

# Condition Reports

Friday, May 31, 2002

Unit	CR #	CA	Ca	CR Oid	Due	Inv Cmpl	Closure	Roib	Assa	Status	Causes
Qua	Eval	ITS	OD	ID	Ext #	Oid Due	HW	Asset#	Mode/Res1?	System	Cause Oid

Title / Description / Immed Actions & Subv Comments										Process	Events	Actv Codes
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1	02-01534	2	CA	04/12/02	06/27/02				No	DBE	Open	
No	No			1	1	05/27/02	Rework T2*RC		5	Yes	064-04	
OXIDATION AND MISSING PAINT AT PRESSURIZER LEVEL TAP										HDW	0575 0576	0575

During walkdown for IP-M-028, Alloy 600 Inspection Plan, it was noted that there was slight oxidation, missing paint/coating and faint trace of some previous leakage at the nozzle for the lower tap of the Pressurizer Level Transmitter, LT-RC14-2. The root valve associated with this tap and adjacent to this tap is RC14A.

There are no signs of active leakage. There are no signs of any boric acid.  
The oxidation is on the surface of pressurizer in a narrow ring (perhaps 1/4") around the circumference of the nozzle penetration. (see attached picture) The reference to a faint trace of previous leakage refers to staining observed on the surface of the pressurizer paint below the nozzle. This cannot be readily seen in the attached picture.  
This inspection was done as part of the extent of condition for CR 2002-00891.

1	02-01582	2	CA	04/18/02	06/02/02				No	DBE	Open	
No	No			1	0	06/02/02	T9-1			No	051-01	
CORE FLOOD TANK 1 ALLOY 600 EXTENT OF CONDITION DISCREPENCIES										HDW	0575 0576	0575

During walkdown of the Core Flooding Tank 1-1 for Alloy 600 Extent of Condition per IP-M-028 several issues were noted that required further review:

- CFT1-01, (Outlet Nozzle) Nozzle had numerous indications of rust stains. Appears to be from elsewhere. No signs of leakage from the nozzle itself.
- CFT1-02 (CF3B1) Nozzle had small rust stain on top of nozzle. No sign of nozzle leaking.
- CFT1-04 (Sample Connection) Rust stains on the nozzle and a rusted area on the tank at the 10 o'clock position. No signs of the nozzle leaking.
- CFT1-05 (CF4B1) Minor white stains under the nozzle. Appears to be from elsewhere. No evidence of nozzle leaking.
- CFT1-06 (CF4B2) Signs of paint or possibly old boron in a longitudinal line down the nozzle @ 1 o'clock position. It does not rub off or brush off. Also minor white stains under nozzle appears to be from elsewhere.
- CFT1-07 (CF103) Signs of minor tank oxidation approximately 4" from nozzle.

Due to white stains being seen on several of the components, this CR needs to follow the requirements of NG-EN-00324, Boric Acid Corrosion Procedure.  
Contacted Jon Hook.  
Identified per Reactor Head Degradation extent of condition program.

1	02-01585	2	CA	04/18/02	06/02/02				No	DBE	Open	
No	No			1	0	06/02/02	T9-2		3	Yes	051-01	
CORE FLOOD TANK 2 ALLOY 600 EXTENT OF CONDITION DISCREPENCIES										HDW	0575 0576	0575

During walkdown of the Core Flooding Tank 1-2 for Alloy 600 Extent of Condition per IP-M-028 several issues were noted that required further review:

- CFT2-01 (Outlet Nozzle) Nozzle had streaks of white which appeared to be from elsewhere. It also had rust spots and streaks which appear to be minor but are numerous.
- CFT2-03 (CF3A2) Nozzle had streaks and spots of white. Appears to be from elsewhere.
- CFT2-05 (CF4A1) Nozzle had minor white stains under nozzle. Appears to be from elsewhere. Adjacent area of tank has a 8" high x 4" wide area of surface rust.
- CFT2-06 (CF4A2) Nozzle had streaks and spots of white. Appears to be from elsewhere. Band of horizontal rust marks under the nozzle and run several feet in each direction around tank. Appear to be possibly from a band or strap on the tank in the past that scratched the coating.
- CFT2-07 (CF100) Nozzle had minor streaks and spots of white. Appears to be from elsewhere.

Due to the white material being found, this CR needs to follow the requirements of NG-EN-00304, Boric Acid Corrosion Procedure.  
Contacted Jon Hook.  
Identified per Reactor Head Degradation extent of condition program.

1	02-01606	2	CA	04/19/02	06/03/02			No	PE	Open	
No	No			1	0	06/03/02	RCS 2 Hot Leg	4	Yes	064-02	
INSPECTION PLAN IP-M-028 ALLOY 600 FINDING ON INSULATION									HDW	0575 0576	0575

The following conditions were identified during an IP-M-028 Alloy 600 inspection for three nozzle located on the Number 2 Hot Leg.

HL2-5 (Pressure Tap PTA1 near valve RC2A1) had surface boric acid crystals located on the upper horizontal surface of the hot leg insulation. This appears to be from the thermal well, which is directly above this nozzle. Insulation has minor surface discoloration and the outer line insulation (called a "coffee can") has poor fit and form.

HL2-6 (Thermal Well Tap TWRC3A) and HL2-7 (Pressure Tap PTA2 near valve RC2A2) insulation had minor surface discoloration. There was question if a coffee can cover was installed at one time and is missing.

This CR is written in accordance with the inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall will comply with NG-EN-00324 Boric Acid Corrosion Procedure.

Additional inspections will be required to determine source and corrective actions. These inspections are detailed in the Extent of Condition plan. No active leakage was identified. Identified per Reactor Head Degradation extent of condition program.

1	02-01631	1	CA	04/23/02	06/07/02			No	DBE	Open	
No	No			1	0	06/07/02	OTSG 2 Hot Leg		No	064-02	
MISSING INSULATION ON OTSG 2 HOT LEG VENT AND FLOW TRANSMITTERS NOZZLES									HDW	0575 0576	0575

The following missing insulation conditions were identified during an IP-M-028 Alloy 600 inspection for three nozzle located on the Number 2 Hot Leg. It appears that insulation was installed, however it is currently missing.

HL2-10. Insulation Hot Leg 2 Upper Vent Nozzle near RC44 (OTSG 2) appears to be missing the north insulation box. This located on the upper part of the hot leg.

HL2-3 and HL2-4, Insulation for Hot Leg 2 Flow transmitter at azimuth 337.5 degrees and 202.5 degrees are missing insulation cover plates (pie pans). Located near RC1AA and RC1AB isolation valves.

This CR is written against configuration control of insulation not being installed or even if required. Request a determination if this insulation is required and if so then have it replaced.

Identified per Reactor Head Degradation Extent of Condition program.

Note, the only issue identified under this CR is missing insulation. Since the missing insulation pieces are shown as installed on an "Approved" status vendor drawing M-197-00040, it is recommended that this CR go to Maintenance to find or procure the missing insulation and re-install.

1	02-01635	2	CA	04/23/02	06/07/02			No	DBE	Open	
No	No			1	0	06/07/02	TWRC3A1	4	Yes	064-02	
INSPECTION PLAN IP-M-028 FINDINGS.									HDW	0575 0576	0575

The following conditions were identified during an IP-M-028 Alloy 600 inspection for RCS Hot Leg Thermowells TWRC3A1 and TWRC3A3.

Inspection zone HL2-8 (TWRC3A1) had evidence of possible leakage "trails" below and on the east side of the thermowell. In comparison to the general condition of the surrounding area, the mounting boss and adjacent area had been cleaned, but uncertain when this cleaning occurred. Discoloration of the RTD nut and RTD, and at the 10:00 position around the thermowell was also noted. Reddish/brown oxidation was present on the underside of the RTD conduit coupling weld and a white deposit was present on the conduit. Reddish/brown oxidation was present on the hot leg both above and below TWRC3A1, with heavier oxidation noted to the west and trailing down the hot leg. Unable to determine with certainty the cause of the oxidation.

Inspection zone HL2-9 (TWRC3A3) had evidence of possible leakage in the form of minor reddish/brown oxidation on the hot leg piping below TWRC3A3. The mounting boss itself was very clean, but uncertain when cleaning occurred. Reddish/Brown oxidation was also present in the seam of the insulation piece below TWRC3A3 and above TWRC3A.

Identified per Reactor Head Degradation Extent of Condition program.

No active leakage identified.

This Condition Report must comply with the requirements of NG-EN-00324, Boric Acid Corrosion Control Program.

1	02-01647*	2	CA	04/23/02	06/07/02			No	PE	Open	
No	No			1	0	06/07/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 ALLOY 600 FINDINGS									HDW	0575 0576	0575

The following conditions were identified during an IP-M-028 Alloy 600 Inspection of RCP 2-1 Outlet UCL Temp. Conn. TWRC4A1 and TWRC4A3.

The target areas (28" ID RCS Pipe) for UCL Temp. Connections TWRC4A1 has slight oxidation (rust) on the pipe and nozzle surfaces. Likewise, TWRC4A3 also has oxidation on the RCS pipe surrounding the nozzle however, to a lesser degree.

This CR is written in accordance with the inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program.

No active or inactive leakage was identified. Additional evaluation of effected areas per the Extent of Condition Plan will be needed. No immediate actions required.

1	02-01660*	0	CF	04/24/02	06/08/02			No	PE	Open	
Yes	No			3	0	06/08/02	N/A	N/A	No	N/A	
INSPECTION PLAN REQUIREMENT NOT INCLUDED IN INSPECTION CR									ERO	2779	2775

Condition report 02-1635 was initiated to document an Extent of Condition Inspection finding.

Extent of Condition Inspection Plan IP-M-028 states that a CR shall be initiated for any indication of leakage or corrosion identified during an inspection. The plan also states that the CR shall include a statement indicating 'the need to comply with NG-EN-00324 Boric Acid Corrosion Procedure'. This statement was not included in CR 02-1635.

Based on the anticipated number of CRs that will be originated for this effort, consideration should be given to developing a boilerplate CR that will include the minimum required information for this project.

Recommend category CF, CAQ because the inspection plan procedure is a quality procedure, and quality related inspections/documentation are conducted IAW the inspection plan. F because the cause is understood.

1	02-01703*	1	CA	04/26/02	06/10/02			No	PE	Open	
No	No			1	0	06/10/02	Rework 12" RC	4	Yes	064-04	
INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION - PZR-14									HDW	9999 0576	9999

During inspection of the nozzle of RC13A a white streak/stain was noted on the nozzle. It appeared that something may have dripped on it in the past. The streak does not extend and is not seen on other portions of the nozzle. Can not confirm that it is boric acid.

This Condition Report is generated based on Serial Number PZR-14 performed under Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

No immediate actions required.

