	-------------------	---------------------	-----------------------	-------------------------	------------------	------------------------------------

(a) _____

(b) _____

If removable, bolts used _____ (Material, Spec. No., T.S., Size, Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____ (Describe as gage and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575³ °F Drop Weight _____ Charpy Impact _____ at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____ (Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
----------	-----------	-----------------	-------------------	---------------------	-----------------------	-------------------------	------------------	------------------------------------

(a) Top, bottom, ends _____

(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____ Charpy Impact _____ at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Manholes, No. _____ Size _____ Location _____

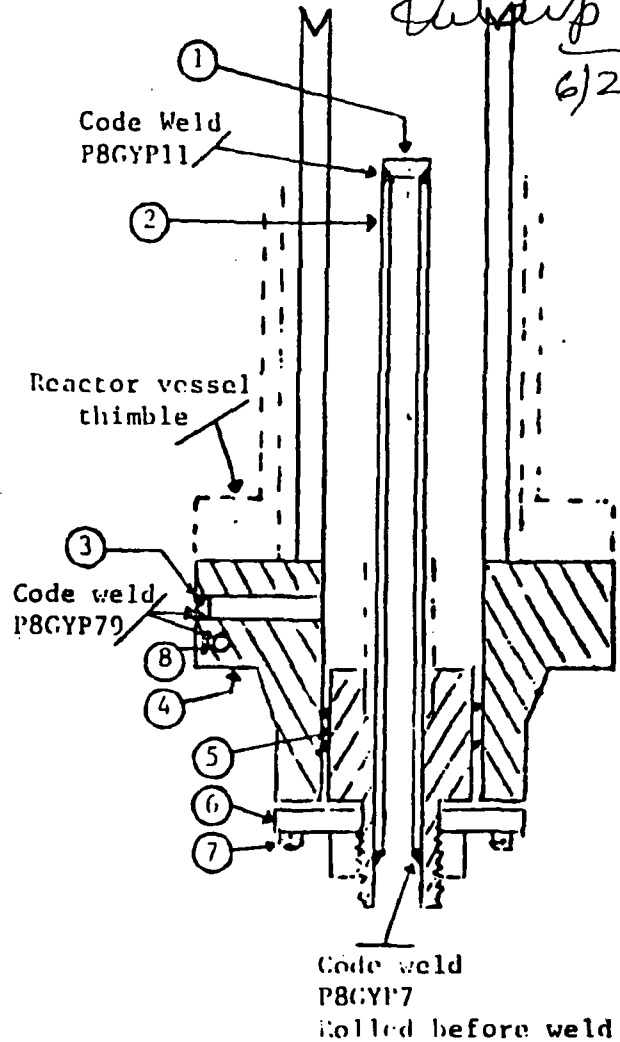
Openings: Handholes, No. _____ Size _____ Location _____

Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ (Yes or No) (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

Supp Supp!
6/23/07.

- 1. Cap 167A2343P1
(167A2343)
SA182-F304
3/8 thick x 1.1/16 OD
- 2. Indicator Tube 104B1336P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
- 3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
- 4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck-1 1/16 thick x 5.0 OD
2.875 ID
- 5. Head 129B3539P1
SA182-F304
7/8 thick x 2.875 Dia.
- 6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
- 7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
- 8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



ATTACHMENT TO
FORM N-2 MANUFACTURER'S DATA REPORT



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|--|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Control Rod Drive (CRD) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 06/23/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|--|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD CRD	GE GE	7376 A9303	N/A N/A	N/A N/A	1975 1996	Removed Installed	Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 10-39. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 7376.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9303.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9303 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturers Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9303. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Richard Eup
4/23/01.

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9303 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D.L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *E. Bayutt*
(NPT Certificate Holder) (ASME QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2

Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1

Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29 96 *Thomas Lee* NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location (Top Bottom, Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) _____
 (b) _____
 If removabe, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)
 Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) Top, bottom, ends _____
 (b) Channel _____
 If removabe, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)
 Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain) Number Dia. or Size Type Material Thickness Reinforcement Material How Attached

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)

Quincy Sup 6

3901 Castle Hayne Road, Wilmington, North Carolina 28401

6/23/07.

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9303 Nat'l Bd. No. N/A

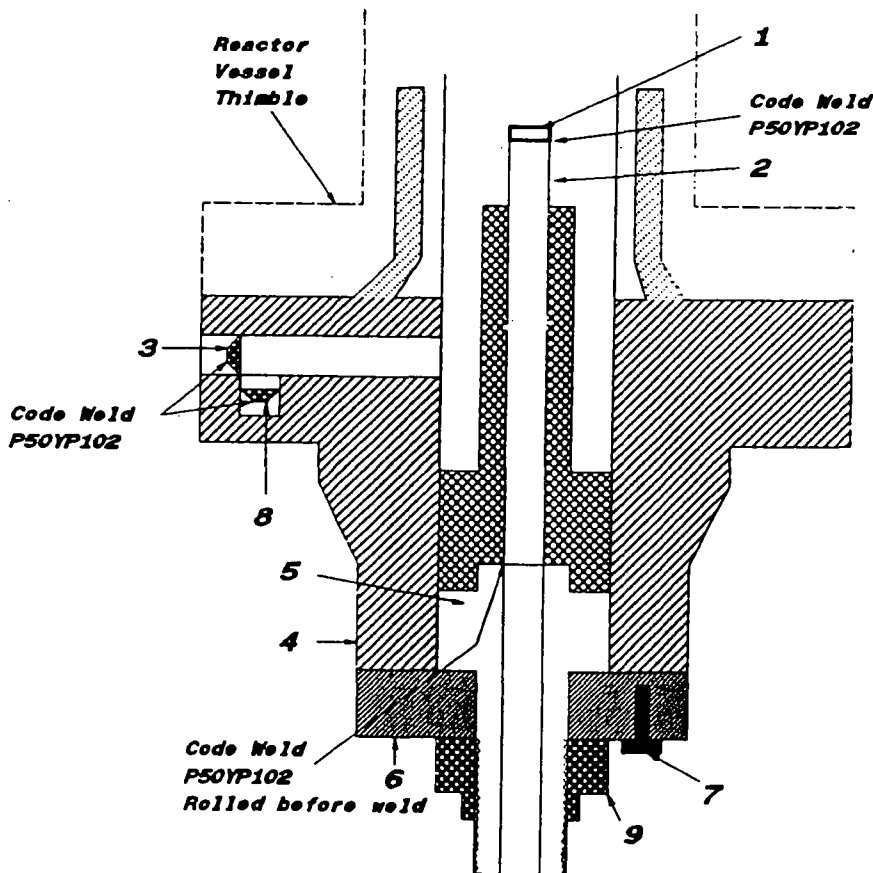
(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.
3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.
9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Code Case(s):** None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	A7585	N/A	N/A	1977	Removed	Yes, Code Class 1
CRD	GE	A9297	N/A	N/A	1996	Installed	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced Control Rod Drive (CRD) assembly at Core Location 10-35. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A7585.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9297.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9297 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9297. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Rudip Supri
6/23/07.

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

- 2. Identification - Certificate Holder's S/N of Part : A9297 Nat'l Bd. No. N/A
 - (a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson
 - (b) Description of Part Inspected: Cylinder Tube & Flange
 - (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1
- 3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *CS Bayart*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29 96 Date *Thomas Lee* Inspector's Signature NC 856 National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removabe, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removabe, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain) _____ Number _____ Dia. or Size _____ Type _____ Material _____ Thickness _____ Reinforcement Material _____ How Attached _____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

WOT NO. 0110967010

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)

Handwritten signature

3901 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

6/23/01.

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9297 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

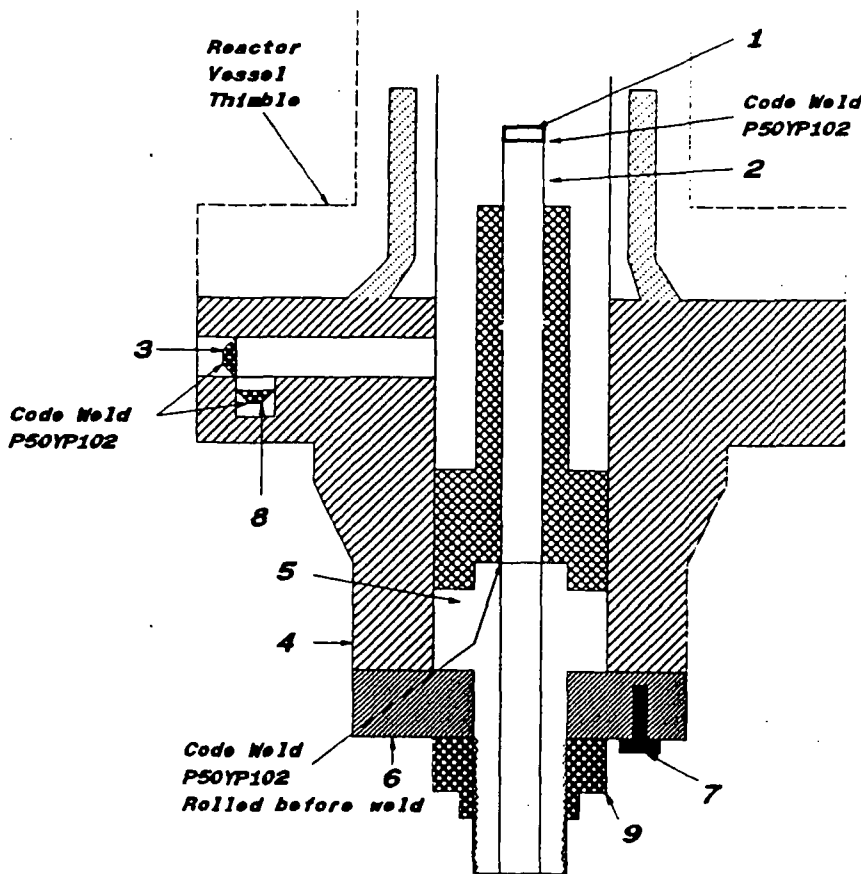
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Control Rod Drive (CRD) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 06/23/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	5393	N/A	N/A	1974	Removed	Yes, Code Class 1
CRD	GE	6446	N/A	N/A	1974	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 18-39. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 5393.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No 6446.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No 6446 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 6446. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 NAB, I, N.S.C. 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

WOT No. 0109670 11

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

Handwritten signature

- 1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C. 6/23/07.
(Name and address of Manufacturer of part)
- (b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)
- 2. Identification-Manufacturer's Serial No. of Part 6446 ✓ Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-i Class 1
- 3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi
(Brief description of service for which component was designed)
minimum.

FOR INFORMATION ONLY

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date November 11 19 74 Signed GE, BWRSD - REM By *Handwritten Signature*
(Manufacturer)
Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on November 11 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date November 11 19 74

Handwritten Signature Commissions NC 723, PA. 1766, Ohio
Inspector's Signature National Board, State, Province and No.

2X00367309

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) _____

(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575 °F
Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

FOR INFORMATION ONLY

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) Top, bottom, ends _____

(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F
Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

2X003673

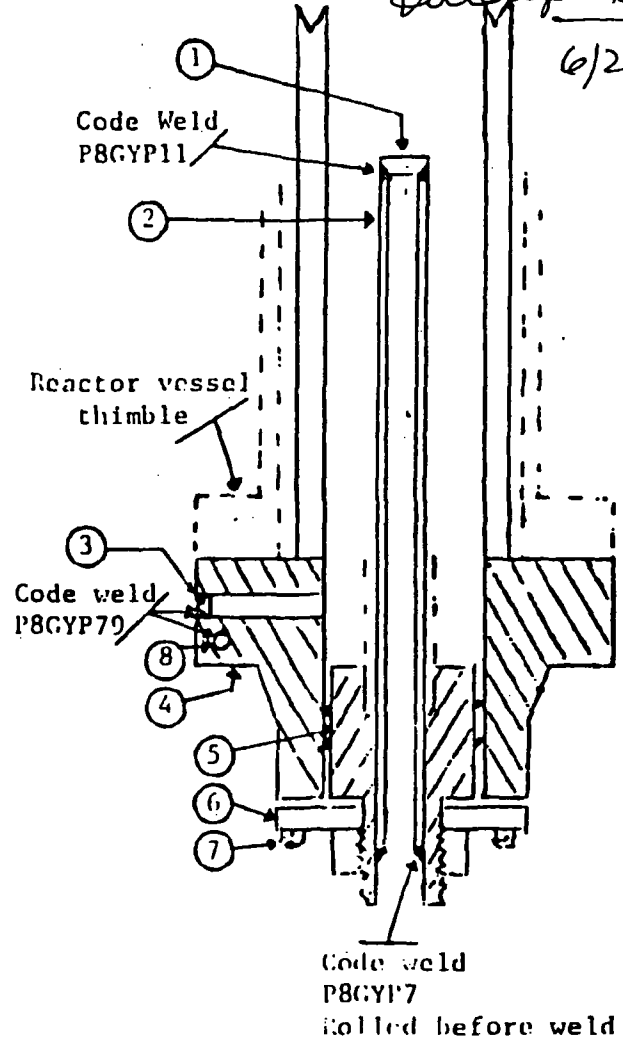
18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicable.