1	02-01658*	1	CA	04/24/02	06/08/02			No	PE	Open	
No	Yes			1	0	06/08/02	OTSG 2 Hot Leg	4	Yes	064-02	
DIRTY INSULATION ON OTSG 2 HOT LEG - IDENTIFIED DURING THE IP-M-028 PLAN									HDW	0575 0576	0575

The following insulation had reddish material and evidence of corrosion. This was identified during an IP-M-028 Alloy 600 inspection for two nozzle located on the SG 2 Hot Leg.

HL2-10. Insulation Hot Leg 2 Upper Vent Nozzle near RC44 (OTSG 2) has reddish particulate material located at base of hot leg insulation. This reddish material was found over most horizontal surfaces on the hot leg. Insulation cap appears to have surface corrosion material near inner buckle. Unable to determine source or reason. Insulation material is stainless steel and does not appear to be deteriorating. Form/fit and discoloration is present. The location is on the upper part of the number 2 hot leg.

HL2-3 Insulation for Hot Leg 2 Flow transmitter at azimuth 202.5 degrees, elevation 626' 7" has a reddish material located on the inner surface of the insulation penetration. This appears to be coming from the hot leg surface. The thermal well located directly above this penetration was leaking. Also there is the same reddish particulate material as found on top of the hot leg insulation on the horizontal flow transmitter isolation valve.

This CR is written in accordance with the inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR complies with NG-EN-00324 Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. The requirements of NG-EN-00324 need to be addressed in the evaluation of this CR.

1	02-01661	1	CA	04/24/02	06/08/02			No	PE	Open	
No	Yes			1	0	06/08/02	TWRC3B, RC2B2	4	Yes	064-02	
INSPECTION PLAN IP-M-028 FINDINGS									HDW	0575 0576	0575

The following conditions were identified while performing inspections for IP-M-028 Alloy 600 Inspection program for package serial numbers Insulation inspections for HL1-4, HL1-5, HL1-6 and weld inspections for HL1-7 and HL1-8.

Inspection zone HL1-4 Insulation (HL Temp Connection TWRC3B). The insulation for HL1-4 has boron or white powder noted on the horizontal surface of the right insulation panel as viewed looking at the thermal well. In a slightly recessed area to the right of the white powder locations a reddish brown discoloration is evident.

Inspection Zone HL1-5 Insulation (HL Pressure Tap Nozzle RC2B2 PTB2). The insulation pertaining to HL1-5 has standard hot leg mirror with a small can at the pressure tap location and a box around the first valve. Reddish brown discoloration was present on the north side of the can and on the horizontal surface of the hot leg insulation. White powder / discoloration is present on the horizontal surface of both hot leg mirror panels and the West side of the box in a dented area or indentation.

Inspection zone HL1-6 Insulation (HL Pressure Tap Nozzle RC2B1 PTB1). The insulation for HL1-6 has boron or white powder noted on both top horizontal surfaces for both insulation panels. Boron streaking is heavy on the back half-outer surface of the left panel as viewed looking at HL1-6. Brownish red discoloration is present on the right side panel starting about mid panel approximately 1 inch below the top and extending nearly 12 inches. Boron was noted in the vertical seam and resting around the bottom of the pipe penetration within the hot leg mirror.

Inspection zone HL1-7 Weld (HL RTE Mounting Boss Replaced TWRC3B1). Inspection identified a white powder type material which looks like boron on the threaded connection at approximately the 5:00 area. Streaks of white were found below the threaded connection on the nozzle and past the weld. All match marks contained white powder (possibly developer) in the stamped area. A weld strike mark was identified at about the 2:30 position. Minor rust was located on painted portion of piping where scratches has removed the paint and near the band that is around the piping.

Inspection zone HL1-8 Weld (HL RTE Mounting Boss Replaced TWRC3B3). Inspection of weld area was conducted with the following discrepancies: Entire area was covered with a white powder which is believed to be developer from ISI weld inspection. Boron deposits were found on the threaded connection from approximately 9:00 to the 11:30 position and at the 6:00 position. Reddish brown streaks of stained areas were identified at 6:00 below weld. All match marks are filled with white powder. Most all of the scratched surfaces in the painted area of the piping have some corrosion and corrosion is apparent under the band around pipe. Boron deposits were found near the band around the piping (appears to be a previous location of the band itself), located below the nozzle. The one deposit was located below and to the left of the nozzle (approximately 10 to 12 inches in length by 0.5 to 0.75 inches in width), two smaller deposits were noted below and to the right of the nozzle (each approximately 3 inches in length by 0.5 inches in width). A large corrosion spot was found on the hanger above where the paint has scaled off.

This CR was written in accordance with the IP-M-028 inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure

This was identified per the Reactor Head Degradation Extent of Condition program. No active leakage was identified. The requirements of NG-EN-00324 need to be addressed in the evaluation of this CR.

1	02-01704	1	CA	04/26/02	06/10/02			No	PE	Open	
No	No			1	0	06/10/02	E24-2	4	Yes	063-01	
INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION - SG2-1									HDW	0575 0576	0575

During inspection of Serial Number SG2-1 (Primary Drain Nozzle) signs of previous boric acid leakage from the manway was noted. Since the drain nozzle is lower than the manway, gravity would cause this leakage to run down to the drain nozzle area. The area between the manway and the drain nozzle shows minor areas where the original paint is missing and brownish color. No heavy rust or scale was noted.

This condition report is generated based on inspection SG2-1 performed under Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

No immediate action required.

1	02-01705	1	CA	04/26/02	06/10/02			No	PE	Open	
No	No			1	0	06/10/02	E24-1	4	Yes	063-01	
INSPECTION PLAN IP-M-028 ALLOY 600 (EXTENT OF CONDITION) - SG1-1									HDW	0575 0576	0575

During inspection of Serial Number SG1-1 (Primary Drain Nozzle) faint signs/stains of white can be seen around the nozzle (mostly in the north-east corner). It may be from some previous boric acid leakage. The source can not be determined the drain nozzle is lower than the nearby manway, gravity would cause any other leakage to run down

to the drain nozzle area. The area between the manway and the drain nozzle does not show any streaks to indicate that this may have been the source where the leakage may have been from. There is also some slight rust colored surface in the same area since much of the original paint is gone. There is no corrosion or loss of metal noted. This condition report is generated based on Inspection SG1-1 performed under Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Identified per Reactor Head Degradation Extent of Condition program.  
No Immediate action required.

1	02-017114	0	NF	04/27/02	06/26/02			No	PE	Open	
No	No			1	0	06/26/02	N/A	N/A	No	N/A	
INSPECTION PLAN IP-M-029 AREA 585-4S FINDINGS										ERO	3450 2779 3450

This Condition Report is generated based on Inspection Area 585-4S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Full inspection of serial 585-4 could not be completed due to presence of Insulation repair tent placed up against Containment Vessel and staged Insulation storage against D-ring wall.

This is an administrative issue only and is used to track uninspected areas. (reference IP-M-029 sections 6.4, 6.6 and 8.1)

Contacted Peter Mainhardt

1	02-017124	0	CA	04/27/02	06/11/02			No	PE	Open	
No	No			1	0	06/11/02	N/A	N/A	No	N/A	
INSPECTION PLAN IP-M-029 AREA 585-4S FINDINGS										HDW	0575 0576 0575

This Condition Report is generated based on Inspection Area 585-4S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of the CR.

Floor elevation 603'-0" floor structural beam between northwest stairs and Containment Vessel has minor surface rust along flange edge.

The above CR identifies a condition with minor surface rust. This minor surface rust will not adversely affect the structural integrity of the beam.

Contacted P. Mainhardt

1	02-017137	0	CA	04/27/02	06/11/02			No	PE	Open	
No	No			1	0	06/11/02	n/a	N/A	No	Various	
INSPECTION PLAN IP-M-029 AREA 585-3S FINDINGS										HDW	0575 0576 0575

This Condition Report is generated based on Inspection Area 585-3S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. Rust stains evident on Containment vessel beneath mounting plates for conduit and cable tray supports. Back surfaces of plates have never been painted due to accessibility and have surface rust. Typical for all plates in area. (photo file 585-3s-1.jpg)

2. Surface rust on restraint components for valve CV5010A Limitorque actuator. (photo file 585-3s-6.jpg)

3. Surface rust on mounting pad welds for Core Flood Tank No. 1. (photo file 585-3s-2.jpg)

4. Pipe support clamps for 3/4" EBB-5 sample line have some surface rust. Supports are located on wall east of Core Flood Tank No. 1.

5. Rust staining on structural beam for elevation 603' floor. Location approximately one foot south and west of Core Flood Tank.

6. Underside of grating support angle for floor elevation 603'-0" has surface rust. Grating is located between vessel and concrete floor area northwest of equipment hatch.

7. Pipe supports located in northeast corner of room 316 have boric acid deposits. The boric acid is white and appears to have originated due to condensing of vapor on 3" CC line above. (photo files 585-3s-4.jpg, 585-3s-5.jpg)

The above CR identifies a condition with minor surface staining and surface rust. This minor surface staining / rust will not adversely affect the structural integrity of the item.

Contacted P. Mainhardt

1	02-01717	0	CA	04/27/02	06/11/02			No	PE	Open	
No	No			1	0	06/11/02	N/A	N/A	No	Various	
INSPECTION PLAN IP-M-029 FINDINGS FOR AREA 585-5S									HDW	0575 0576	0575

This Condition Report is generated based on Area Inspection 585-5S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. Rust colored staining identified at joints in ceiling floor plugs. Staining extends to the flanges on some structural support beams. Staining appears to be caused by unknown fluid leaking through joints. (See representative Photos # 585-5S-1 & 2)
2. Spotty corrosion and water spotting identified on metal decking at ceiling. Corrosion appears to have begun to undermined the protective coating (blistering). (See representative Photos # 585-5S-3 & 15)
3. An unknown red powder identified on angle member support for small bore pipe. Support is located on south wall in front of CAC 1-1 at approximately El. 589'. No corrosion was identified. (See Photo # 585-5S-4)
4. Light surface rust and staining identified on Core Flood Tank No. 2 supports. (See representative Photo # 585-5S-5)
5. Boric acid residue, staining and surface rust identified on supports for small bore core flood line. Supports are located on east side of core flood tank (near valves CF100 & CF15). Boric acid residue is from service water piping above. (See Photo # 585-5S-6)
6. Wide spread boric acid residue (white and rust-colored) and corrosion identified on service water piping supports. Any evidence of flaking appears to be limited to where the corrosion has begun to blister the protective coating. Some possible minor loss of material at corners of member flanges. (See representative Photos # 585-5S-7, 8, 9 & 20)
7. An area with very light surface rust identified on the containment vessel liner, located between the elevator and CAC 1-2. (See Photo # 585-5S-10)
8. Surface rust identified on drain piping rod hanger supports. Supports located in overhead south of CAC 1-3. (See representative Photo # 585-5S-11)
9. Wide spread rust color staining of concrete floor, predominately beneath the service water piping and in the vicinity of the CACs. (See representative Photos # 585-5S-12 & 13)
10. Surface rust and rust-colored staining (typical) on CAC base anchorage. Paint is blistering, but there does not appear to be any material wastage on the nuts. (See representative Photos # 16 & 17)
11. Surface rust identified (typical) on CAC drain line supports located on floor. (See representative Photo # 585-5S-18)
12. Staining, surface rust and light boric acid residue identified on small bore pipe supports. The supports are located off south wall near elevator at approximately El. 593', below service water piping. (See Photo # 585-5S-19)

The above CR identifies a condition with minor surface staining, surface rust, and some boric acid residue. This minor surface staining / rust and boric acid residue do not adversely affect the structural integrity of the item. Contacted P. Mainhardt

1	02-01718	0	CA	04/27/02	06/11/02			No	PE	Open	
No	No			1	0	06/11/02	N/A	N/A	No	Various	
INSPECTION PLAN IP-M-029 FINDINGS FOR AREA 603-2-S									HDW	0575 0576	0575

This Condition Report is generated based on Area Inspection 603-2-S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

- 1) The area around and above the Equipment Hatch shows signs of water streaking, however, no rust was noted. It appears that the streaking may be the result of past deconning operations.  
Note: The "rust" color discoloration around the equipment hatch is not the result of rust. It appears to be residue left over from tape that was applied to the equipment hatch in past outages.  
See Photo #603-2-S-1
- 2) Directly in front of the equipment hatch are 6 vertical Service Water pipes. There is a gang support for these pipes at the floor level. This pipe support shows varying signs of boric acid buildup as well as surface discoloration, and surface rust. No loose rust was noted.  
See Photo #603-2-S-2, #603-2-S-3, and #603-2-S-4.

3) The 603 floor grating directly in front of the Item #2 above and the structural steel that supports the grating shows signs of boric acid deposits, surface staining, surface rust and in a few isolated location slight flaky rust. This appears in four locations.

See Photo #603-2-S-5 and #603-2-S-6.

4) Pipe support for a 1-1/2 inch diameter pipe (Green) at elevation 603'8" near Item #2 above (by PT RC 2A1) shows signs of surface discoloration and slight surface rust.

See Photo #603-2-S-7.

5) Service Water Pipe Support H44 (@ 613'). Note, this is the first support north of the Equipment Hatch shows signs of boric acid deposits and surface rust at numerous locations at the pipe / support interface.

See Photo #603-2-S-8 and #603-2-S-9.

6) The pipe support for the 1-1/2 pipe (Green) above valve SW 391 shows discoloration and surface rust.

See Photo #603-2-S-10 and #603-2-S-11

7) Service Water Pipe gang support (2-nd pipe support) shows signs of boric acid deposits at the pipe/support interface, and the shims of the support and surface discoloration and rust.

See Photo #603-2-S-16, #603-2-S-17, #603-2-S-18, and #603-2-S-19

8) Structural Steel for floor grating and the grating itself (under JT 4904) shows signs of boric acid deposit and light surface staining and rust.

Note, this is common to the grating under the Service Water Pipes.

See Photo # 603-2-S-20, which is a representative photo of the area.

9) The floor grating under the Service Water lines shows signs of surface staining and rust (near JT 4910)

See Photo #603-2-S-21

10) Service Water Pipe gang support (3-rd pipe support) shows signs of boric acid deposit at the pipe/support interface and light surface discoloration and surface rust.

See Photo # 603-2-S-22 and #603-2-S-23.

11) Pipe support (angle support) for a 1-1/2 inch diameter pipe (Green) shows slight boric acid deposit at the pipe/support interface, surface discoloration and surface rust as well as very minor material wastage (flaky) at the end of angle support.

See Photo #603-2-S-24

12) A 1-inch copper line above valve SW 391 has a U-bolt that shows signs of surface discoloration and surface rust.

See Photo # 603-2-S-25

13) A Tube Steel Support and its baseplate, anchor bolts and nuts shows signs of surface rust and the nut shows slight material wastage.

NOTE: There is no equipment currently mounted on this support.

See Photo # 603-2-S-26

14) The concrete floor directly under the Service Water pipes shows signs of surface discoloration and surface staining.

See Photo # 603-2-S-27 for a representative photo.

15) Service Water Pipe gang support (4-th pipe support) shows signs of boric acid deposit at the pipe/support interface, surface staining, and surface rust. This condition is also present on the brace for this support.

See Photo # 603-2-S-28, # 603-2-S-29, #603-2-S-30, #603-2-S-31, and #603-2-S-32.

16) The ISI 5034 Test Equipment (C. Daff) shows signs of surface rust and boric acid deposit.

See Photo # 603-2-S-33.

17) Service Water Pipe gang support (4-th pipe support identified as 47-H49) shows signs of boric acid deposit at the pipe/support interface but no staining or rust.

See Photo # 603-2-S-34 and #603-2-S-35

18) The Pipe Whip Restraint Backing Plate / nut directly behind JT 3952 shows signs of surface staining and surface rust.

See Photo #603-2-S-36

19) Service Water Pipe gang support (5-th pipe support identified as 41-HBC-47-H29)

The baseplate shows signs of discoloration and surface staining.

See Photo # 603-2-S-37

The support adjacent to the Service Water Pipe shows signs of boric acid deposit at the pipe/support interface, surface staining and slight surface rusting.

See Photo # 603-2-S-38, #603-2-S-39, and #603-2-S-40

20) The pipe support for the 1-1/2 pipe (Green) above the Pipe Whip Restraint shows signs of boric acid deposit, surface discoloration and surface rust, and slight material wastage at the end.

See Photo #603-2-S-41

21) The floor grating including the structural steel beams next to the outer D-Ring wall by the stairs shows signs of boric acid deposit, surface staining, and surface rust.

See Photo # 603-2-S-42. This is a representative photo of the area.

22) Service Water Pipe gang support (6-th pipe support north side of the outer D-ring wall) shows signs of boric acid deposit at the pipe/support interface, surface staining and surface rust.

See Photo #603-2-S-43 and #603-2-S-44

23) Service Water Pipe gang support (7-th pipe support 46-H23) shows signs of boric acid deposit at the pipe/support interface, surface staining and surface rust.

See Photo #603-2-S-45 and #603-2-S-46

24) Support for SP 12A1A line shows signs of discoloration, surface staining, and surface rust.

See Photo #603-2-S-47

25) At the north boundary of Area 603-2 on the outer D-Ring wall several small bore pipe supports shows signs of water droplets residue / discoloration. This does not appear to be rust related.

See Photo #603-2-S-48

26) Containment Vessel by the stairwell (general) shows signs of discoloration and streaking on the surface. There are no signs of boric acid deposits or rust.

See Photo #603-2-S-49

27) Service Water Pipe gang support (8-th pipe support) at elevation 602 shows signs of boric acid deposit, surface staining and surface rust.

See Photo #603-2-S-50 and #603-2-S-51.

28) Large diameter nut (4" bolt ?) located approximately 6-feet from the top of elevation 653 at the north end by the stairwell (next to cable tray BCCD-01) shows signs of surface staining.

Note: This is the only staining / rust identified that is located above the Service Water Pipes.

See Photo #603-2-S-53 and #603-2-S-54.

The above CR identifies a condition with minor surface staining, surface rust, and some boric acid residue and in a few cases minor material wastage. This minor surface staining / rust and boric acid residue as well as minor material wastage do not adversely affect the structural integrity of the item.

Contacted P. Mainhardt

1	02-01706	0	CA	04/26/02	06/10/02			No	MAIN	Open	
No	No			1	0	06/10/02	OTSG 1 Hot Leg		No	064-02	
MISSING/LOOSE INSULATION ON OTSG 1 FLOW TRANSMITTERS NOZZLE AND VENT LINE										HDW	0575 0576 0575

The missing insulation conditions were identified during an IP-M-028 Alloy 600 inspection for a nozzle located on the Number 1 Hot Leg. It appears that insulation was installed, however it is currently missing. HL1-3 Insulation for Hot Leg 1 Flow transmitter at RC1BB is missing coffee can insulation and insulation box on RC1BB. RC1BB and RC1BBA appears to be new

HL1-9. Insulation Hot Leg 1 Upper Vent Nozzle near RC42 (OTSG 1) and the 36 inch line appears to be loose, requiring to be re-aligned and buckled. This is located on the upper part of the hot leg.

This CR is written against configuration control of insulation not being installed or if required. Request a determination if this insulation is required and if so then have it replaced. Insulation if installed will be removed for further Alloy 600 inspections.

Identified per Reactor Head Degradation Extent of Condition program.

Note, the only issue identified under this CR is missing insulation. Since the missing insulation pieces are shown as



installed on an "Approved" status vendor drawing M-197-00040. It is recommended that this CR go to Maintenance to find or procure the missing insulation and re-install.

1	02-01782	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			1	0	06/15/02	N/A	4	Yes	064-02	

**INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION: 1CCA-20-FLANGE1-UP** HDW 0575 0576 0575

During inspection of inspection of 1CCA-20-FLANGE1-UPPER two bright white stains were noted on one of the flange faces. This was the south half of the flange. Some insignificant white stains noted on the bottom of the other half of the flange. These can not be confirmed to be boric acid as no crystals were noted. There was no extension noted and no wetness or corrosion noted.

This condition report is generated based on inspection 1CCA-20-FLANGE1-UPPER performed under inspection plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

None

1	02-01784	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			1	0	06/15/02	N/A	4	Yes	064-02	

**INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION: 1CCA-20-FLANGE2-L** HDW 0575 0576 0575

During the inspection of 1CCA-20-Flange2-Lower there were small white stains noted on the lower flange outer edge and several dark stains on the lower flange face (dark stains could be some type of thread lubricant). No boric acid crystals were noted. No corrosion or active leakage was noted.

This condition report is generated based on inspection 1CCA-20-Flange2-Lower performed under inspection plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

None

1	02-01788	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			1	0	06/15/02	LTCF3A2	4	Yes	051-01	

**INSPECTION PLAN IP-M-029 AREA 565-6 PIPING** HDW 0575 0576 0575

This condition report is generated based on inspection LTCF3A2 performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The stainless steel fitting that attaches valve K2 to the valve block has an accumulation of loose boric acid crystals.

A digital photo was taken to document the inspection. 565-6P-LTCF3A2-K2-1.JPG and 565-6P-3A2-LTCF3A2-K2-2.JPG identified during the Reactor Head Degradation Extent of Condition Program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition Program plan will be needed. No immediate actions are required. The requirements of NG-EN-00324 need to be addressed in the evaluation of this CR.