Subcap Size
6/23/01.

1. Cap 167A2343P1
(167A2343)
SA182-F304
3/8 thick x 1.1/16 OD
2. Indicator Tube 104B1336P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Head 129B3539P1
SA182-F304
7/8 thick x 2.875 Dia.
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



ATTACHMENT TO
FORM N-2 MANUFACTURER'S DATA REPORT



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 06/23/07
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Control Rod Drive (CRD) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	8664	N/A	N/A	1988	Removed	Yes, Code Class 1
CRD	GE	6671	N/A	N/A	1975	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 02-35. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 8664.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No 6671.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No 6671 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) Four (4) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code J144.
- 4) VT-1 visual examination Report No 2RPV-018 for the new replacement cap screws.
- 5) Four (4) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 6) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 6671. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/18/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.A.B.I.N.S.C 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 6/26/07

WOT NO. 01109670 12

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

Lead Ship

(a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C. 6/23/07.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 6671 Nat'l Bd. No. _____

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi
(Brief description of service for which component was designed)
minimum.

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date July 30 19 75 Signed GE, BWRSD - REM By [Signature]
(Manufacturer)

Date of Authorization Expires June 20, 1978 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina

July 30 19 75 have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on _____ and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date July 30 19 75

[Signature]
Inspector's Signature

Commissions NC 723, PA, NC 1766, Ohio
National Board, State, Province and No.

FOR INFORMATION ONLY

Items 4-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location (Top, bottom, ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) _____
(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as edge and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575¹ °F Drop Weight _____ Charpy Impact _____ ft.-lb. at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) Top, bottom, ends _____
(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____ Charpy Impact _____ ft.-lb. at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

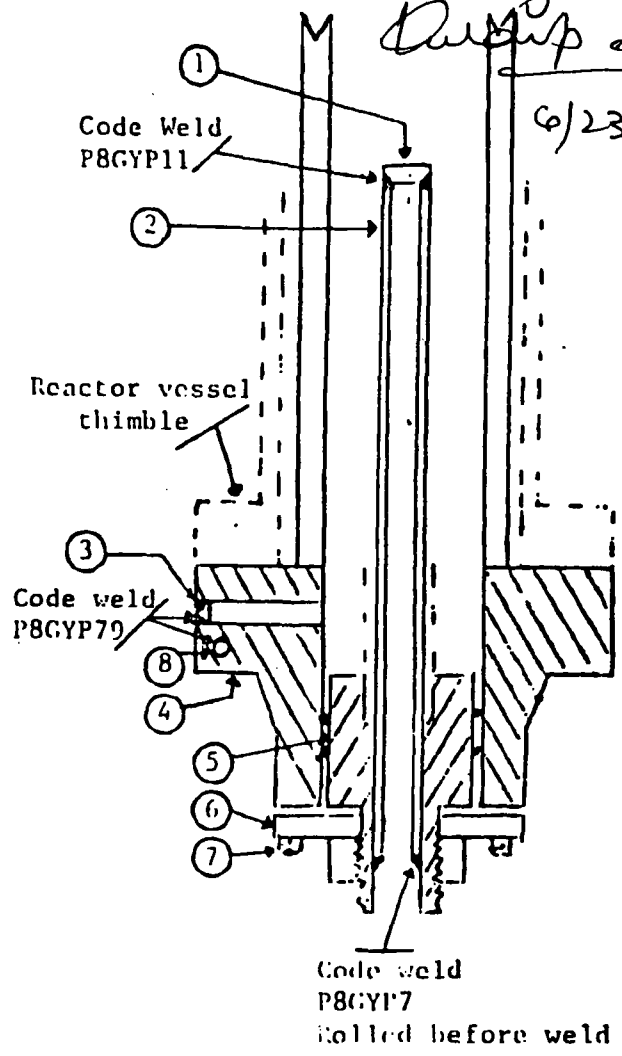
¹ If Postweld Heat-Treated.

² List either internal or external pressure and ambient temperature when applicable.

Drip Supp

6/23/07

- 1. Cap 167A2343P1
(167A2343)
SA182-F304
3/8 thick x 1.1/16 OD
- 2. Indicator Tube 104B1336P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
- 3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
- 4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
- 5. Head 129B3539P1
SA182-F304
7/8 thick x 2.875 Dia.
- 6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
- 7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
- 8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



ATTACHMENT TO
FORM N-2 MANUFACTURER'S DATA REPORT



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 06/23/07

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

Unit: Not Applicable

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable.

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	A8554	N/A	N/A	1988	Removed	Yes, Code Class 1
CRD	GE	A8662	N/A	N/A	1988	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 18-35. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A8554.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8662.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A8662 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8662. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Jae C. Hair Commissions 9496 N, A, B, I, NS, C 9496W
Inspector's Signature National Board, State, and Endorsements

Date 6/26/07

WOT No. 01109670 13,
Head Sup

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1 6/23/87

Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402

(Name and Address of NPT Certificate Holder)

(b) Manufactured for: WNP-2, RICHLAND, Wa. 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holders's S/N of Part: A8662 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: CYLINDER TUBE & FLANGE

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75 Case No. 1361-2 Class 1

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.

(Brief description of service for which component was designed)

Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

DATE: 5/27, 19 88 Signed GE-NEEG-NF&CM-QA By [Signature]
(NPT Certificate Holder)

Certificate of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA

DC22A6253 Rev. 0
Design specification certified by EJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570

DC22A6254 Rev. 0.
Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. M018646

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 5/27 1988, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

DATE 5/27, 19 88 Inspector's Signature [Signature]

N.C. 723, PA.WC1766, CHIO
National Board, State, Province and No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8 1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

FORM M-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material T.S. Thickness in. Allowance in. Dia. ft. in. Length ft. in.
 (Kind & Spec.No.) (Min.of Range Specified)

5. Seams: Long H.T.¹ R.T. Efficiency %
 Girth H.T.¹ R.T. No. of Courses

6. Heads: (a) Material T.S. (b) Material T.S.

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
(b)	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

If removable, bolts used (Material, Spec.No., T.S. Size Number) Other fastening (Describe or attach sketch)

7. Jacket Closure:
 (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

8. Design Pressure ² 1250 psi at 575 °F Drop Weight
 Charpy Impact ft-lb at temp. of °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l. Dia. Thickness in. Attachment
 (Kind of Spec. No.) (Subj. to Press.) (Welded, Bolted)
 Floating. Material Dia. Thickness in. Attachment
 inches

10. Tubes: Material O.D. in. Thickness or gage. Number Type
 (Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

11. Shell: Material T.S. Thickness in. Allowance in. Dia. ft. in. Length ft. in.
 (Kind & Spec.No.) (Min. of Range Specified)

12. Seams: Long H.T.¹ R.T. Efficiency %
 Girth H.T.¹ R.T. No. of Courses

13. Heads (a) Material T.S. (b) Material T.S.

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, Bottom, End	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
(b) Channel	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

If removable, bolts used (a) (b) (c) Other Fastening
 (Describe or attach sketch)
 Drop Weight
 Charpy Impact ft-lb at temp. of °F

14. Design pressure² psi at °F at temp. of °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number Size Location

16. Nozzles:

Purpose (Inlet Outlet, Drain)	Number	Dia or Size	Type	Material	Thickness	Reinforcement Material	Attached
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

17. Inspection Manholes, No. Size Location
 Openings: Handles, No. Size Location
 Threaded, No. Size Location

18. Supports: Shirt Lugs Legs Other Attached
 (Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicable.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Control Rod Drive (CRD) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 06/23/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD CRD	GE GE	A8748 A9305	N/A N/A	N/A N/A	1988 1996	Removed Installed	Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 26-35. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A8748.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9305.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9305 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturers Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9305. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/18/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.A.B.I. NSC 9496W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

Handwritten Signature
 6/23/07.

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9305 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson
- (b) Description of Part Inspected: Cylinder Tube & Flange
- (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1
3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By C. S. Baggett
 (NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
 Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
 Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29-96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29-96 Date *Thomas F...* Inspector's Signature NC 856 National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain)

Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Adair Supb
 6/23/07.

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9305 Nat'l Bd. No. N/A

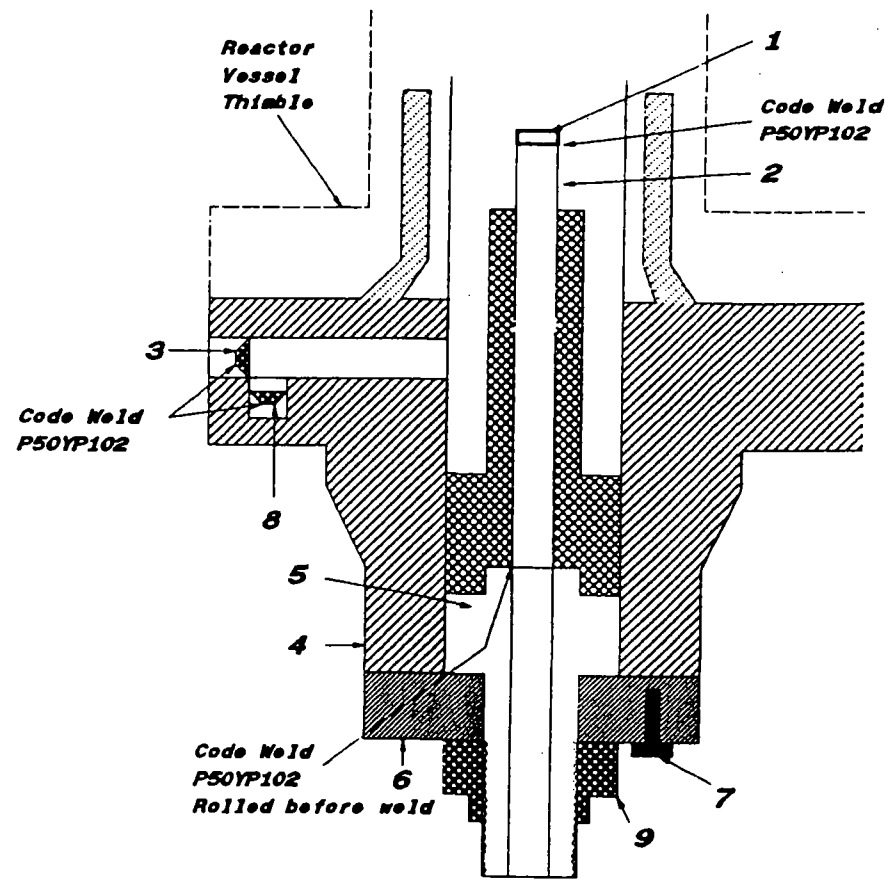
(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F316
 3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.
3. Plug 159A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD
5. Head 129B3539P005
 SA182 - F304
 7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.
9. Nut 114B5460P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Control Rod Drive (CRD) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 06/23/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7388	N/A	N/A	1974	Removed	Yes, Code Class 1
CRD	GE	A8750	N/A	N/A	1987	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 22-27. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 7388.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8750.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A8750 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturers Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8750. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/07 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.

Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Jaec. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 6/26/07

W07 01109670 15

Supp

6/23/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)
- (b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
(Name and Address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holders's S/N of Part: A8750 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson
- (b) Description of Part Inspected: CYLINDER TUBE & FLANGE
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75 Case No. 1361-2 Class 1
3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

DATE: 12/31, 19 88 Signed GE-NEEG-NP&M-QA By [Signature]
(NPT Certificate Holder)

Certificate of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA
DC22A6253 Rev. 0

Design specification certified by BJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570
DC22A6254 Rev. 0.

Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. M018646

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 12-31 1988, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12-31, 1988 [Signature] NO 779, PAWC2L60, OHIO
DATE Inspector's Signature National Board, State, Province and No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

(10/77)

VERIFIED & ACCEPTED [Signature]
1-18-89
R.I. Inspector Date

FORM M-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec.No.) (Min.ofRange Specified) Corrosion

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

6. Heads: (a) Material _____ Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____
T.S. _____ (b)Material _____ T.S. _____

Location (Top Bottom,Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv.or conc.)

(a) _____
(b) _____

If removable, bolts used _____ Other fastening _____
(Material,Spec.No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld,bar,etc. If bar give dimensions, if bolts, describe or sketch)

8. Design Pressure ² _____ 1250 _____ psi at _____ 575 _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l. _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind&Spec.No.) (Min.ofRange Specified) Corrosion

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b)Material _____ T.S. _____

Location (a)Top, Bottom, End Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter (Conv.or Conc.) Side to Press

(b)Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other Fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:
Purpose (Inlet Outlet, Drain) Number Dia or Size Type Material Thickness Reinforcement Material Attached

17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handles, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Shirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicalbe.

W07 01109670 15

David Smith

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* 6/23/0
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)

(b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holders's S/N of Part: A8750 Nat'l Bd. N. N/A

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson

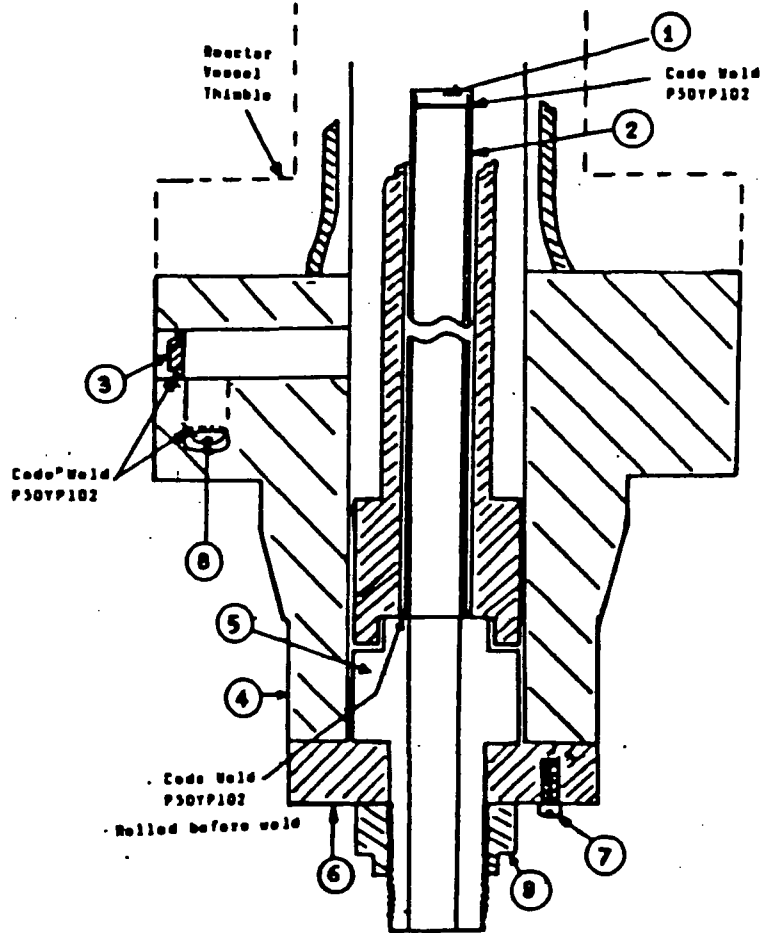
(b) Description of Part Inspected: CYLINDER TUBE & FLANGE

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 2 of 2

1. Cap 167A2343P1
SA182-F304
3/8 thick x 1 1/16 OD
2. Indicator Tube 104B1336P3
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
5. Head 129B3539P3, P5
SA182-F304
7/8 thick x 2.875 Dia.
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.
9. Nut 114B5460P1
SA193-B8A
1.30 thick x 2.62 dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Control Rod Drive (CRD) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 06/23/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD CRD	GE GE	7320 A8929	N/A N/A	N/A N/A	1974 1988	Removed Installed	Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 10-27. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 7320.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8929.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A8929 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8929. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, T, W, S, C 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Richard Supb
6/23/07.

- 1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)
- (b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)
- 2. Identification - Certificate Holder's S/N of Part : A8929 Nat'l Bd. No. N/A
 - (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
 - (b) Description of Part Inspected: Cylinder Tube & Flange
 - (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1
- 3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 10/23/91 Signed GE - NEBG - NF & CM - QA By *[Signature]*
(NPT Certificate Holder) (SC OR Representative)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 10/22, 1991 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

10/23, 1991 *[Signature]* NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

1. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)
2. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____
3. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
- | | | | | | | | | |
|----------------------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|--------------------------------------|
| Location (Top
Bottom, Ends) | Thickness | Crown
Radius | Knuckle
Radius | Elliptical
Ratio | Concial
Apex Angle | Hemispherical
Radius | Flat
Diameter | Side to Press.
(conv. or conc.) |
| (a) _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| (b) _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
- If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)
7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)
- Drop Weight _____ ft-lb
 Charpy Impact _____ ° F
8. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
- Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____
10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

1. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)
2. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____
3. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
- | | | | | | | | | |
|-----------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|--------------------------------------|
| Location | Thickness | Crown
Radius | Knuckle
Radius | Elliptical
Ratio | Concial
Apex Angle | Hemispherical
Radius | Flat
Diameter | Side to Press.
(conv. or conc.) |
| (a) Top, bottom, ends | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| (b) Channel | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
- If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)
- Drop Weight _____ ft-lb
 Charpy Impact _____ ° F
4. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

5. Safety Valve Outlets: Number _____ Size _____ Location _____
6. Nozzles: Purpose (Inlet, Outlet, Drain) _____ Number _____ Dia. or Size _____ Type _____ Material _____ Thickness _____ Reinforcement Material _____ How Attached _____
7. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____
8. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

W07 No. 01109670 16

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. II

Handwritten signature
6/23/07

Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GEN F & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A8929 Nat'l Bd. No. N/A

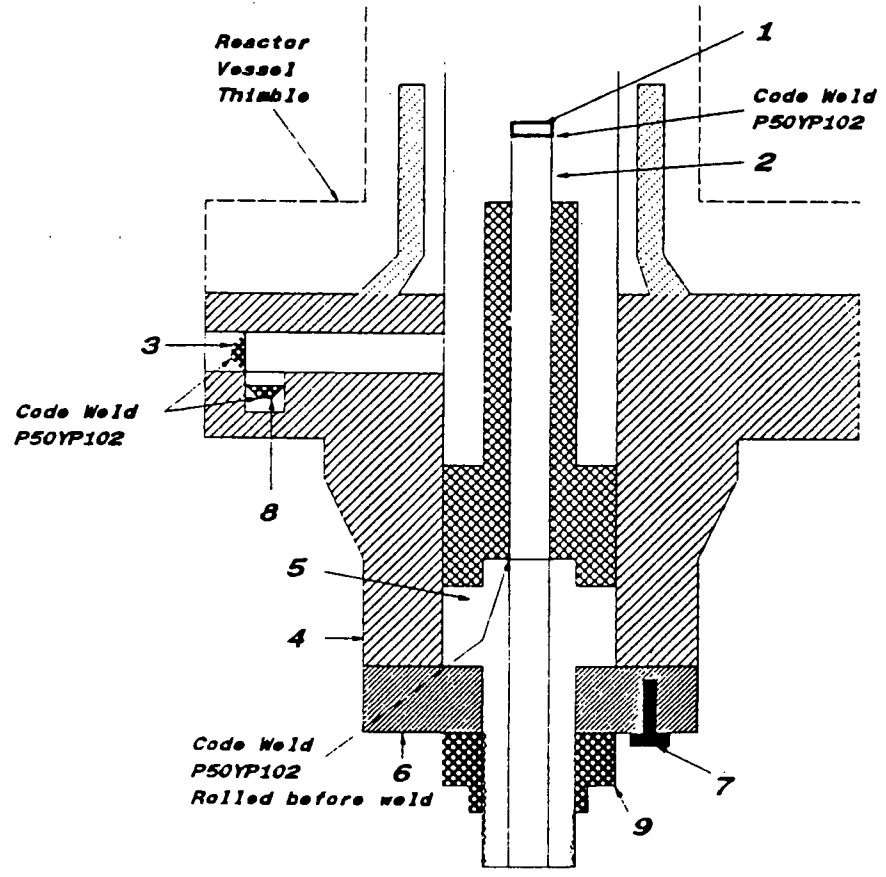
(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

- 1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD
- 2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.
- 3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD
- 4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD
- 5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.
- 6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID
- 7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle
- 8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.
- 9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Control Rod Drive (CRD) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 06/23/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD CRD	GE GE	6447 A8710	N/A N/A	N/A N/A	1974 1988	Removed Installed	Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 26-15. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 6447.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8710.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A8710 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8710. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/18/07 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.A.B.I. N.S.C. 9496W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

WOT No. 0110967017

Handwritten: 6/23/0

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. 1

- 1. Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)
- (b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
(Name and Address of N Certificate Holder for completed nuclear component)
- 2. Identification-Certificate Holders's S/N of Part: A8710 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson
- (b) Description of Part Inspected: CYLINDER TUBE & FLANGE
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75 Case No. 1361-2 Class 1
- 3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

DATE: 12/31, 19 88 Signed GE-NEEG-NF&M-OA By [Signature]
(NPT Certificate Holder)

Certificate Of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA
DC22A6253 Rev. 0

Design specification certified by EJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570
DC22A6254 Rev. 0.

Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. M018646

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 12-31 1988, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12-31, 1988 [Signature] MC 779, PA W C 2 L 60, OHW
DATE Inspector's Signature National Board, State, Province and No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

(10/77)

VERIFIED & ACCEPTED [Signature]
1-18-89
R.I. Inspector Date

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material T.S. Nominal Thickness in. Allowance in. Dia. ft. in. Length ft. in.
(Kind & Spec.No.) (Min.ofRange Specified)

5. Seams: Long H.T.¹ R.T. Efficiency %

6. Heads: (a) Material H.T.¹ R.T. No. of Courses
(b) Material T.S. (b)Material T.S.

Location (Top Bottom,Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv.or conc.)
-------------------------------	-----------	-----------------	-------------------	---------------------	-----------------------	-------------------------	------------------	-----------------------------------

(a)
(b)

If removable, bolts used (Material,Spec.No., T.S. Size Number) Other fastening (Describe or attach sketch)

7. Jacket Closure:
(Describe as ogee and weld,bar,etc. If bar give dimensions, if bolts, describe or sketch)

8. Design Pressure ² 1250 psi at 575 °F Drop Weight ft-lb
Charpy Impact at temp. of °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l. Dia. Thickness in. Attachment
(Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)

Floating. Material Dia. Thickness in. Attachment
inches

10. Tubes: Material O.D. in. Thickness or gage. Number Type
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

11. Shell: Material T.S. Nominal Thickness in. Allowance in. Dia. ft. in. Length ft. in.
(Kind&Spec.No.) (Min.ofRange Specified)

12. Seams: Long H.T.¹ R.T. Efficiency %
Girth H.T.¹ R.T. No. of Courses

13. Heads (a) Material H.T.¹ R.T. No. of Courses
(b) Material T.S. (b)Material T.S.

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv.or Conc.)
----------	-----------	-----------------	-------------------	---------------------	-----------------------	-------------------------	------------------	-----------------------------------

(a) Top, Bottom, End
(b) Channel

If removable, bolts used (a) (b) (c) Other Fastening (Describe or attach sketch)

14. Design pressure² psi at °F Drop Weight ft-lb
Charpy Impact at temp. of °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number Size Location

16. Nozzles:

Purpose (Inlet Outlet, Drain)	Number	Dia or Size	Type	Material	Thickness	Reinforcement Material	Attached
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

17. Inspection Manholes, No. Size Location
Openings: Handles, No. Size Location
Threaded, No. Size Location

18. Supports: Shirt Lugs Legs Other Attached
(Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402 *6/23/0*
 (Name and Address of NPT Certificate Holder)

(b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holders's S/N of Part: A8710 Nat'l Bd. N. N/A

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson

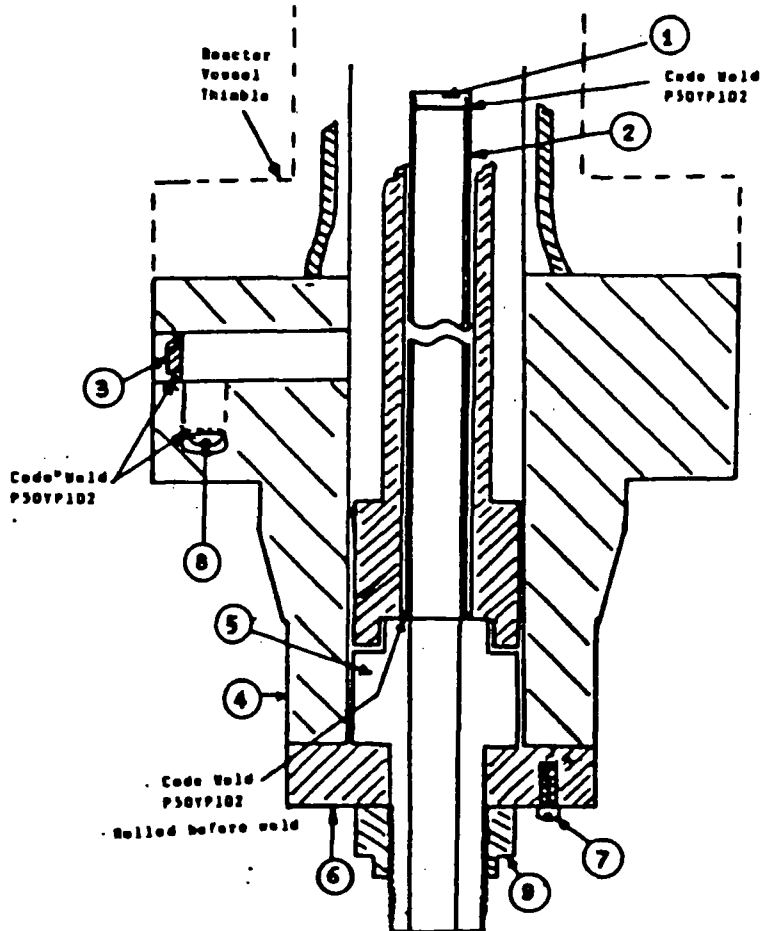
(b) Description of Part Inspected: CYLINDER TUBE & FLANGE

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
 (Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 2 of 2

1. Cap 167A2343P1
SA182-F304
3/8 thick X 1 1/16 OD
2. Indicator Tube 104B1336P3
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
5. Head 129B3539P3, P5
SA182-F304
7/8 thick x 2.875 Dia.
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.
9. Nut 114B5460P1
SA193-B8A
1.30 thick x 2.62 dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Control Rod Drive (CRD) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 06/23/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6410	N/A	N/A	1974	Removed	Yes, Code Class 1
CRD	GE	A9308	N/A	N/A	1996	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 18-23. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 6410.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9308.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9308 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturers Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9308. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/12/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, I, NS, C 9496W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

WOT No. 0119670 18

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

[Signature]

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

6/23/07.