1	02-01755	1	CA	04/30/02	06/14/02			No	PE	Open	
No	No			1	0	06/14/02	rc2a	4	Yes	064-02	

**INSPECTION PLAN IP-M-028 BOLTED CONNECTION FINDINGS** HDW 0575 0576 0575

This Condition Report is generated based on inspection RC2A Outlet and Pilot Bolted PRZR Pwr Relief Vlv performed under inspection plan IP-M-28. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The stainless steel valve bonnet (on the top of and sides of the bonnet) and body has a white surface discoloration that may be boric acid. (It may be paint or another substance.)

A digital photo was taken to document the inspection. RC 2A.jpg identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01794	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			1	0	06/15/02	PTCF4A2	4	Yes	051-01	

**INSPECTION PLAN IP-M-029 AREA 565-6 PIPING** HDW 0575 0576 0575

This condition report is generated based on inspection PTCF4A2 performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The left-rear top cover screw has an accumulation of loose boric acid crystals.

A digital photo was taken to document the inspection. 565-6P-PTCF4A2-1.JPG

Identified during the Reactor Head Degradation Extent of Condition Program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition Program Plan will be needed. No immediate actions are required.

1	02-01795	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			1	0	06/15/02	CF46	4	Yes	051-01	
INSPECTION PLAN IP-M-029 AREA 565-6 PIPING									HDW	0575 0576	0575

This condition report is generated based on Inspection CF46 performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The valve packing area has an accumulation of loose boric acid crystals.

A digital photo was taken to document the inspection. 565-6P-CF46-1.JPG AND 565-6P-CF46-2.JPG

Identified during the Reactor Head Degradation Extent of Condition Program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition Program Plan will be needed. No immediate actions are required.

1	02-01797	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			1	0	06/15/02	ms858	4	Yes	083-01	
INSPECTION PLAN IP-M-029 CONTAINMENT AREA INSPECTIONS									HDW	0575 0576	0575

This Condition Report is generated based on Inspection #565-6 Room 217 Core Flood Tank #2 Area performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this report.

MS858, SG 1-1 Vent Line Isolation Valve, has indicated corrosion of the yoke. This appears that it may not to be due to boric acid corrosion and only due to minor packing leakage onto the carbon steel yoke. This leak has been identified under this inspection program and should be evaluated with other.

A digital photo was taken to document the inspection. 565-6P-MS 858-1.jpg, 565-6P-MS 858-2.jpg.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions area required.

1	02-01798	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			1	0	06/15/02	E24-2	4	Yes	063-01	
INSPECTION PLAN IP-M-028 FINDINGS.									HDW	0575 0576	0575

This Condition Report is being written as a result of inspections performed at Serial Numbers 'Head Vent Flange 4' (Flange Connection at SG) and 'Head Vent Flange 5' (Flange Connection to SG 1-2) in accordance with Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this Condition Report.

Serial Number 'Head Vent Flange 4': Extremely minor traces of boron at interface of flex gasket and flange face over a small portion of the gasket circumference.

Serial Number 'Head Vent Flange 5': Traces of boron residue on underside of flange and also above the flange on the Steam Generator Shell. Trailing marks are evident on the Steam Generator Shell that do not appear to contain boron and do not have the appearance of reddish/brown oxidation. Additional markings/dicolorations noted on the Steam Generator Shell and/or the head vent line flange and associated piping.

Refer to Inspection Plan IP-M-028 data sheets for further details.

No active leakage noted.

1	02-01799	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			1	0	06/15/02	MSD417	4	Yes	020-10	
INSPECTION PLAN IP-M-029 CONTAINMENT AREA INSPECTIONS									HDW	0575 0576	0575

This Condition Report is generated based on Inspection #565-6 Room 217 Core Flood Tank #2 Area performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this report.

The floor drain piping coming from 585 to 565 has large traces of leakage from the above elevation. This is dry buildup of some unknown substance. There is also a few small areas of rust at the first 'Y' above the 565 elevation. (About 7' off the floor.)

A digital photo was taken to document the inspection. 565-6P-MSD 417-1.jpg, 565-6P-MSD 417-2.jpg, 565-6P-MSD 417-3.jpg.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-029.

Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions area required.

1	02-01800	0	NA	05/01/02	06/30/02			No	PE	Open	
No	No			1	0	06/30/02	T1*RC		No	064-02	
INSPECTION PLAN M-028 INCOMPLETE INSPECTION									ERO	3450 2779	3450

Inspection Plan IP-M-028, Step 6.4 requires a Condition Report to be written for circumstances when an entire 360 degree inspection was not performed. Attachment 3 of IP-M-028 requires inspections to be performed at the following locations:

Serial Number	Description
Head Vent Flange 1	Flange Connection to RV CRD
Head Vent Flange 2	Flange Connection at Service Structure
Head Vent Flange 3	Flange Connection at D-Ring Wall

The bolted flange connections associated with these inspection points have been dismantled, and the associated spoolpieces have been removed. Therefore, inspections at these bolted locations have not been performed.

Evaluation required in accordance with Inspection Plan IP-M-028.

1	02-01801	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			1	0	06/15/02	sp9b3c3, sp9b3	4	Yes	063-01	
INSPECTION PLAN IP-M-029 CONTAINMENT AREA INSPECTIONS									HDW	0575 0576	0575

This Condition Report is generated based on Inspection #565-5 Outside D-ring Between Rooms 215 and 217 Area performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this report.

Several OTSG level Instrument Isolation valves have have indicated corrosion on the yoke. This appears to not be due to boric acid corrosion and due to minor packing leakage onto the carbon steel yoke. This leak has been identified under this inspection program and should be evaluated with other deficiencies found in this area. The Isolation valves involved are: SP9B3BC, SP9B3AC, SP9B3BE, SP9B3AE, SP9B5BA, SP9B5AA, SP9B4BA, SP9B4AA, SP9B2BA, SP9B2AA, SP9B4BA, SP9B4AC, SP9B4BE, SP9B4AE.

Digital photos were taken to document the inspections. 565-5P-SP9B3BC-1.jpg, 565-5P-SP9B3AC-1.jpg, 565-5P-SP9B3BE-1.jpg, 565-5P-SP9B3AE-1.jpg, 565-5P-SP9B5BA-1.jpg, 565-5P-SP9B5AA-1.jpg, 565-5P-SP9B4BA-1.jpg, 565-5P-SP9B4AA-1.jpg, 565-5P-SP9B2BA-1.jpg, 565-5P-SP9B2AA-1.jpg, 565-5P-SP9B4BA-1.jpg, 565-5P-SP9B4AC-1.jpg, 565-5P-SP9B4BE-1.jpg, 565-5P-SP9B4AE-1.jpg.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions area required.

1	02-01818	1	CA	05/02/02	06/16/02			No	PE	Open	
No	No			1	0	06/16/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION									HDW	0575 0576	0575

The following conditions were identified during an IP-M-028 (Extent of Condition) Inspection of the west d-ring RCS hot leg piping. This was a target examination of the hot leg after insulation was removed from the lower horizontal portion of the pipe (approx. 587' to 575' elevations). IP-M-028 component serial # is HL11-1.

Patches (areas) of minor surface corrosion where paint is missing. Various locations within area inspected.

Also, white residue was found on the east side of RCS pipe at the 575' level under restraint. This residue does not appear to originate from a RCS leak, and in my opinion is dried up ultrasonic couplant.

Photo #'s HL11-1-5, 6, 11 & 12 document conditions

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. No active or inactive leakage was identified. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required. Note that this was an "inspection of opportunity" in that the surface of this portion of the Hot Leg became available for inspection due to a Work Activity to replace damaged insulation.

1	02-01819	0	CA	05/02/02	06/16/02			No	PE	Open	
No	No			2	0	06/16/02	N/A		No	055-02	
INSPECTION PLAN IP-M-029 FOR CRDESSV EXTENT OF CONDITION									HDW	0575 0576	0575

The following observations were made while performing the inspection of serial number CRDESSV - CRDM Vent Fans/Ductwork External to the Service Structure:

1) A light layer of rust colored debris was found coating all of the fan blades of both fans. This included rust colored debris near the fan access door where air had leaked by the access door gasket. It is postulated that the debris is from the reactor head. No boric acid was evident internal to the fan. Digital pictures CRDESSV-P-20, 21 and 22 document this condition.

2) The fan/motor assemblies are mounted to the floor via steel framed painted platform. Grease from the fan/motor bearings has melted and dripped down to the platform creating a sticky surface. This surface has collected a light layer of rust colored debris. It is believed that the rust colored debris was from the general CTMT environment. Digital pictures CRDESSV-P-05 and 06 document this condition. This was also identified as part of Area Inspection 603-1s, reference CR 02-01749 Item 2.

This Condition Report is being generated based upon Inspection Serial Number CRDESSV performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Identified per Reactor Head Degradation Extent of Condition Program. No active or inactive leakage was identified. Additional evaluation of effected areas per the Extent of Condition Plan will need to be developed. No immediate actions required. Based on discussions with the Originator, the rust colored debris on the fan blades would not adversely impact the functioning of these fans.

1	02-01821	1	CA	05/02/02	06/16/02			No	PE	Open	
No	No			1	0	06/16/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION									HDW	0575 0576	0575

The following conditions were identified during an IP-M-028 (Extent of Condition) inspection on the east d-ring RCS hot leg piping. This was a target examination of the hot leg after insulation was removed from the lower horizontal portion of the pipe (approx. 587' to 575' elevations). IP-M-028 component serial # is HL2I-1.

There is evidence of leakage (streaks and deposits) located on the insulation, insulation support ring, and the RCS piping at the 587' level. Small amounts of white and rust colored deposits (residue) on the pipe and insulation (insul. joints and OD surface). Source of leak could not be determined.

Also, patches (areas) of minor surface corrosion where paint is missing. Various locations within area inspected.

Photo #'s HL2I-1-4, 5, 6, 7, 10, 11 document these conditions.

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure

Identified per Reactor Head Degradation Extent of Condition program. No active leakage was identified. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-01825	1	CA	05/02/02	06/16/02			No	PE	Open	
No	No			1	0	06/16/02	n/a	4	Yes	Various	
INSPECTION PLAN IP-M-029 CONTAINMENT AREA INSPECTION FINDINGS									HDW	0575 0576	0575

The following conditions were identified during an IP-M-029 Containment Area Inspection of AREA 585-1P (Rm 315 - Incore Instrument Tank Area).

Steam Generator 1-2 Shell Sample line runs through Area 585-1. Paint is missing from most of the line. The line is covered with surface rust. The rust is not loose or flaky. The source appears to be from general airborne accumulation / condensation.

CCW piping has evidence of rust colored water stains on lines directly below MU valves. The source appears to be the MU valves. The surface stain appears to be a discoloration of the surface only.

Both items are located inside the Incore Tank Room Door on 585, directly up.

Digital photos were taken to document the inspection.

This CR is written in accordance with the inspection plan, which directs writing a CR for any indications of leakage or

corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.

n/a

1	02-01863	1	CA	05/06/02	06/20/02			No	PE	Open	
No	No			1	0	06/20/02	MU370	4	Yes	065-01	

INSPECTION PLAN IP-M-029 EXTENT OF CONDITION: 565-4P HDW 0575 0576 0575

During area walkdown, rust/boron was noted on the packing of MU370.

This condition report is generated based on Inspection 565-4P performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions area required.

1	02-01867	1	CA	05/06/02	06/20/02			No	PE	Open	
No	No			1	0	06/20/02	MU1A	4	Yes	064-02	

INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION HDW 0575 0576 0575

The following conditions were identified during an IP-M-028 (Extent of Condition) inspection of the RC Letdown Cooler 1-1 Inlet Isolation valve MU 1A. This examination was performed with the insulation removed. IP-M-028 component serial # is MU1B Bolted.

Boric Acid Crystals was noted on the floor and surrounding components under RC Letdown Cooler 1-1 Inlet Isolation valve MU 1A. No boric acid crystals were located on either the valve body or flange surfaces.

Also, orange (rusty) residue located on the top of the upper and lower flange surfaces observed. Appears to have originated from a packing leak above.

Photo ID's of above conditions are MU1A-3 and MU1A-4

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-028. No active leakage was identified. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-01820	0	CA	05/03/02	06/17/02			No	DBE	Open	
No	No			1	0	06/17/02	DH11	4	Yes	049-02	

DH11/DH12 VALVE YOKE CORROSION IDENTIFIED DURING RCS EXTENT OF CONDITION HDW 0575 0576 0575

The following conditions were identified during an IP-M-028 Alloy 600, Threaded/Bolted Class 1 Joints and Connections RCS Extent of Conditions Inspections of DH11 Bolted and DH12 Bolted Insulation connections.

DH11, RCS TO DH SYSTEM. The inspection identified corrosion on the valve yoke and corrosion products / staining covering major areas of the valve body that were exposed. The valve appears to have had recent maintenance and the as found information would therefore be following any cleanup/deconning of the valve. This was an insulation inspection, however one section of insulation was removed. Notice similar rust staining on body to bonnet gasket, lower edge. Gasket surface observed was clear of direct leakage. DH11 inspection with all insulation removed will occur later.

DH12, RCS TO DH SYSTEM. The inspection identified corrosion on the valve yoke and corrosion products / staining covering major areas of the valve body that were exposed. This was an insulation inspection only. All insulation will be removed for the component inspection. Valve yoke corrosion is similar to DH11, however not as prevalent.

This CR was written in accordance with the IP-M-028 inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

This was identified per the Reactor Head Degradation Extent of Condition Program. No Active Leakage was identified.

1	02-01728	0	CA	04/29/02	06/13/02			No	DBE	Open	
No	No			1	0	06/13/02	N/A	N/A	No	Various	

INSPECTION PLAN IP-M-029 AREA 585-1S FINDINGS HDW 0575 0576 0575

This condition report is generated based on Inspection 585-1S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

- 1) Concrete decking has corrosion throughout the ceiling of the room. Photo 585-1S-1
- 2) Support on steam generator blow down line immediately below the east side room entrance has surface rust.

Photo 585-1S-2  
 3) Incore instrument tank anchor bolts have surface rust. Photo 585-1S-4  
 This CR identifies components with minor surface rust. This minor surface rust will not prevent them from performing their design function.

1	02-01861	1	CA	05/06/02	06/20/02			No	PE	Open	
No	No			1	0	06/20/02	CC100, CC371	4	Yes	016-04	
INSPECTION PLAN IP-M-029 EXTENT OF CONDITION: 565-4P									HDW	0575 0576	0575

During the area inspection it was noted that there was light rust discoloration on CCW valves CC100 and CC3712 and the CCW pipe to Letdown Cooler 1-2 has bright rust on the pipe where it enters/leaves the cooler.

This condition report is generated based on inspection 565-4P performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions area required.

1	02-01907	1	CA	05/07/02	06/21/02			No	PE	Open	
No	No			1	0	06/21/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION FINDINGS									HDW	0575 0576	0575

The following conditions were identified during an IP-M-028 (Extent of Condition) inspection on the east d-ring RCS hot leg piping. This was an inspection of the Decay Heat Nozzle to Elbow weld off the hot leg after insulation was removed. IP-M-028 component serial # is HL2-1 Weld.

Possible leakage detected on the nozzle and elbow (evident by water streaking stains). The source is unknown, insulation on RCS hot leg above nozzle covers the tracks.

Photo #'s HL2-1W-1 & HL2-1W-2

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. No active leakage was identified. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-01915	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION FINDINGS									HDW	0575 0576	0575

The following conditions were identified during an IP-M-028 (Extent of Condition) inspection on the east D-ring RCP 2-1. This examination covered the pump flange area, studs and the RCP pump bowl. The insulation was removed in 2 locations and from the bottom nozzle. This examination was limited due to the restraint cables and drooping insulation. IP-M-028 component serial # is RCP 2-1 CLS Cover/Studs.

White and rust colored streaks run down the side of RCP 2-1 bowl. These streaks extend past the suction nozzle onto the RCS piping. No signs of boric acid crystals were noted on the RCP flange

Minor surface corrosion was noted on the RCP Studs and parts of the flange surfaces. Also, there is quite a bit of debris on the top of the RCS bowl.

Photo #'s RCP21CLS COVER&STUD-1 thru 10 document conditions

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. No active was identified. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required. This CR also needs to be evaluated with respect to the fact that a 100% inspection was not completed.

1	02-01917	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION FINDINGS									HDW	0575 0576	0575

The following conditions were identified during an IP-M-028 (Extent of Condition) inspection on the East D-ring RCP 2-2. This examination covered the pump flange area, studs and the RCP pump bowl OD. The insulation was removed in 2 locations and from the bottom nozzle. This examination was limited due to the restraint cables and drooping insulation. IP-M-028 component serial # is RCP 2-2 CLS Cover/Studs.

Slight white streaks/stains on side of RCP bowl and flange surface. Also a white ring around the RCP flange mating surface (resembles pipe dope in appearance).

Boron Crystals noted on the leak-off pipe flange (north side of RCP). Also a small pile of white/gray powder under the leak-off pipe on the RCP flange surface (It appears to be ashes).

Slight corrosion on some of the RCP studs. Some debris on the top of the RCP bowl.

Photo #'s RCP22CLS COVER&STUDS-1 thru 5 document conditions.

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. No active leakage was identified. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required. This CR also needs to be evaluated with respect to the fact that a 100% inspection was not completed.

1	02-01756,	1	CA	04/30/02	06/14/02			No	PE	Open	
No	No			1	0	06/14/02	rc48	4	Yes	064-02	
INSPECTION PLAN IP-M-028 BOLTED CONNECTION									HDW	0575 0576	0575

This Condition Report is generated based on inspection RC48 Bolted Presurizer Spray Manual Isolation Valve performed under inspection plan IP-M-28. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The stainless steel valve bonnet has a bonnet plug that has boric acid on the plug threaded connection. The side of the body to bonnet gasket also has boric acid residue.

A digital photo was taken to document the inspection. RC 48.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01830,	1	CA	05/03/02	06/17/02			No	PE	Open	
No	No			1	0	06/17/02	n/a	4	Yes	Various	
INSPECTION PLAN IP-M-029 CONTAINMENT AREA INSPECTION FINDINGS									HDW	0575 0576	0575

The following conditions were identified during an IP-M-029 Containment Area Inspection of AREA 585-3P (Room 316: Core Flood Tank No. 1 Area).

Dry, White Boric Acid crystals were found on the component cooling line on the North wall of Rm 316. The total accumulation amounts to 1/2 cup. The crystals originate on top of the pipe, continue around the pipe, drip down to a structural angle pipe support, drip down onto conduit and finally to the floor. There was no corrosion present. The paint on the CCW line was in good condition. The source of the Boric Acid can be traced to piping directly above - through the ceiling, at the 603 elevation, near the equipment hatch. The entire line at valve CC625 is covered with a film of Boric Acid. The source appears to be from general airborne accumulation / condensation.

Steam Generator Shell Sample Line is covered with surface rust and most paint is gone. The rust is not loose or flaky. The source appears to be from general airborne accumulation / condensation.

CCW piping has evidence of rust colored water stains that originate from on top of the lines, source unknown. The paint on the line is in good condition. The surface stain appears to be a discoloration of the surface only.

Digital photos were taken to document the inspection.

This CR is written in accordance with the inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.

n/a

1	02-01834,	1	CA	05/03/02	06/17/02			No	DBE	Open	
No	No			1	0	06/17/02	DH12	4	Yes	049-02	
INSPECTION PLAN IP-M-028 DH12 BOLTED CONNECTION									HDW	0575 0576	0575

This Condition Report is generated based on inspection DH12 Bolted Connection performed under inspection plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this report.

DH 12 has experienced packing leaks in the past and this has contributed to corrosion streaming on other components of this valve. While almost all parts of this valve are stainless steel the yoke and actuator are made of carbon steel. The yoke is the primary source of the corrosion streaming. This streaming has accumulated on the body to bonnet gasket, the body top flange and the top of the bonnet flange. There is also corrosion on the yoke and the actuator bolting.

A digital photo was taken to document the inspection. 565-10P-1.jpg, 565-10P-2.jpg, 565-10P-3.jpg, 565-10P-4.jpg, 565-10P-5.jpg.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions area required.

1	02-01731	0	CA	04/29/02	06/13/02			No	DBE	Open
No	No			1	0	06/13/02	N/A	N/A	No	Various

**INSPECTION PLAN IP-M-029 AREA 636-1 FINDINGS ON STRUCTURAL COMPONENTS** HDW 0575 0576 0575

This Condition Report is generated based on Area Inspection 636-1 performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. Metal decking at ceiling in subject area has minor surface rust. (Reference representative picture(s): 636-1s-1)
2. Surface rust on support above PORV. (Reference picture(s): 636-1s-2)
3. Abandoned Restraints have surface rust. (Reference representative picture(s): 636-1s-3, -4)
4. Rust on threads for struts - support 30-GCC-8-H17. (Reference picture(s): 636-1s-4, -5)
5. Several support coatings chipped - misc. areas of surface rust. (Reference representative picture(s): 636-1s-2, -7)
6. Pipe clamp for snubber near RC2 has chipped coatings and surface rust. (Reference representative picture(s): 636-1s-6)
7. Abandoned/cut off supports were never painted after being cut off. Surface rust evident. (Reference representative picture(s): 636-1s-8)
8. Rust on spring hanger can and snubber reservoirs in Southeast side of inspection area. (Reference representative picture(s): 636-1s-9, -10)
9. Rust on support plate, nut, and stud (various in Southeast side of inspection area). (Reference representative picture(s): 636-1s-13, -14)
10. Rust on snubber rear bracket and associated support. (Reference picture(s): 636-1s-15)

The above CR identifies a condition with minor surface staining/rust. This minor staining/rust will not adversely affect the structural integrity of the SSC.