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9308 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *[Signature]*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29-96, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29-96 Date *[Signature]* Inspector's Signature NC 856 National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____¹ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____¹ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____¹ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____¹ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div I

Richard Supb

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)

6/23/01.

3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9308 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

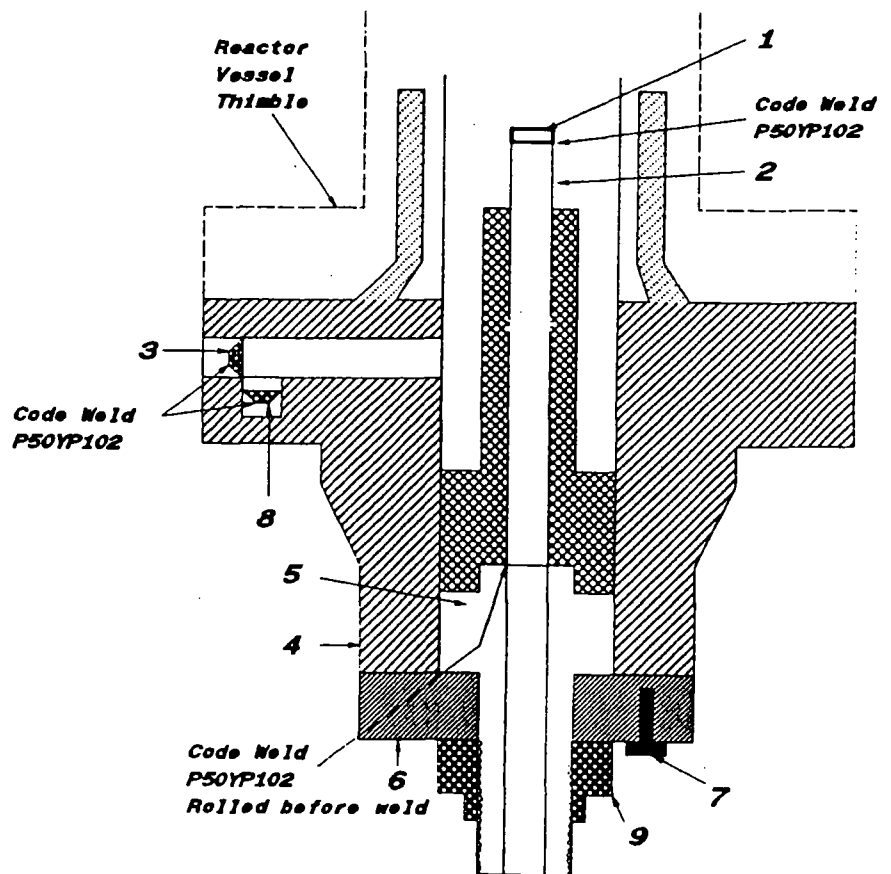
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) **Work Performed By:** Energy Northwest
(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest
(c) **Type Code Symbol Stamp:** Not Applicable
(d) **Certificate Of Authorization No.:** Not Applicable
(e) **Expiration Date:** Not Applicable
- 4. **Identification Of System:** Control Rod Drive (CRD) System
- 5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda
(c) **Applicable ASME Section XI Code Case(s):** None
- 6. **Identification Of Components**

Date: 06/23/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD CRD	GE GE	7091 A9417	N/A N/A	N/A N/A	1975 1996	Removed Installed	Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 14-35. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 7091.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9417.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9417 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other [x]
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9417. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/18/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, I, NS, C 9496W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div I

[Signature]
6/23/07.

- 1. Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)
- (b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)
- 2. Identification - Certificate Holder's S/N of Part : A9417 Nat'l Bd. No. N/A
 - (a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson
 - (b) Description of Part Inspected: Cylinder Tube & Flange
 - (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1
- 3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By [Signature]
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 [Signature] NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain)

Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

David Smith
 (6/23/01)

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9417 Nat'l Bd. No. N/A

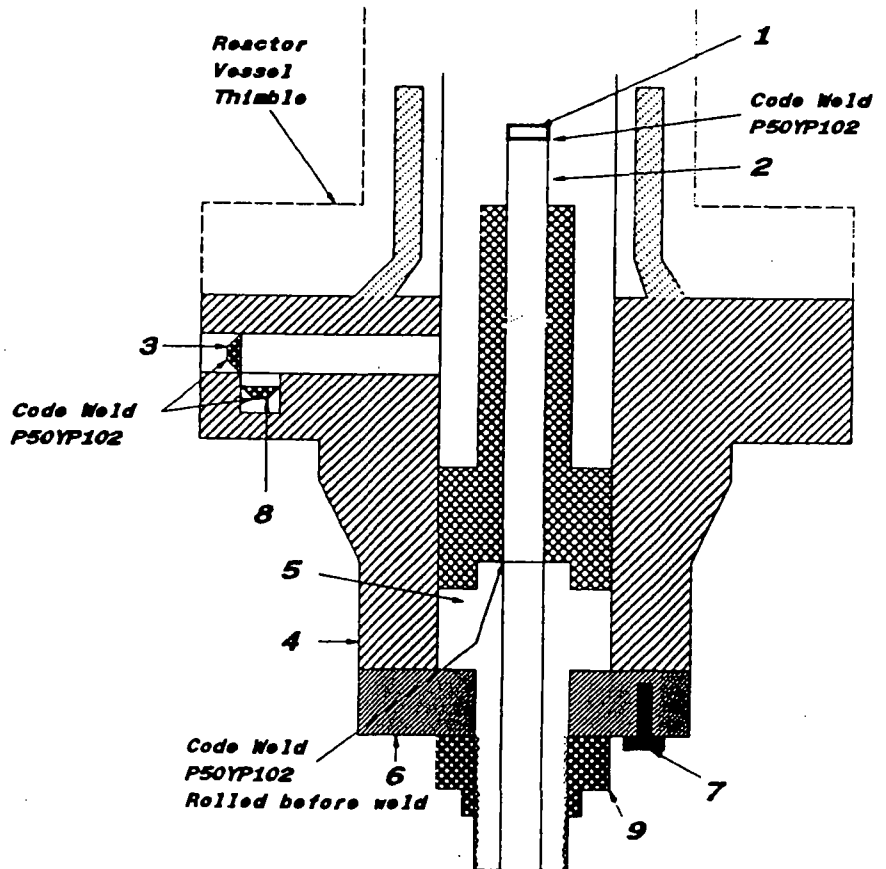
(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F316
 3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.
3. Plug 159A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD
5. Head 129B3539P005
 SA182 - F304
 7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.
9. Nut 114B5460P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest **Date:** 06/23/07
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. **Plant:** Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6309	N/A	N/A	1975	Removed	Yes, Code Class 1
CRD	GE	A9317	N/A	N/A	1996	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 02-19. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 6309.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9317.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9317 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code J144.
- 4) VT-1 visual examination Report No 2RPV-018 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturers Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9317. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.A., B, I, NS, C 9496
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Judip Singh
6/23/01

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9317 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *C. S. Bennett*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 *Thomas J. ...* NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location (Top Bottom, Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) _____
 (b) _____
 If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-lb

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) Top, bottom, ends _____
 (b) Channel _____
 If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-lb

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (inlet, Outlet, Drain) Number Dia. or Size Type Material Thickness Reinforcement Material How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

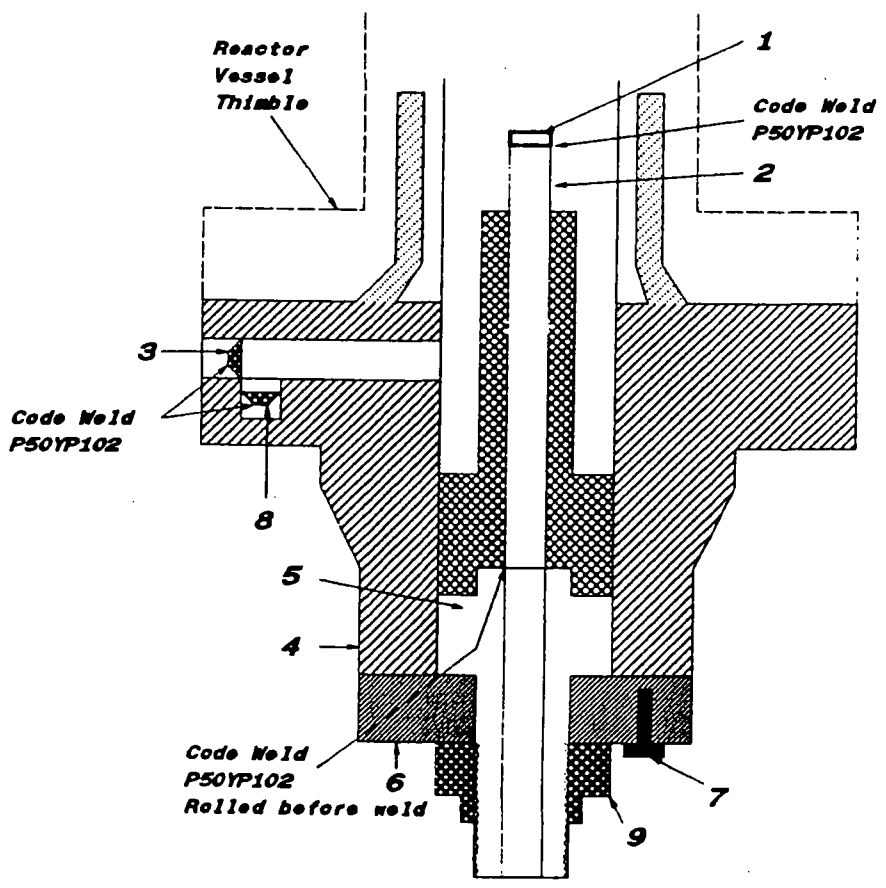
2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Philip Simp
6/23/07.

- 1. Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)
- (b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)
- 2. Identification - Certificate Holder's S/N of Part : A9317 Nat'l Bd. No. N/A
 - (a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson
 - (b) Description of Part Inspected: Cylinder Tube & Flange
 - (c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1
- 3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

- 1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD
- 2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.
- 3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD
- 4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD
- 5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.
- 6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID
- 7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle
- 8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.
- 9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Control Rod Drive (CRD) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 06/23/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	8246	N/A	N/A	1975	Removed	Yes, Code Class 1
CRD	GE	A9118	N/A	N/A	1993	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 30-23. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 8246.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9118.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES:

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9118 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9118. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/07 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NSC 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Richard Rupp
6/23/07 4:20 PM

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)
- (b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)
2. Identification - Certificate Holder's S/N of Part : A9118 Nat'l Bd. No. N/A
 - (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
 - (b) Description of Part Inspected: Cylinder Tube & Flange
 - (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1
3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Reports are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenance is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 01/28/93

Signed GE - NEBG - NF & CM - OA
(NPT Certificate Holder)

By *[Signature]*
(SC QA Representative)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018648

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 1/26, 1993 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

1/28, 1993 *[Signature]*
Date Inspector's Signature

NC 1231, Ohio, WC 3686 PA
National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	_____	_____	_____	_____	_____	_____	_____	_____	_____
(b)	_____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, E)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____
 Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F
 Drop Weight _____
 Charpy Impact _____ ft-