1	02-01747	0	CA	04/29/02	06/13/02			No	DBE	Open
No	No			1	0	06/13/02	N/A	N/A	No	N/A

**INSPECTION PLAN IP-M-029 AREA 565-7S FINDINGS** HDW 0575 0576 0575

This condition report is generated based on inspection area 585-3S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Subject area is relatively clear of corrosion. No Boric acid nor material wastage was discovered.

1. Minor surface rust found on snubber spring can and internal spring (East wall of subject area). (Reference picture 565-7s-2)
2. Structural support members in the area generally have several paint chips. Very light surface rust on the exposed metal. (Reference representative pictures: 565-7s-1, -2, -3)

The above CR identifies a condition with very minor surface rust. This surface rust will not adversely affect the structural integrity of the SSC.

1	02-01758	1	CA	04/30/02	06/14/02			No	PE	Open
No	No			1	0	06/14/02	RC1BA	A	Yes	064-02

**INSPECTION PLAN IP-M-028 BOLTED CONNECTION** HDW 0575 0576 0575

This Condition Report is generated based on inspection HL1-2 HL Flow Meter (Near RC1BA and RC1BAA) performed under Inspection Plan IP-M-28. This second inspection was performed following insulation removal on RC1BA. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The stainless steel valve body has accumulation of boric acid. This appears to be an old accumulation from packing leakage. No boric acid is currently at the valve packing or packing follower area. Note: Both RC1BA and RC1BAA are scheduled to be replaced this outage per WO 02-008430-00.

A digital photo was taken to document the inspection. RC1BA.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028.



Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01759	1	CA	04/30/02	06/14/02			No	PE	Open	
No	No			1	0	06/14/02	rc262	4	Yes	064-02	

**INSPECTION PLAN IP-M-028 BOLTED CONNECTION**

This Condition Report is generated based on Inspection RC262 Bolted Pressurizer Spray Valve Bypass performed under Inspection Plan IP-M-28. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The stainless steel bonnet for this valve has a brown discoloration. Also the nuts have brown discoloration. While this discoloration appears to be thermally induced, further evaluation is necessary. There is minor loose boric acid crystals on the top of the valve flangs also.

A digital photo was taken to document the inspection. RC 262.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01835	1	CA	05/03/02	06/17/02			No	DBE	Open	
No	No			1	0	06/17/02	DH11	4	Yes	049-02	

**INSPECTION PLAN IP-M-028 DH11 BOLTED CONNECTION**

This Condition Report is generated based on Inspection DH11 Bolted Connection performed under Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this report.

DH 11 has experienced packing leaks in the past and this has contributed to corrosion streaming on other components of this valve. While almost all parts of this valve are stainless steel the yoke and actuator are made of carbon steel. The yoke is the primary source of the corrosion streaming. This streaming has accumulated on the body to bonnet gasket, the body top flange and the top of the bonnet flange. There is also corrosion on the yoke.

A digital photo was taken to document the inspection. 565-10P-6.jpg, 565-10P-7.jpg, 565-10P-8.jpg, 565-10P-9.jpg, 565-10P-10.jpg.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions area required.

1	02-01837	1	CA	05/03/02	06/17/02			No	PE	Open	
No	No			1	0	06/17/02	DH50	4	Yes	049-02	

**INSPECTION PLAN IP-M-029 AREA 565-10P**

This Condition Report is generated based on Inspection #565-10P Decay Heat Valve Pit Area performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this report.

DH50, RCS TO DH SYSTEM LEAK TEST CONNECTION, has boric acid residue on the yoke. This valve was identified on the Mode 5 walkdown as having a packing leak and has been adjusted. This component is all stainless steel except the handwheel which is not affected by the leakage. This is a cleanliness issue only.

A digital photo was taken to document the inspection. 565-10P-11.jpg.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions area required.

1	02-01845	2	CA	05/03/02	06/17/02			No	PE	Open	
No	No			1	0	06/17/02	N/A	4	Yes	049-02	

**INSPECTION PLAN IP-M-029 EXTENT OF CONDITION: AREA 548-1P**

During walkdown of the Core Flood Pipe Tunnel (East/West Tunnel), an active leak was noted on the South wall of the tunnel. Wetness was seen on the wall and a puddle on the floor. There was a large amount of boric acid crystals on South wall, the floor and portions of the ceiling. The Decay Heat piping and valve bodies under the floor grating had a coating of rust particles, boric acid crystals and dust. It appeared that the piping and valve bodies were all stainless and not affected or corroded. The drain pump in the room has some light corrosion on the carbon steel base plate. This condition report is generated based on Inspection 548-1P performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

None

1	02-01937	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	n/a	4	Yes	Various	
INSPECTION PLAN IP-M-029 CONTAINMENT AREA INSPECTION FINDINGS									HDW	0575 0576	0575

The following conditions were identified during an IP-M-029 Containment Area Inspection of AREA 565-2P (West D-Ring).

Leakage was evidenced by surface rust from general airborne accumulation / condensation and dry / white boric acid deposits on valves and piping. Very little paint is left on carbon steel lines. Noted Indications are itemized below by digital picture file name:

Valves In West D-Ring from Top Elevation to 565'

Pic	Description
565-2P-1.jpg	RC42 Boron / Rust @ 633' SE side of SG
565-2P-2.jpg	RC43 Rust from RC42 directly above
565-2P-3.jpg	Flange between RC4841A and RC4841B @ 633' SE side of SG has small amount of Boron
565-2P-4.jpg	Rust on AFW Header Flanges @ 626', typical all around SG
565-2P-5.jpg	MS753 Old orange paint, rusty valve @ 620' West Wall
565-2P-6.jpg	SP9B4B Surface rust / corrosion at 603' SE of SG.
565-2P-7.jpg	SP9B6DA Surface Rust @ 603 West wall
565-2P-8.jpg	MS859 Surface rust, possible boron residue, hand wheel replaced with Hex Nut @ 603' NW
565-2P-9.jpg	NN70, NN1, NN83 rust, heat, poor condition @ 603' NW side of SG
565-2P-10.jpg	MU289 Boron on packing @ 590' E of SG
565-2P-11.jpg	CC4134A & B surface rust covering valves
565-2P-12.jpg	CC186 surface rust mostly on follower
565-2P-13.jpg	CC4234A & B surface rust covering valves @ 580' East side of SG
565-2P-14.jpg	Piping to and from CC283 covered with surface rust @ 565' West side of SG
no pic	HP48 Rust and Boric Acid residue on valve bonnet @ 565' East side of SG
no pic	RC38 Boron on packing, rust on follower @ 565' East side of SG
no pic	RC39 Rust on follower @ 565' East side of SG

Piping In West D-Ring from Top Elevation to 565'

Pic	Description
565-2P-15.jpg	MS757 Old orange paint at 628' West Wall
565-2P-16.jpg	MS757 Old orange paint, rust by pipe cap at 628' West Wall
565-2P-17.jpg	Rust on pipe support, surface rust on AFW pipe @ 603'
565-2P-18.jpg	Hot Leg has Boron residue @ 635' with insulation removed
565-2P-19.jpg	Hot Leg show streaks @ 603' with insulation removed
565-2P-20.jpg	Streaks on wall and rusty piping at 650' below MS752, D-ring top entrance
565-2P-21.jpg	Streaks and rusty piping at 603' (North Wall).
565-2P-22.jpg	MS860 Flaky rust on pipe wall entering Steam Generator @ 603' SE
565-2P-23.jpg	SG surface rust at SU LVL Source tap (SP9B6D) @ 603' NW side of SG
565-2P-24.jpg	Surface rust on lines running from SP9B3B and 9B1B @ 603' looking down SW side SG
565-2P-25.jpg	Surface rust on lines and support near SP9B3B on 603' looking down SW side of SG
565-2P-26.jpg	Piping surface rust @ 580' NW side of SG
565-2P-27.jpg	Rusty piping @ 565' West side of SG
565-2P-28.jpg	Old insulation or other material @ 565' NE side of SG (at floor)

This CR is written in accordance with the Inspection plan, which directs writing a CR for any Indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.

n/a

1	02-01930*	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	Rework RC39	4	Yes	064-02	
INSPECTION PLAN IP-M-028 FINDINGS.									HDW	0575 0576	0575

This condition report is being written as a result of inspection performed at Serial Number 'RC39' in accordance with Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this Condition Report.

Inspection of RC39 revealed the following conditions: The yoke is corroded. Considerable loose rust is present on top of the bonnet. Some boron/rust appears at the bonnet joint, which is also in contact with the studs and studholes.

The source of leakage appears to be the bonnet joint since there is no evidence of streaming from the packing gland area, but cannot discount the possibility of past packing leakage causing the observed condition. No signs of active leakage. Digital photographs were obtained. Refer to Inspection Plan IP-M-028 documentation for further details.

Note that WO 02-002428-000 is included in the 13RFO scope to repack RC39.

No active leakage noted.

1	02-01927	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	Emergency Su	4	Yes	049-01	
INSPECTION PLAN IP-M-029 AREA 585-11P FINDINGS										HDW	9999 0576 9999

This Condition Report is generated based on Inspection 585-11P Emergency Sump Area performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The Emergency Sump has an excessive amount of boric acid on the floor of the sump.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01924	1	CA	05/08/02	06/22/02			No	DBE	Open	
No	No			1	0	06/22/02	n/a	4	Yes	064-02	
INSPECTION PLAN IP-M-029 AREA 636-1P FINDINGS										HDW	0575 0576 0575

This Condition Report is generated based on Inspection 636-1P - PORV Area performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The pipe hanger upstream of RC11 has surface corrosion.

A digital photo was taken to document the inspections. 636-1P-RC 11 Upstream Hanger.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01922	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	n/a	4	Yes	064-04	
INSPECTION PLAN IP-M-029 AREA 636-1P FINDINGS										HDW	0575 0576 0575

This Condition Report is generated based on Inspection 636-1P - PORV Area performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

RC2 and RC49 stainless steel bonnet has overall surface discoloration that appears to be rust. There is also a rust deposit on the floor.

A digital photo was taken to document the inspections. 636-1P-RC 2-1.jpg, 636-1P-RC 49-1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01749	0	CA	04/30/02	06/14/02			No	DBE	Open	
No	No			1	0	06/14/02	N/A	N/A	No	N/A	
INSPECTION PLAN IP-M-029 AREA 603-1S FINDINGS										HDW	0575 0576 0575

This condition report is generated based on Inspection 603-1s performed under Inspection Plan IP-M-029.

The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. Elevation 608'-0" and higher supports with spotted surface rust throughout area right outside of the elevator. (Representative photo file 603-1s-1.jpg)

2. Rust stain and evidence of surface rust on floor mounted fan motor assembly south east of head stand (photo file 603-1s-2.jpg)

3. Rust stain on floor south of the water tanks. (photo file 603-1s-3.jpg)

This CR identifies components with minor surface rust and staining. This minor surface rust and staining will not prevent them from performing their design function

1	02-01760	1	CA	04/30/02	06/14/02			No	PE	Open	
No	No			1	0	06/14/02	rc10	4	Yes	064-02	
INSPECTION PLAN IP-M-028 BOLTED CONNECTION									HDW	0575 0576	0575
This Condition Report is generated based on Inspection RC10 Bolted Pressurizer Spray Motor Isolation Valve performed under Inspection Plan IP-M-28. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.											
The stainless steel valve body flange has boric acid residue on the top of the flange.											
A digital photo was taken to document the inspection. RC 10.jpg											
Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.											
1	02-01761	1	CA	04/30/02	06/14/02			No	PE	Open	
No	No			1	0	06/14/02	rc50	4	Yes	064-02	
INSPECTION PLAN IP-M-028 BOLTED CONNECTION									HDW	0575 0576	0575
This Condition Report is generated based on Inspection RC50 Bolted Pressurizer Spray Manual Isolation Valve performed under Inspection Plan IP-M-28. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.											
The stainless steel valve bonnet has boric acid surface residue. The body has lines of discoloration that appear to be thermally induced. There is a small area of loose boric acid on the top of the valve body flange, also.											
A digital photo was taken to document the inspection. RC 50.jpg											
Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.											
1	02-01699	0	NC	05/01/02	06/30/02			No	none	Closed	NA
No	No			1	0	06/30/02	T2RC		No	064-04	NONE
INSPECTION PLAN IP-M-028 ALLOY 600 (EXTENT OF CONDITION) PZR-14									HDW	0963 0576	2500
During inspection of the nozzle of RC13A a white streak/stain was noted on the nozzle. It appeared that something may have dripped on it in the past. The streak does not extend and is not seen on other portions of the nozzle. Can not confirm that it is boric acid.											
This Condition Report is generated based on Serial Number PZR-14 performed under Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.											
This issue is a duplication of the issue identified in CR02-01703. Due to problems experienced with the CREST database by the Originator, CR 02-01703 was initiated. Therefore this CR is being closed.											
1	02-01846	2	CA	05/03/02	06/17/02			No	PE	Open	
No	No			1	0	06/17/02	Rework N/A	4	Yes	067-02	
INSPECTION PLAN IP-M-029 EXTENT OF CONDITION: AREA 565-12P									HDW	0575 0576	0575
During walkdown of the Transfer Tube Access Area on the 565' elev of Containment, boric acid was noted on the fuel transfer tubes. This appeared to be from a previous leak in the North wall of the area. No active leakage was noted. No corrosion of the transfer tubes was noted.											
This condition report is generated based on Inspection 565-12P performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.											
The leak in the south wall of this area has been previously identified in CR-02-01447.											
1	02-01847	1	CA	05/03/02	06/17/02			No	PE	Open	
No	No			1	0	06/17/02	N/A	4	Yes	063-01	
INSPECTION PLAN IP-M-029 EXTENT OF CONDITION: AREA 565-3P									HDW	0575 0576	0575
Blowdown Line from Steam Generator 1-1 in Room 214 has a coating of rust over its length in the room. This is likely due to it being carbon steel with no type of coating on it. A portion of it has a blanket type of insulation but no metal jacket. Metal jacketing may be required to protect it from a jet impingement from other piping.											
This condition report is generated based on Inspection 565-12P performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.											
None											

1	02-01926	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	n/a	4	Yes	064-04	
INSPECTION PLAN IP-M-029 AREA 636-1P FINDINGS									HDW	9999 0576	9999

This Condition Report is generated based on Inspection 636-1P - PORV Area performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The pressurizer quench tank rupture disk common piping has some foreign material on it located about 2' above the floor.

A digital photo was taken to document the inspections. 636-1P-Rupture Disk Common Piping 2' above floor-1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01923	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	n/a	4	Yes	064-02	
INSPECTION PLAN IP-M-029 AREA 636-1P FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Inspection 636-1P - PORV Area performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Pressurizer Quench Tank Rupture Disk has boric acid residue and some corrosion on the flange gasket.

A digital photo was taken to document the inspections. 636-1P-PORV Discharge Rupture Disk (Western most Rupture Disk-1).jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01918	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	n/a	4	Yes	063-01	
INSPECTION PLAN IP-M-029 AREA 565-9P FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Inspection 565-9P, Room 220 - Incore Instrument Trench Area performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Carbon steel pipes, flanges and valves are unpainted and have general surface corrosion. These are the pipes for penetrations 57 and 60. The valves affected are MS614 and 615. There are also two cleanout flanges that have surface corrosion along with rust on the closure bolting.

A digital photo was taken to document the inspections. 565-9P-1.jpg, 565-9P-2.jpg, 565-9P-4.jpg, 565-9P-5.jpg, 565-9P-MS 614-1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01919	1	CA	05/08/02	06/22/02			No	DBE	Open	
No	No			1	0	06/22/02	N/A	4	Yes	074-01	
INSPECTION PLAN IP-M-029 AREA 565-9P FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Inspection 565-9P, Room 220 - Incore Instrument Trench Area performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The pipe hanger for pipe 1"-HCB-164 located about 7' above valve NN63 (on same line) is corroded. Also the point on the piping just below NN412 has been worn off and the pipe is corroded.

A digital photo was taken to document the inspections. 565-9P-3.jpg, 565-9P-6.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01721	0	CA	04/29/02	06/13/02			No	DBE	Open	
No	No			1	0	06/13/02	N/A	N/A	No	Various	

**INSPECTION FINDINGS FOR IP-M-029 INSPECTION AREA 585-6S** HDW 0575 0576 0575

This Condition Report is generated based on Inspection Area 585-6s performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. Structural support beams for grating on floor elevation 603'-0" have minor surface rust primarily on the top of the bottom flange and at the junction of the bottom flange and web. (Photo file 585-6s-8.jpg)
2. Service Water piping supports located between D-ring wall and adjacent to elevator have surface rust and boric acid debris. (Photo file 585-6s-2.jpg)
3. Pipe support u-bolts have surface rust. U-bolts on supports for instrument piping which includes valves RC14AB and RC14BB and for support identified as H18. Supports are located on the outside surface of the northeast diagonal wall of the D-ring adjacent to the northeast stairway. Elevation of the supports is between 590' and 595'. (Photos 585-6s-1.jpg and 585-6s-3.jpg).
4. Surface rust observed on instrument piping protective cover adjacent to elevator on D-ring wall and on adjacent pipe supports. (Photo 585-6s-9.jpg)
5. Surface rust on support bolting for H36. Support is located east of entrance to Incore tank at an elevation of approximately 590'-0". (Photo 585-6s-6.jpg)
6. Surface rust on support structural member. Support located on outer surface of east wall of east D-ring. (Photo file 585-6s-4.jpg)

Surface rust is minor and has no impact on structural adequacy of support structures.

1	02-01722	1	CA	04/29/02	06/13/02			No	PE	Open	
No	No			1	0	06/13/02	CF29	4	Yes	051-01	

**INSPECTION PLAN IP-M-028 ALLOY 600 FINDINGS** HDW 0575 0576 0575

The following conditions were identified during an IP-M-028 Alloy 600 & Threaded/Bolted Components Inspection of CF29 BOLTED (CFT 1-1 to Rx Check Valve).

The target area includes the bolted flange, valve body and removed insulation. The valve is located in the East / West tunnel, CFT 1-1 area. The removed insulation showed no evidence of bulges, boric acid crystals, corrosion or corrosion products. Approximately two table spoons of white boric acid crystals were found on the top surface of the bolted connection. The flange has 16 bolts. The crystals were located around one bolt. The bolt location is 175° CW from due North. There was no evidence of corrosion.

Digital photos were taken to document the inspection.

This CR is written in accordance with the inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.

N/A

1	02-01750	0	CA	04/30/02	06/14/02			No	DBE	Open	
No	No			1	0	06/14/02	N/A	N/A	No	N/A	

**INSPECTION PLAN IP-M-029 AREA 603-3S** HDW 0575 0576 0575

This condition report is generated based on inspection 603-3s performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

- 1) Wall plate and concrete has a surface stain likely coming from rust on an expansion anchor bolt. Wall plate is located near southwest corner of west D-ring at approximate elevation 608. Photo 603-3s-5.jpg.
- 2) Wall plate on containment vessel has rust stains leading from the back side of the plate. No signs of wastage of the plate. Photo 603-3s-1.jpg.
- 3) U-bolts on pipe supports near the southwest corner of the west D-ring between elevations 608' and 613' have surface rust. Photo 603-3s-4.jpg.
- 4) Uni-strut for a pipe support on the south wall of the east D-ring at approximate elevation 608' has surface rust. Photo 603-3s-8.jpg.

This CR identifies components with minor surface rust and rust stains. This minor surface rust and stains will not prevent them from performing their design function.

1	02-01751	0	CA	04/30/02	06/14/02			No	DBE	Open	
No	No			1	0	06/14/02	Rework N/A	N/A	No	N/A	

**INSPECTION PLAN IP-M-029 AREA 565-3S FINDINGS** HDW 0575 0576 0575

This condition report is generated based on inspection 565-3s performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. Surface rust on platform bracing on south end of room at elevation 618'-0". (photo file 565-3s-1.jpg)
2. The ceiling decking throughout the room had minor surface rust. (representative photo file 565-3s-2.jpg)
3. The base plate of the support for MU590 on the north end of the room had some minor surface rust. (photo file 565-3s-3.jpg)
4. The floor on the North end of the room had some rust staining. (photo file 565-3s-4.jpg)

This CR Identifies components with minor surface rust and staining. This minor rust will not prevent them from performing their design function.

1	02-01753	0	CA	04/30/02	06/14/02			No	DBE	Open	
No	No			1	0	06/14/02	N/A	N/A	No	Various	
INSPECTION PLAN IP-M-029 AREA 565-9S FINDINGS									HDW	0575 0576	0575

This condition Report is generated based on Inspection area 565-9S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Subject area is relatively clear of corrosion. No boric acid or material wastage were discovered.

- 1) The pipe stanchions on pipe support 7-EBB-5-H3 and the adjacent support for the same pipe are unpainted and have developed light surface rust. (Reference picture 565-9S-1 & 2)
- 2) The internal surface of a tube steel member of pipe support M-1147-H19 is unpainted and open to the environment. It has developed light surface rust. (Reference picture 565-9S-3)
- 3) Concrete decking on the ceiling has minor bubbled paint and surface rust. (Reference picture 565-9S-4)
- 4) The pipe support for a 1" copper pipe located below valve NN-836 has surface rust and staining. Appears to be caused by a previous flange leak from the pipe directly above this support. (Reference Picture 565-9S-5)
- 5) A support base plate for the Incore support structure adjacent to the emergency sump screen has some surface staining. (Reference Picture 565-9S-6)
- 6) The tube steel member of pipe support M-1147-H18 is unpainted and has developed light surface rust. (Reference picture similar to 565-9S-3)

The above CR identifies conditions with minor surface rust. This surface rust will not adversely affect the structural integrity of the SSC.

1	02-01762	1	CA	04/30/02	06/14/02			No	PE	Open	
No	No			1	0	06/14/02	rc1baa	4	Yes	064-02	
INSPECTION PLAN IP-M-028 BOLTED CONNECTION									HDW	0575 0576	0575

This Condition Report is generated based on Inspection HLI-2 HL Flow Meter (Near RC1BA and RC1BAA) performed under Inspection Plan IP-M-28. This second inspection was performed following insulation removal on RC1BA. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The stainless steel valve packing area has accumulation of boric acid. This appears to be an old accumulation from packing leakage. No boric acid is currently on the packing follower area. Note: Both RC1BA and RC1BAA are scheduled to be replaced this outage per WO 02-008430-00.

A digital photo was taken to document the inspection. RC1BAA.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01849	1	CA	05/03/02	06/17/02			No	PE	Open	
No	No			1	0	06/17/02	Emergency Su	4	Yes	049-01	
INSPECTION PLAN IP-M-029 EXTENT OF CONDITION: AREA 565-11P									HDW	9999 0576	9999

This Condition Report is generated based on Inspection #565-11P Emergency Sump Area performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this report.

The vortex breaker for the Decay Heat line that is associated with DH9A has boric acid residue on the upper part of the flange area. This component is stainless steel and this is a cleanliness issue only.

A digital photo was taken to document the inspection. 565-11P-1.jpg.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions area required.

1	02-01848	1	CA	05/03/02	06/17/02			No	DBE	Open	
No	No	Yes		1	0	06/17/02	N/A	4	Yes	052-01	
INSPECTION PLAN IP-M-029 EXTENT OF CONDITION: AREA 565-3P										HDW	9999 0576 9999
<p>During a walkdown of Room 214, Core Flood Tank 1 area, it was noted that there is an HPI line that has a rod hanger in the vicinity of HP46A (HPI LINE 1-1 ISOLATION VALVE LEAK TEST CONNECTION) that is not connected and is rusted.</p> <p>This condition report is generated based on Inspection 565-12P performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.</p> <p>Based on review of the hanger with DEMS, it appears that this hanger was likely from construction and just never completely removed.</p>											
1	02-01921	1	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	rc74	4	Yes	064-02	
INSPECTION PLAN IP-M-029 AREA 565-9P FINDINGS										HDW	0575 0576 0575
<p>This Condition Report is generated based on Inspection 565-9P, Room 220 - Incore Instrument Trench Area performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.</p> <p>RC74 has surface residue of boric acid on the stainless steel bonnet, nuts and valve body flange. The carbon steel yoke also has pitting from past corrosion.</p> <p>A digital photo was taken to document the inspections. 565-9P-7.jpg.</p> <p>Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.</p>											
1	02-01681	1	CA	04/25/02	06/09/02			No	PE	Open	
No	Yes			1	0	06/09/02	N/A	4	Yes	064-04	
INSPECTION PLAN IP-M-028 ALLOY 600 FINDINGS										HDW	9999 0576 9999
<p>The following conditions were identified during an IP-M-028 Alloy 600 inspection of PZR-07 Insulation (Level Tap Nozzle Near RC14D).</p> <p>The target area includes insulation surrounding the pressure tap nozzle.</p> <p>The insulation showed no evidence of bulges, boric acid crystals, corrosion or corrosion products.</p> <p>No conclusive evidence of leakage was present, however a white powder residue was found on insulation in the surrounding area. The immediate area was inspected for potential sources of the powder. No source was identified.</p> <p>Digital photos were taken to document the inspection. S:\eng\planteng\mech\ip-m-028 photos\pzt-07-1 Ins.jpg pzt-07-2 Ins.jpg</p> <p>This CR is written in accordance with the inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.</p> <p>Identified per Reactor Head Degradation Extent of Condition program.</p> <p>Inspection documented per IP-M-028.</p>											
1	02-01723	1	CA	04/29/02	06/13/02			No	PE	Open	
No	No			1	0	06/13/02	cf31	4	Yes	051-01	
INSPECTION PLAN IP-M-028 ALLOY 600 FINDINGS										HDW	0575 0576 0575
<p>The following conditions were identified during an IP-M-028 Alloy 600 &amp; Threaded/Bolted Components Inspection of CF31 BOLTED (CFT 1-1 to Rx Check Valve).</p> <p>The target area includes the bolted flange, valve body and removed insulation. The valve is located in the East / West tunnel, CFT 1-1 area. The removed insulation showed no evidence of bulges, boric acid crystals, corrosion or corrosion products. Less than one table spoon of white boric acid crystals were found around the seam of the bolted connection. There was no evidence of corrosion.</p> <p>Digital photos were taken to document the inspection.</p> <p>This CR is written in accordance with the inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.</p> <p>none.</p>											



1	02-01730	1	CA	04/29/02	06/13/02			No	DBE	Open	
No	No			1	0	06/13/02	N/A	3	Yes	Various	
INSPECTION FINDINGS FOR IP-M-029 INSPECTION AREA 565-6S									HDW	0575 0576	0575

This Condition Report is generated based on Inspection Area 565-6S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. Surface rust observed on baseplate and instrument piping restraint straps for support assembly located above manifold valve LTCF3A1. (Photo 565-6S-1.jpg)
2. Structural steel members located just below floor elevation 585'-0" and southeast of Core Tank. Members appear to have never been painted. (Photo 565-6S-2.jpg)
3. Light surface rust on u-bolt for instrument pipe restraint adjacent to valve CC4201B and on top of unistuf member. (Photo 565-6S-3.jpg).
4. Entire area north of CAC plenum has rust staining on concrete, general rusting of steel substrates and boric acid debris. (Photo 565-6s-9.jpg)
5. Severe corrosion of CAC plenum anchorage assemblies including anchor bolts. Photos 565-6s-10.jpg and 565-6s-11.jpg are representative of as-found corrosion.
6. Piping, supports, plenum surfaces are severely corroded. (Photos 565-6s-12.jpg and 565-6s-14.jpg)
7. Corrosion has caused through wall holes in CAC plenum. (Photo 565-6s-13.jpg) During current cleaning process of interior surfaces water was observed dripping along bottom of plenum.
8. Rust staining on concrete beam/floor above plenum (Photo 565-6s-16.jpg).
9. Rust and boric acid debris at interface of structural floor beam and concrete flooring (Photo 565-6s-15.jpg)

In accordance with IP-M-029, Section 6.13.5, the Plant Engineering Manager or his designee was contacted concerning above Items 5, 6, and 7 as representing degraded conditions requiring further engineering evaluation. The remaining items concern minor surface rust. This minor surface rust will not prevent the items from performing their design function.

1	02-01807	1	CA	05/02/02	06/16/02			No	DBE	Open	
No	No			1	0	06/16/02	N/A	N/A	No	N/A	
INSPECTION PLAN IP-M-029 AREA 565-4S FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Inspection 565-4s performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Description of findings:

- 1) The metal decking for the floor above the Letdown Coolers has areas of light surface rust. (Reference representative picture 565-4s-1)
- 2) The base plates and anchor bolts of the supports for PSH3712, PSH3711, and the support between these two have light surface rust. (Reference picture 565-4s-2)
- 3) Pipe support CCA-18-H10 has surface rust on the base plate and anchor bolts, and surface staining on the grout pad. There are signs of boric acid on the support. (Reference picture 565-4s-3)
- 4) Pipe support CCA-18-H9 has surface rust near the connection to the process pipe. (Reference Picture 565-4s-4)
- 5) Pipe support CCA-18-H12 has surface rust on the pipe strap and bolts. (Reference Picture 565-4s-6)
- 6) The two pipe supports that are approximately 5' north of pipe support CCA-18-H12 has surface rust. (Reference picture 565-4s-7)

The above CR identifies areas with surface rust. The surface rust will not adversely affect the structural integrity of the SSC.

1	02-01993	0	CA	05/13/02	06/27/02			No	PE	Open	
No	No			1	0	06/27/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 FINDINGS.									HDW	0575 0576	0575

This Condition Report is being written as a result of inspections performed at Serial Numbers 'RCP12IN-1' (28" inlet piping weld to 90 degree bend for RCP 1-2), 'RCP12INI-1 (RCP 1-2 Inlet Pipe), and RCP12OUTI-1 (RCP 1-2 Outlet Pipe and RCP 1-2) in accordance with Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this Condition Report.

Serial 'RCP12IN-1': Duct tape residue found on pump bowl. Some trace evidence of boron on pump insulation and slight reddish-brown oxidation of the insulation support frame. A faint white coating was noted over some areas of the pump bowl. Several discolorations were noted on the underside of the pump bowl, one of which has the appearance of a damp spot. No boron was evident in or around this possibly damp area. This is being classified as a potential active leak.

Serial 'RCP12INI-1': Light boron streaking evident on exposed piping (no apparent source), with minor streaking trails

on underside of insulation. Minor reddish-brown trails evident on underside of piping and anchor lug welds are rusty.

Serial RCP12OUTI-1: It was noted that a brass pipe plug was installed in spare TWRC482 and although this is a well type RTD, it was questioned whether the use of brass is appropriate. Very minor traces of white and reddish-brown trailing noted on the piping. Minor reddish-brown and pale white streaks were noted on the face of the vane support penetrating the D-Ring wall and some steel associated with this support.

Refer to Inspection Plan IP-M-028 Data Sheets for further information.

1	02-01692	1	CA	04/25/02	06/09/02			No	PE	Open	
No	Yes			5	0	06/09/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 FINDINGS									HDW	0575 0576	0575

The following conditions were identified while performing inspections for IP-M-028 Alloy 600 inspection program for package serial numbers insulation inspections for RCP11IN-2, RCP12IN-1 and RCP12IN-2.

RCP11IN-2 (Insulation, 2.5" drain nozzle weld CL1-2, RC38) The inspection identified some streaking of white down the cold leg insulation to the drain line on the east side. Insulation was generally dirty / dusty, but in good condition. Some minor spots of white were found