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

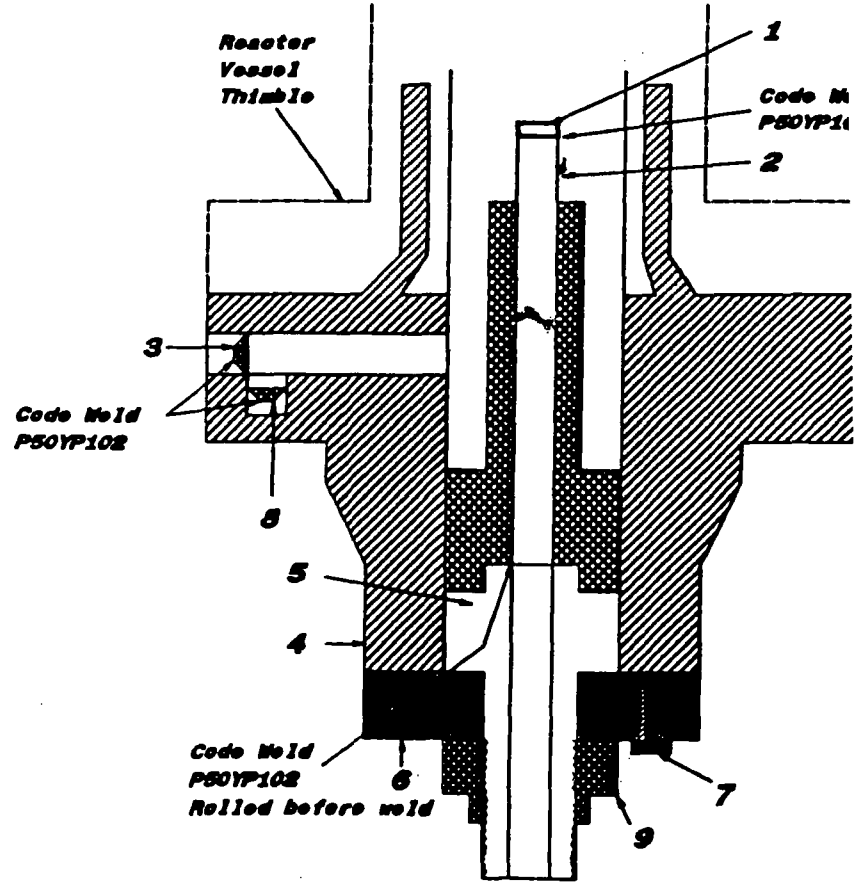
1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Handwritten: 6/23/07
 [Signature]

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)
 - (b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)
2. Identification - Certificate Holder's S/N of Part : A9118 Nat'l Bd. No. N/A
 - (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
 - (b) Description of Part Inspected: Cylinder Tube & Flange
 - (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1
3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F304
 3/8" thick x 1 1/16" OD
2. Indicator Tube 166B9313P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.
3. Plug 158A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD
5. Base 137C5311P001
 SA182 - F304
 7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002, P003
 137C8151P001, P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.
9. Nut 137C5934P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- | | |
|---|---|
| <p>1. Owner: Energy Northwest
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>2. Plant: Columbia Generating Station
 Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352</p> <p>3. (a) Work Performed By: Energy Northwest
 (b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
 (c) Type Code Symbol Stamp: Not Applicable
 (d) Certificate Of Authorization No.: Not Applicable
 (e) Expiration Date: Not Applicable</p> <p>4. Identification Of System: Control Rod Drive (CRD) System</p> <p>5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1
 (b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
 (c) Applicable ASME Section XI Code Case(s): None</p> <p>6. Identification Of Components</p> | <p>Date: 06/23/07
 Sheet: 1 Of 1
 Unit: Not Applicable</p> |
|---|---|

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	A8727	N/A	N/A	1989	Removed	Yes, Code Class 1
CRD	GE	6492	N/A	N/A	1974	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 34-19. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A8727.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No 6492.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES:

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No 6492 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 6492. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496N, A, B, I, NS, C 9496W
Inspector's Signature National Board, State, and Endorsements

Date 6/26/07

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

Handwritten signature

- 1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C. 6/23/07.
(Name and address of Manufacturer of part)
- (b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)
- 2. Identification-Manufacturer's Serial No. of Part 6492 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-i Class 1
- 3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi
(Brief description of service for which component was designed)
minimum.

FOR INFORMATION ONLY

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date November 11 19 74 Signed GE, BWRSD - REM By *Handwritten Signature*
(Manufacturer)
Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on November 11 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date November 11 19 74

E. L. Shinnell Commissions NC 723, PA, NC 1766, Ohio
Inspector's Signature National Board, State, Province and No.

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Top, bottom, ends) (Conv. or Conc.)

(a) _____
(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. if bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575 °F Drop Weight _____ Charpy Impact _____ ft-lb at temp. of _____ °F

FOR INFORMATION ONLY

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Conv. or Conc.)

(a) Top, bottom, ends _____
(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____ Charpy Impact _____ ft-lb at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other material or material of construction if different from that specified in the code.

ZX00368346

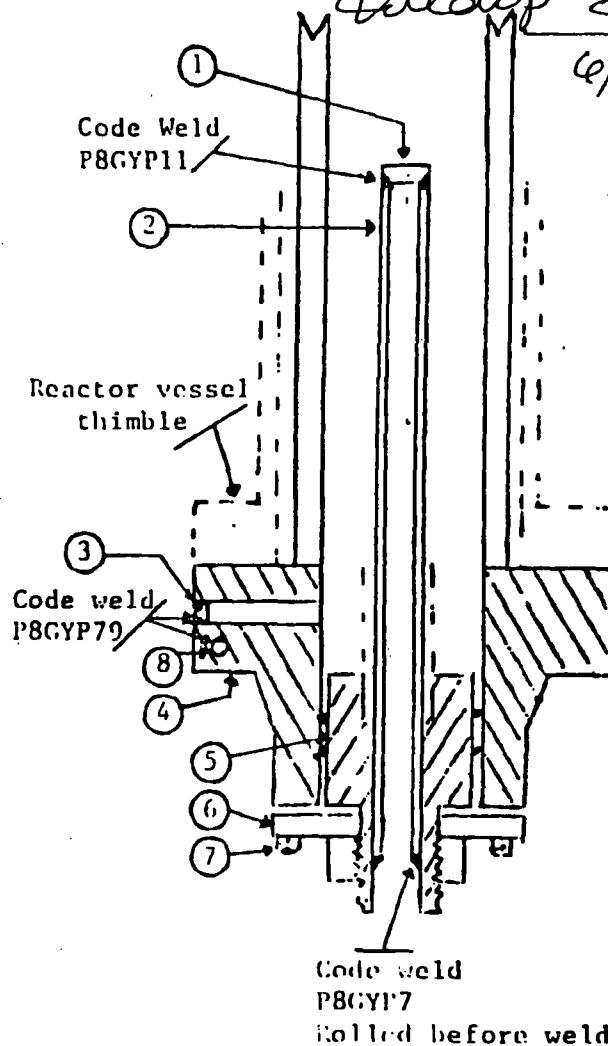
CONTROL ROD DRIVE
761E387G1/G2

WOR No. 01109670 45

Check Sup 6

6/23/07

1. Cap 167A2343P1
(167A2343)
SA182-F304
3/8 thick x 1.1/16 OD
2. Indicator Tube 104B1336P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Head 129B3539P1
SA182-F304
7/8 thick x 2.875 Dia.
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



ATTACHMENT TO
FORM N-2 MANUFACTURER'S DATA REPORT



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 06/23/07

Sheet: 1 Of 1

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7326	N/A	N/A	1975	Removed	Yes, Code Class 1
CRD	GE	5106	N/A	N/A	1974	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 06-15. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 7326.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No 5106.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No 5106 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturers Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 5106. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N A, B, I, M, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

W07 No. 01109670 46

As required by the Provisions of the ASME Code Rules

Handwritten signature
6/23/07.

Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.
(Name and address of Manufacturer of part)

Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 5106 Nat'l Id. No.

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 Ci

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi
(Brief description of service for which component was designed)
minimum.

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

December 17 19 74 Signed GE, BWRSD - REM By *[Signature]*
(Manufacturer)
Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington
Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington
Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488
Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 17 1974, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date December 17 19 74
[Signature]
Inspector's Signature
Commissions NC 723, PA. 1766, Ohio
National Board, State, Province and No.

FORM No. 1 (Rev. 11-1-61)

Items 1-8 to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

1. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) _____

(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as gage and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575³ °F
Drop Weight _____
Charpy Impact _____ ft.-lb.
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) Top, bottom, ends _____

(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F
Drop Weight _____
Charpy Impact _____ ft.-lb.
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

FOR INFORMATION ONLY

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Manholes, No. _____ Size _____ Location _____

Openings: Handholes, No. _____ Size _____ Location _____

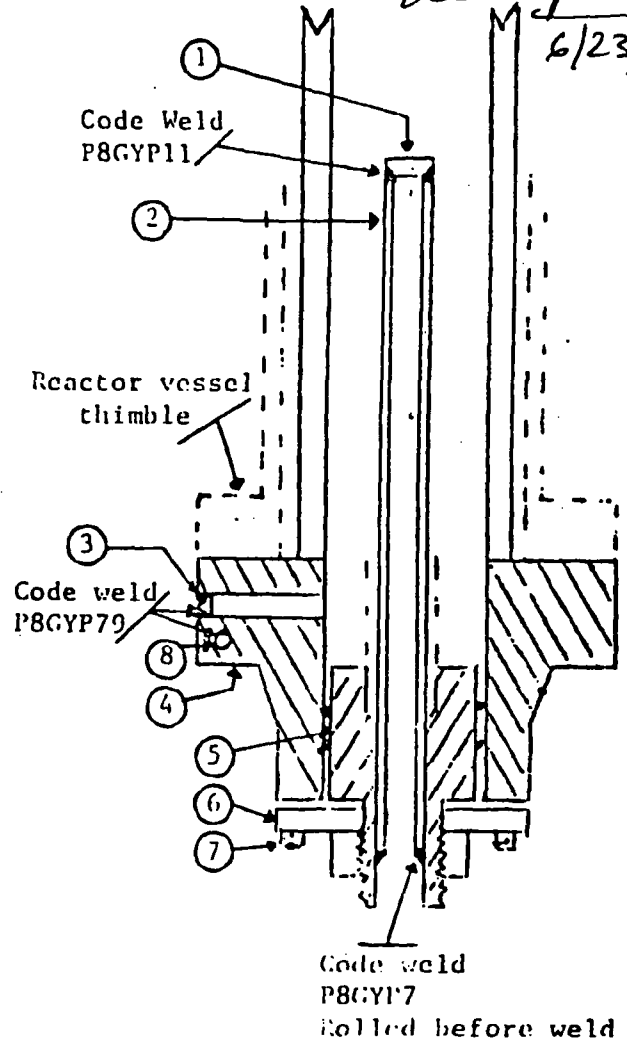
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ (Number) _____ Legs _____ (Number) _____ Other _____ (Describe) _____ Attached _____ (Where & How)

CONTROL ROD DRIVE
761E387G1/G2

WOT No. 0110967046
David Supt
6/23/07.

1. Cap 167A2343P1
(167A2343)
SA182-F304
3/8 thick x 1.1/16 OD
2. Indicator Tube 104B1336P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Head 129B3539P1
SA182-F304
7/8 thick x 2.875 Dia.
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



ATTACHMENT TO
FORM N-2 MANUFACTURER'S DATA REPORT

[Faint, illegible text]



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. Owner:** Energy Northwest **Date:** 06/23/07
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 Of 1
2. Plant: Columbia Generating Station **Unit:** Not Applicable
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Control Rod Drive (CRD) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	5485	N/A	N/A	1974	Removed	Yes, Code Class 1
CRD	GE	A9294	N/A	N/A	1996	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 30-43. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 5485.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9294.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES:

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9294 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9294. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.B.P.V. NSC 9496W
Inspector's Signature National Board, State, and Endorsements

Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Handwritten: Supp
6/23/07.

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9294 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By [Signature]
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 Date [Signature] Inspector's Signature NC 856 National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	_____	_____	_____	_____	_____	_____	_____	_____	_____
(b)	_____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. if bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b)	Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

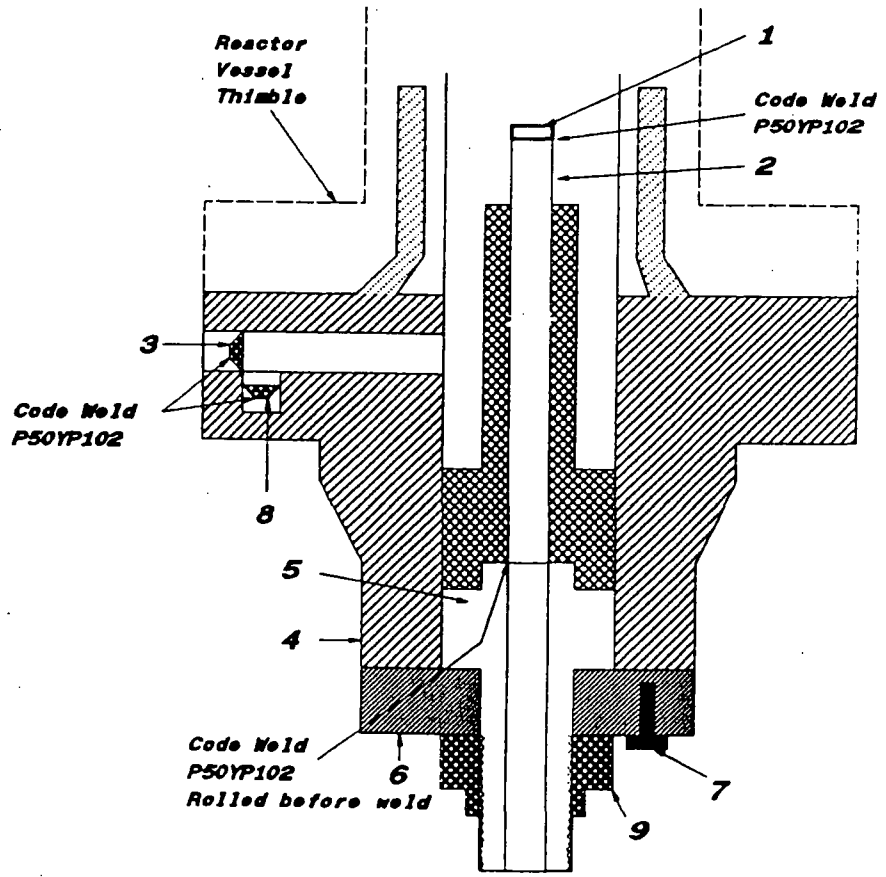
18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.
 2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE) *Philip Sipes*
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder) *6/23/07*
- (b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)
2. Identification - Certificate Holder's S/N of Part : A9294 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson
- (b) Description of Part Inspected: Cylinder Tube & Flange
- (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1
3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.
3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.
9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD) System

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Date: 06/23/07

Sheet: 1 Of 1

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7179	N/A	N/A	1975	Removed	Yes, Code Class 1
CRD	GE	7231	N/A	N/A	1975	Installed	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced Control Rod Drive (CRD) assembly at Core Location 22-15. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 7179.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No 7231.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No 7231 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 7231. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.

Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N.A.B.T., N.S.C. 9496 W
Inspector's Signature National Board, State, and Endorsements

Date 6/26/07

WOT No. 0110967048

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

Handwritten signature

6/23/07

(a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 7231 Nat'l Bd. No. _____

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 G1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi
(Brief description of service for which component was designed)
minimum.

FOR INFORMATION ONLY

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date June 19 19 75 Signed GE, BWRSD - REM By [Signature]
(Manufacturer)

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor

of State of North Carolina have inspected the part of a pressure vessel described in this

Manufacturer's Partial Data Report on June 19 19 75, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date June 19 19 75

[Signature]
Inspector's Signature

Commissions NC 721, PA, NC 1766, Ohio
National Board, State, Province and No

7Y00368065

Items 1-4 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

1. Shell: Material _____ F.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Top, bottom, ends) (Conv. or Conc.)

(a) _____
(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as gage and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575¹ °F
Drop Weight _____
Charpy Impact _____ ft.-lb
at temp. of _____ °F

FOR INFORMATION ONLY

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

*1. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Conv. or Conc.)

(a) Top, bottom, ends _____
(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F
Drop Weight _____
Charpy Impact _____ ft.-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

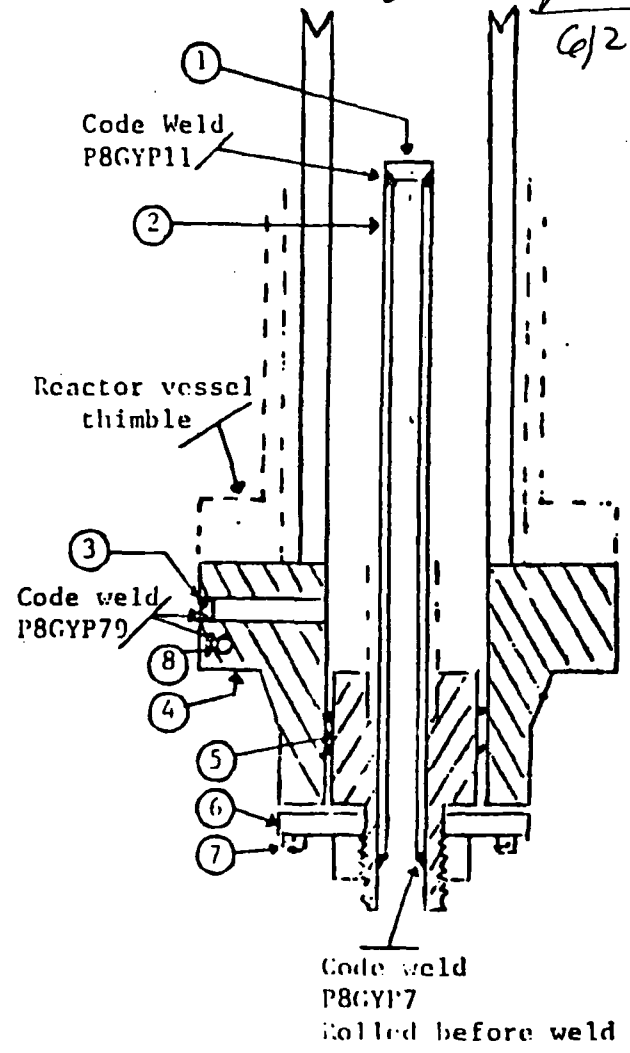
Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
--------------------------------	--------	--------------	------	----------	-----------	------------------------	--------------

17. Inspection Manholes, No. _____ Size _____ Location _____
Openings Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

- 1. Cap 167A2343P1
(167A2343)
SA182-F304
3/8 thick x 1.1/16 OD
- 2. Indicator Tube 104B1336P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
- 3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
- 4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
- 5. Head 129B3539P1
SA182-F304
7/8 thick x 2.875 Dia.
- 6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
- 7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
- 8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



ATTACHMENT TO
FORM N-2 MANUFACTURER'S DATA REPORT



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Date: 06/23/07

Sheet: 1 Of 1

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6006	N/A	N/A	1974	Removed	Yes, Code Class 1
CRD	GE	A8540	N/A	N/A	1987	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 30-15. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 6006.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8540.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A8540 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [] Other []
Exempt [] Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8540. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N, A, B, E, N, S, C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

W07 01109670 49
Wulair Sup 3

As required by the Provision of the ASME Code Rules, Section III, Div. 1

Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)

(b) Manufactured for: WNP-2
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holders's S/N of Part: AB540 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: CYLINDER TUBE & FLANGE MWR AT5071

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section II (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

DATE: 11/10, 19 87 Signed GE-NEBG-NF&CM-QA By J. Ettruden
(NPT Certificate Holder)

Certificate Of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-115

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA

DC22A6253 Rev. 0

Design specification certified by BJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570

DC22A6254 Rev. 0.

Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. MO1864

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 11-10 1987, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

DATE: 11-10, 19 87 Inspector's Signature: J.F. Shomdyke National Board, State, Province and No: NC-779-PA-WC 2260 OHIO

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

VERIFIED & ACCEPTED D. J. Miller

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material T.S. Nominal Thickness in. Allowance in Dia. ft. in. Length ft. in.
 (Kind & Spec.No.) (Min.ofRange Specified) AT 5077
5. Seams: Long H.T.¹ R.T. AT 5077 Efficiency
 Girth H.T.¹ R.T. No. of Courses S/N A85
6. Heads: (a) Material T.S. (b)Material T.S. Postweld
1/15/88
 Location (Top Bottom,Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv.or conc.)
 (a)
 (b)
 If removable, bolts used Other fastening
 (Material, Spec.No., T.S. Size Number) (Describe or attach sketch)
7. Jacket Closure:
 (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)
8. Design Pressure ² 1250 psi at 575 °F Drop Weight
 Charpy Impact ft-lb
 at temp. of °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l. Dia. Thickness in. Attachment
 (Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)
 Floating. Material Dia. Thickness in. Attachment
inches
10. Tubes: Material O.D. in. Thickness or gage. Number Type
 (Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

11. Shell: Material T.S. Nominal Thickness in. Allowance in Dia. ft. in Length ft. in
 (Kind&Spec.No.) (Min.ofRange Specified)
12. Seams: Long H.T.¹ R.T. Efficiency %
 Girth H.T.¹ R.T. No. of Courses
13. Heads (a) Material T.S. (b)Material T.S.
 Location (a)Top, Bottom, End Thickness Crown Radius Knuckle Radius Elliptical Ratio Concial Apex Angle Hemispherical Radius Flat Diameter (Conv.or Conc.) Side to Press.
 (b)Channel
 If removable, bolts used (a) (b) (c) Other Fastening
 (Describe or attach sketch)
 Drop Weight
 Charpy Impact ft-lb
 at temp. of °F
14. Design pressure² psi at °F at temp. of °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number Size Location
16. Nozzles:

Purpose (Inlet Outlet, Drain)	Number	Die or Size	Type	Material	Thickness	Reinforcement Material	Attached
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
17. Inspection Openings: Manholes, No. Size Location
 Handles, No. Size Location
 Threaded, No. Size Location
18. Supports: Shirt Lugs Legs Other Attached
 (Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicalbe.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest

Date: 06/23/07

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Sheet: 1 Of 1

2. **Plant:** Columbia Generating Station

Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD) System

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7155	N/A	N/A	1975	Removed	Yes, Code Class 1
CRD	GE	6091	N/A	N/A	1974	Installed	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced Control Rod Drive (CRD) assembly at Core Location 34-35. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 7155.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No 6091.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No 6091 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 6091. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 NAB, INSC 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/26/07

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

WDT No. 01109670 50

As required by the Provisions of the ASME Code Rules

Repair Shop

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C. 6/23/07.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 6091 ✓ Nat'l Bd. No.

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 G1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi
(Brief description of service for which component was designed)
minimum.

FOR INFORMATION ONLY

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date Dec. 31 19 74 Signed GE, BWRSD - REM By *[Signature]*
(Manufacturer)

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 31 1974, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date December 31 19 74

[Signature]
 Inspector's Signature

Commissions NC 723, PA. NC 1766, Ohio
National Board, State, Province and No.

7X00367561

FORM No. 1 (back)

Items 4-6 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ in. Length _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) _____
(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as gage and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575³ °F Drop Weight _____ Charpy Impact _____ at temp. of _____

Items 9 and 10 to be completed for tube sections

FOR INFORMATION ONLY

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U.)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. in. Length _____ ft. in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) Top, bottom, ends _____
(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____ Charpy Impact _____ at temp. of _____

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

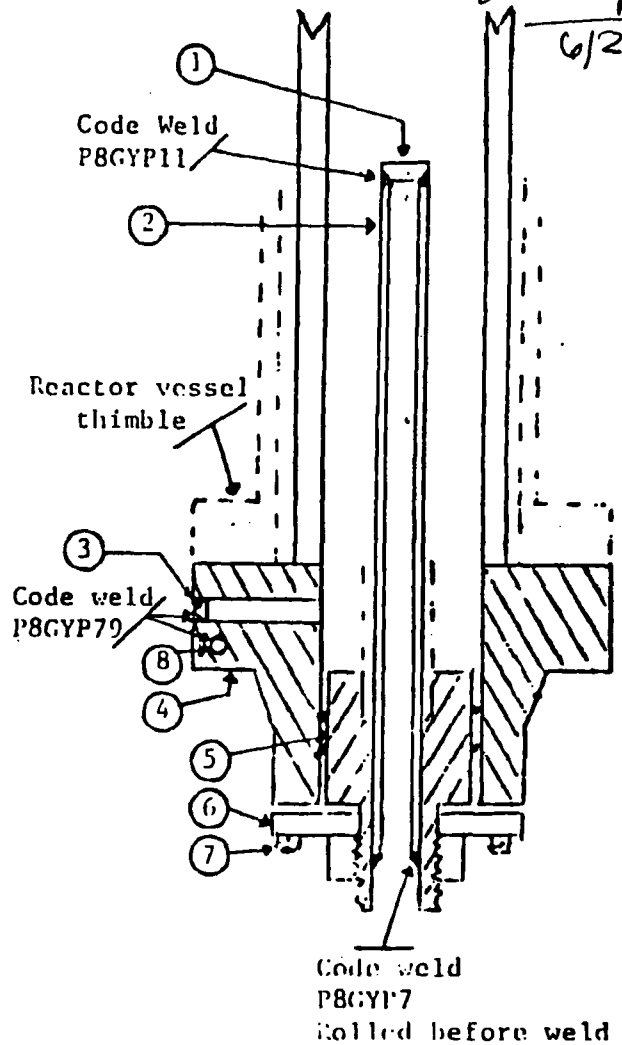
17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

2X00367562

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

Delap Sig
6/23/07.

1. Cap 167A2343P1
(167A2343)
SA182-F304
3/8 thick x 1.1/16 OD
2. Indicator Tube 104B1336P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Head 129B3539P1
SA182-F304
7/8 thick x 2.875 Dia.
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



ATTACHMENT TO
FORM N-2 MANUFACTURER'S DATA REPORT



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. **(a) Work Performed By:** Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD) System

5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. **Identification Of Components**

Date: 06/23/07

Sheet: 1 Of 1

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	A8486	N/A	N/A	1988	Removed	Yes, Code Class 1
CRD	GE	A8722	N/A	N/A	1988	Installed	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced Control Rod Drive (CRD) assembly at Core Location 50-23. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A8486.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8722.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A8722 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8722. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By [Signature] Signed By [Signature]
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions 9496 N.A.B.T., NS C 9496 W
Inspector's Signature National Board, State, and Endorsements
Date 6/26/07

WOT No. 01109670 51

David Supb
6/23/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)
- (b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
(Name and Address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holders's S/N of Part: A8722 Nat'l Bd. No. N/A
 - (a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson
 - (b) Description of Part Inspected: CYLINDER TUBE & FLANGE
 - (c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75 Case No. 1361-2 Class 1
3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

DATE: 12/31, 19 88 Signed GE-NEEG-NF&OM-QA By *[Signature]*
(NPT Certificate Holder)

Certificate of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA
DC22A6253 Rev. 0

Design specification certified by BJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570
DC22A6254 Rev. 0.

Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. M018646

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 12-31 1988, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12-31, 1988 *[Signature]* MG 779, PAWC2L60, OHIO
DATE Inspector's Signature National Board, State, Province and No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

(10/77)

VERIFIED & ACCEPTED *[Signature]*
1-18-89
R.I. Inspector Date

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec.No.) (Min.ofRange Specified)
5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____
6. Heads: (a) Material _____ T.S. _____ (b)Material _____ T.S. _____
Location (Top Bottom,Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv.or conc.)
(a) _____
(b) _____
If removable, bolts used _____ Other fastening _____
(Material,Spec.No., T.S. Size Number) (Describe or attach sketch)
7. Jacket Closure:
(Describe as ogee and weld,bar,etc. If bar give dimensions, if bolts, describe or sketch)
8. Design Pressure ² _____ 1250 _____ psi at _____ 575 _____ °F
Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l. _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____
inches
10. Tubes: Material _____ O.D. _____ in. Thickness _____ or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind&Spec.No.) (Min.ofRange Specified)
12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____
13. Heads (a) Material _____ T.S. _____ (b)Material _____ T.S. _____
Location Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv.or Conc.)
(a)Top, Bottom, Thickness Radius Radius Ratio Apex Angle Radius Diameter (Conv.or Conc.)
End
(b)Channel
If removable, bolts used (a) _____ (b) _____ (c) _____ Other Fastening _____
(Describe or attach sketch
Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F
14. Design pressure² _____ psi at _____ °F at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____
16. Nozzles:
Purpose (Inlet Outlet, Drain) Number Dia or Size Type Material Thickness Reinforcement Material Attached
- | Purpose (Inlet Outlet, Drain) | Number | Dia or Size | Type | Material | Thickness | Reinforcement Material | Attached |
|-------------------------------|--------|-------------|-------|----------|-----------|------------------------|----------|
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handles, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____
18. Supports: Shirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicable.



**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Code Case(s):** None

6. **Identification Of Components**

Date: 06/23/07

Sheet: 1 Of 1

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	A8926	N/A	N/A	1991	Removed	Yes, Code Class 1
CRD	GE	A9302	N/A	N/A	1996	Installed	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced Control Rod Drive (CRD) assembly at Core Location 22-11. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A8926.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9302.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9302 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S478.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9302. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496 U
 Inspector's Signature National Board, State, and Endorsements
 Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Dudip Sup
6/23/01.

- 1. Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)
- (b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)
- 2. Identification - Certificate Holder's S/N of Part : A9302 Nat'l Bd. No. N/A
 - (a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson
 - (b) Description of Part Inspected: Cylinder Tube & Flange
 - (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1
- 3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *CBaynet*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California
 Stress analysis report on file at GE Company, San Jose, California
 DC22A6253 Rev. 2
 Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345
 DC22A6254 Rev 1
 Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
 By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 *Thomas Lee* NC 856
 Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

8. Design pressure _____² 1250 psi at _____ 575 ° F at temp of _____ ° F
 Drop Weight _____ Charpy Impact _____ ft-lb

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure _____² psi at _____ ° F at temp of _____ ° F
 Drop Weight _____ Charpy Impact _____ ft-lb

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

Welding Supp
6/23/01

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9302 Nat'l Bd. No. N/A

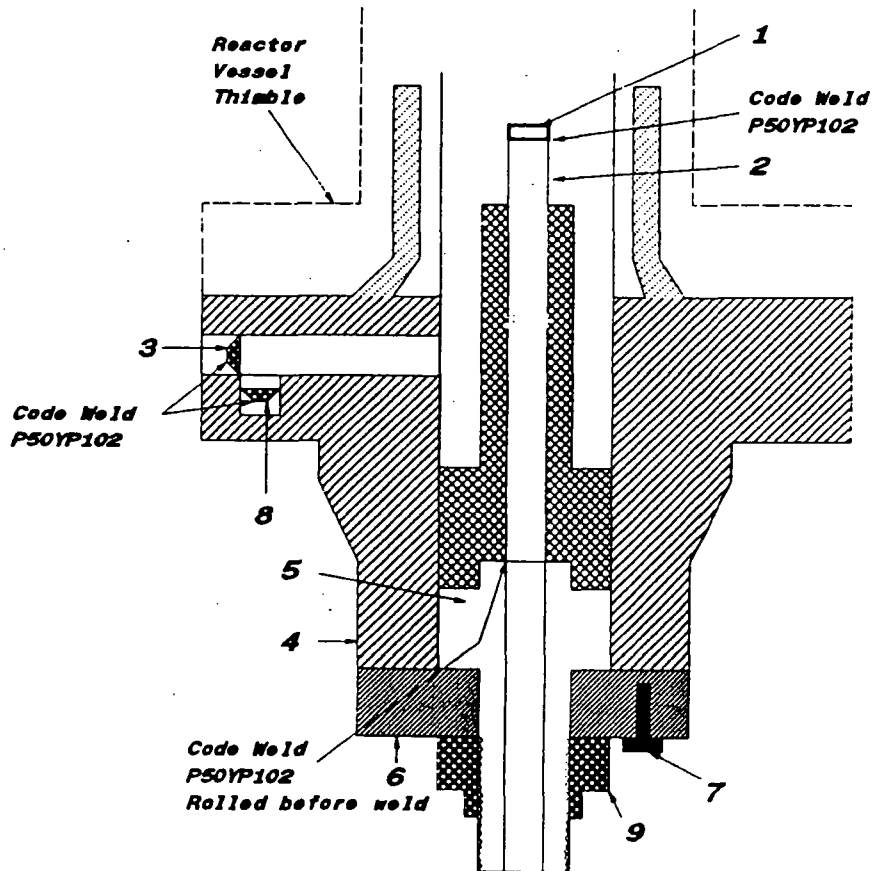
(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.
3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.
9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	A8548	N/A	N/A	1988	Removed	Yes, Code Class 1
CRD	GE	A8738	N/A	N/A	1988	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 50-15. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A8548.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8738.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES-

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A8738 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8738. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Jae C. Hair Commissions 9496 N, A, B, I, NS, C 9496 W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/26/07

W07 01109670 53

Dudip Singh 6/23/89

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. 1

- 1. Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)
- (b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
(Name and Address of N Certificate Holder for completed nuclear component)
- 2. Identification-Certificate Holders's S/N of Part: A8738 Nat'l Bd. No. N/A
- (a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson
- (b) Description of Part Inspected: CYLINDER TUBE & FLANGE
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75 Case No. 1361-2 Class 1
- 3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

DATE: 12/31, 19 88 Signed GE-NEEG-NF&OM-OA By *J. P. Chandra*
(NPT Certificate Holder)

Certificate of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA
DC22A6253 Rev. 0

Design specification certified by BJORN HAAEBERG Prof. Eng. State CALIF. Reg. No. 15570
DC22A6254 Rev. 0.

Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. M018646

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 72-31 1988, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12-31, 1988 *J. P. Chandra* ND 779, PAWC2L60, OHIO
DATE Inspector's Signature National Board, State, Province and No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

(10/77)

VERIFIED & ACCEPTED *W. Miller III*
1-18-89
R.I. Inspector Date

1171

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec.No.) (Min.ofRange Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b)Material _____ T.S. _____
Location (Top Bottom,Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv.or conc.)
(a) _____
(b) _____
If removable, bolts used _____ Other fastening _____
(Material,Spec.No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld,bar,etc. If bar give dimensions, if bolts, describe or sketch)

8. Design Pressure ² 1250 psi at 575 °F Drop Weight _____ Charpy Impact _____ ft-lb at temp. of _____ °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l. _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____ inches

10. Tubes: Material _____ O.D. _____ in. Thickness _____ or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind&Spec.No.) (Min.ofRange Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b)Material _____ T.S. _____
Location (a)Top, Bottom, End Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press (Conv.or Conc.)
(b)Channel _____
If removable, bolts used (a) _____ (b) _____ (c) _____ Other Fastening _____
(Describe or attach sketch Drop Weight _____ Charpy Impact _____ ft-lb at temp. of _____ °F

14. Design pressure² _____ psi at _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:
Purpose (Inlet Outlet, Drain) Number Dia or Size Type Material Thickness Reinforcement Material Attached

17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handles, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Shirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicalbe.

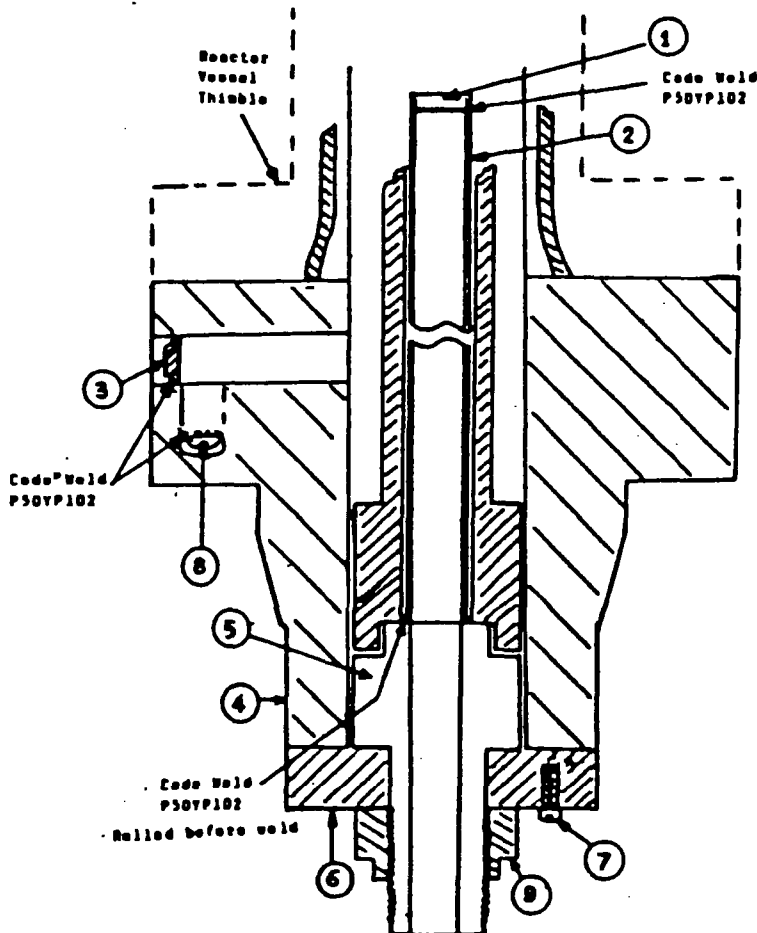
Dulip Singh

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* 6/23/80
 As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
 (Name and Address of NPT Certificate Holder)
- (b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
 (Name and Address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holders's S/N of Part: A8738 Nat'l Bd. N. N/A
- (a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson
- (b) Description of Part Inspected: CYLINDER TUBE & FLANGE
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1
3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
 (Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 2 of 2

1. Cap 167A2343P1
 SA182-F304
 3/8 thick x 1 1/16 OD
2. Indicator Tube 104B1336P3
 SA312-TP316
 3/4 sch 40-seamless pipe
 0.113 wall thickness
 1.065 max. dia.
3. Plug 159A1176P1
 SA182-F304
 1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
 SA182-F304
 3.37 thick x 9 5/8 OD
5. Head 129B3539P3, P5
 SA182-F304
 7/8 thick x 2.875 Dia.
6. Ring Flange 114B5122P2
 SA182-F304
 1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
 SA193-B6
 6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
 SA182-F304
 0.38 thick x 1.307 dia.
9. Nut 114B5460P1
 SA193-B8A
 1.30 thick x 2.62 dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda

(c) Applicable ASME Section XI Code Case(s): None

6. Identification Of Components

Date: 06/23/07

Sheet: 1 Of 1

Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6535	N/A	N/A	1974	Removed	Yes, Code Class 1
CRD	GE	A9406	N/A	N/A	1996	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 38-11. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 6535.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9406.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9406 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9406. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 N, A, B, I, NS, C 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Dudip Suresh
6/23/07

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9406 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *CS Bryant*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3/29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3/29, 96 *Thomas Lee* NC 856
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location (Top Bottom, Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) _____
 (b) _____
 If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)
 Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)
 Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U.)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv. or conc.)
 (a) Top, bottom, ends _____
 (b) Channel _____
 If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)
 Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain) Number Dia. or Size Type Material Thickness Reinforcement Material How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
 Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

Dudip Singh
 6/23/07.

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9406 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
 SA182 - F316
 3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
 SA312 - TP316
 3/4" sch 40 - seamless pipe
 0.113" wall thickness
 1.065" max. dia.

3. Plug 159A1176P001
 SA182 - F304
 1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
 SA182 - F304
 3.37" thick x 9 5/8" OD

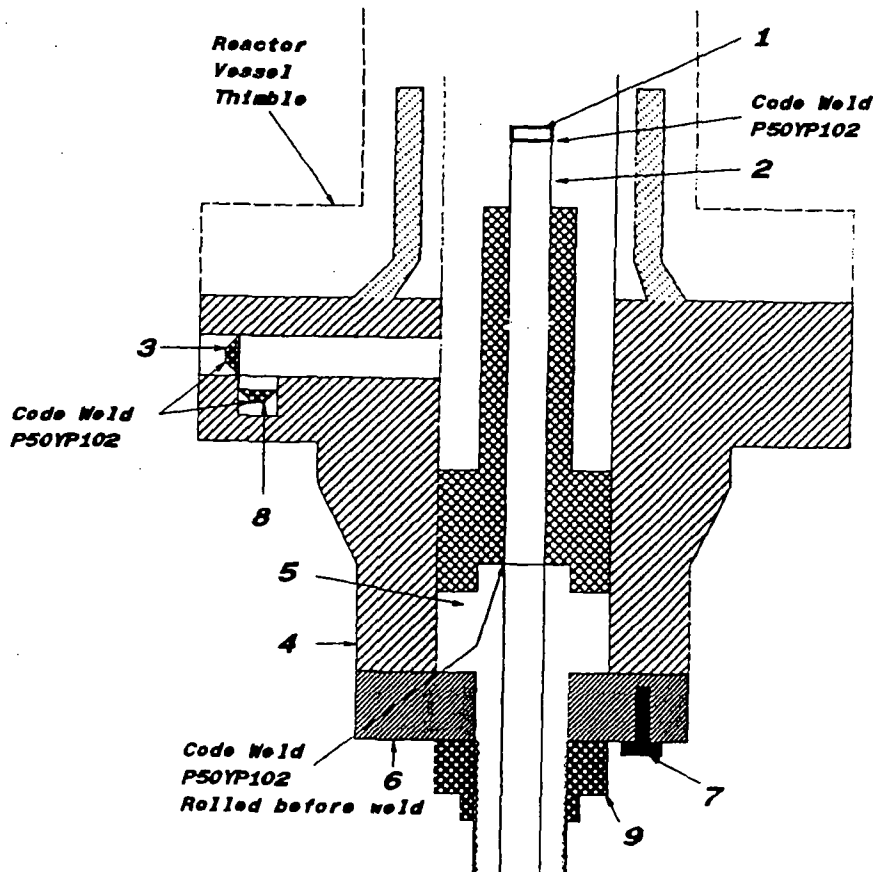
5. Head 129B3539P005
 SA182 - F304
 7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
 SA182 - F304
 1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
 SA193 - B6
 6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
 SA182 - F304
 0.38" thick x 1.307" dia.

9. Nut 114B5460P001
 XM - 19 SA479
 1.30" thick x 2.62" dia.





**FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI**

- 1. **Owner:** Energy Northwest
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. **Plant:** Columbia Generating Station
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. **(a) Work Performed By:** Energy Northwest
(b) Repair/Replacement Organization P.O. No, Job No, etc.: Energy Northwest
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
- 4. **Identification Of System:** Control Rod Drive (CRD) System
- 5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1
(b) Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity: 2001 Edition with 2003 Addenda
(c) Applicable ASME Section XI Code Case(s): None
- 6. **Identification Of Components**

Date: 06/23/07
Sheet: 1 Of 1
Unit: Not Applicable

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	A8534	N/A	N/A	1987	Removed	Yes, Code Class 1
CRD	GE	A9315	N/A	N/A	1996	Installed	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 46-07. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No A8534.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9315.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A9315 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9315. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joc C. Hair Commissions 9496 N, A, B, J, NS, C 9456W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/26/07

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Handwritten signature
6/23/07.

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9315 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 03/28/96 Signed GE-NE By *Handwritten Signature*
(NPT Certificate Holder) (SC QA Representative)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 2
Design specification certified by B.N. Sridhar Prof. Eng. State Calif. Reg. No. 18345

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 3-29, 96 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

3-29, 96 *Handwritten Signature* NC 856
Date Inspector's Signature National Board, State, Province And No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

8. Design pressure ² _____ 1250 _____ psi at _____ 575 _____ ° F at temp of _____ ° F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %
 Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

Drop Weight _____
 Charpy Impact _____ ft-lb

14. Design pressure ² _____ psi at _____ ° F at temp of _____ ° F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles: Purpose (Inlet, Outlet, Drain) _____ Number _____ Dia. or Size _____ Type _____ Material _____ Thickness _____ Reinforcement Material _____ How Attached _____

17. Inspection Manholes, No. _____ Size _____ Location _____
 Openings: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
 As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Energy (GE-NE)
3901 Castle Hayne Road, Wilmington, North Carolina 28401
 (Name and Address of NPT Certificate Holder)

Fielding Sup 4
 6/23/07.

(b) Manufactured for : WNP 2 Richland, Washington 99352
 (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9315 Nat'l Bd. No. N/A

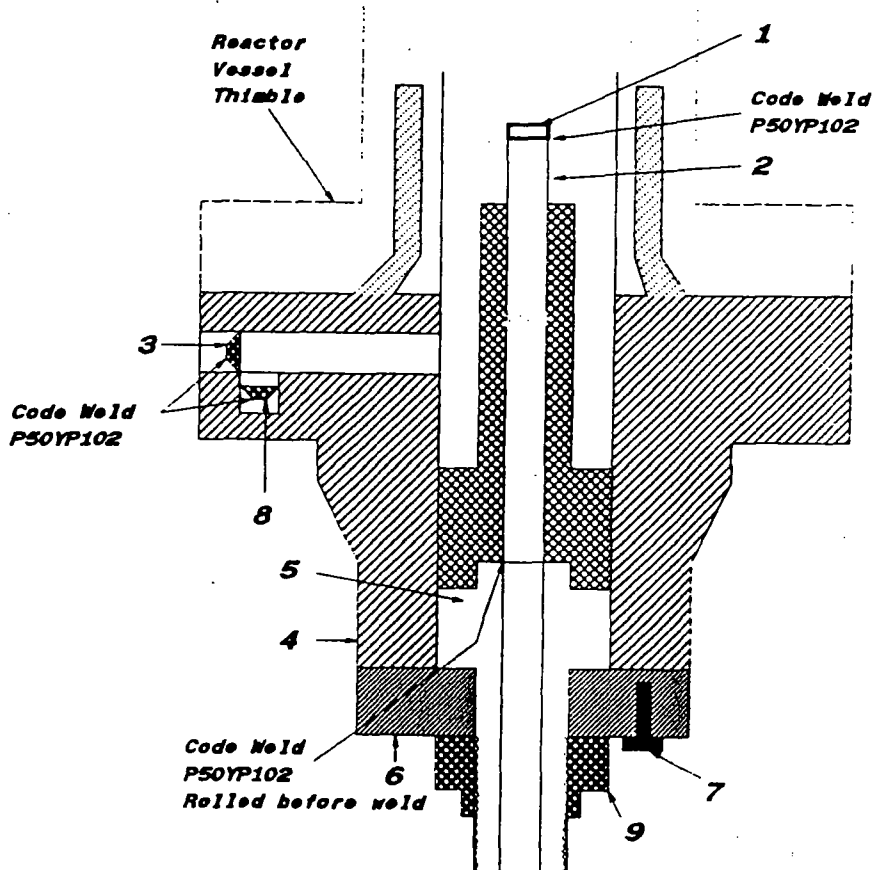
(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
 (Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD
2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.
3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD
4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.
6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.
9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.





FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 06/23/07

Sheet: 1 Of 1

2. **Plant:** Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Unit: Not Applicable

3. (a) **Work Performed By:** Energy Northwest

(b) **Repair/Replacement Organization P.O. No, Job No, etc.:** Energy Northwest

(c) **Type Code Symbol Stamp:** Not Applicable

(d) **Certificate Of Authorization No.:** Not Applicable

(e) **Expiration Date:** Not Applicable

4. **Identification Of System:** Control Rod Drive (CRD) System

5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Note 1

(b) **Applicable Edition Of ASME Section XI Used For Repair/Replacement Activity:** 2001 Edition with 2003 Addenda

(c) **Applicable ASME Section XI Code Case(s):** None

6. **Identification Of Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Corrected, Removed Or Installed	ASME Code Stamped (Yes Or No) Code Class
CRD CRD	GE GE	6651 A6704	N/A N/A	N/A N/A	1975 1987	Removed Installed	Yes, Code Class 1 Yes, Code Class 1

7. **Description Of Work Performed:** Replaced Control Rod Drive (CRD) assembly at Core Location 42-39. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

- 1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.
- 2) Removed existing CRD assembly, Serial No 6651.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A6704.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.
- 6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.
- 7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

- 1) The applicable ASME Code Cases, if any are listed on the ASME Code Data Reports.
- 2) The replacement CRD assembly, Serial No A6704 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.
- 3) Eight (8) new replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 14813, Heat (Trace) Code S548.
- 4) VT-1 visual examination Report No 2RPV-020 for the new replacement cap screws.



FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY (Back)

8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other
 Exempt Test Pressure: 1021 Psig Test Temperature: 182.5° F

9. Remarks (Applicable Manufacturer's Data Reports to be attached): 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A6704. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1021 Psig and test temperature of 182.5° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this Owner's Report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable
 Certificate Of Authorization No.: Not Applicable
 Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh
 Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
 Date 6/23/07 Date 6/23/07

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/19/06 to 6/26/07 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Joe C. Hair Commissions 9496 NA, B, I, NSC 9496W
 Inspector's Signature National Board, State, and Endorsements
 Date 6/26/07

WOT No. 0110967056

... by the provision of the ASME Code Rules, Section III, Div. 1

Designed & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402

(Name and Address of NPT Certificate Holder)

Manufactured for: WNP-2

(Name and Address of N Certificate Holder for completed nuclear component)

Richard Rupp
6/23/07

Identification-Certificate Holders's S/N of Part: A6704 Nat'l Bd. No. N/A

a) Constructed According to Drawing No: 9190258G003 Dwg. Prepared by D. L. Peterson

b) Description of Part Inspected: CYLINDER TUBE & FLANGE

c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class

REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

Sheet 1 of 2 MWR AT 2732 Curdip Rupp

7/22/88

I certify that the statements in this report are correct and this vessel part or appurtenance defined in the code conforms to the rules of construction of the ASME Code Section III as applicable. Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Dated: 11/10, 19 87 Signed GE-NEBG-NF&CH-QA By J. Ettrud
(NPT Certificate Holder)

Certificate of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA

22A6253 Rev. 0

Design specification certified by BJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570

22A6254 Rev. 0.

Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. MO18646

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Vessels and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 11-10 1987, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code, Section III.

In signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

11-10, 1987 J. P. Shoultz
Inspector's Signature

NC 719-PA-WC2L60.0410
National Board, State, Province and No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8 1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

VERIFIED & ACCEPTED J. Miller
1-5-88
Date

Shell: Material _____ T.S. _____ Thickness in. Allowance in. Dia. ft. in. Length ft. in. (Kind & Spec.No., (Min.ofRange Specified))

Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses S/N A6704

6. Heads: (a) Material _____ T.S. _____ (b)Material _____ T.S. _____ Luair

Location (Top Bottom,Ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (conv.or conc.)

(a) _____ (b) _____

If removable, bolts used _____ Other fastening _____ (Material,Spec.No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closures: _____ (Describe as ogee and weld,bar,etc. If bar give dimensions, if bolts, describe or sketch)

8. Design Pressure ² 1250 psi at 575 °F Drop Weight _____ Charpy Impact _____ ft-lb at temp. of _____ °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l. _____ Dia. _____ Thickness in. Attachment _____ (Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness in. Attachment _____ inches

10. Tubes: Material _____ O.D. in. Thickness _____ or gage. Number _____ Type _____ (Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

11. Shell: Material _____ T.S. _____ Thickness in. Allowance in. Dia. ft. in. Length ft. in. (Kind&Spec.No.) (Min.ofRange Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b)Material _____ T.S. _____

Location (a)Top, Bottom, End Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter (Conv.or Conc.) Side to Press.

(b)Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other Fastening _____ (Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____ Charpy Impact _____ ft-lb at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

Table with 8 columns: Purpose (Inlet Outlet, Drain), Number, Dia or Size, Type, Material, Thickness, Reinforcement Material, Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____ Handles, No. _____ Size _____ Location _____ Threaded, No. _____ Size _____ Location _____

18. Supports: Shirt _____ Lugs _____ Legs _____ Other _____ Attached _____ (Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicable.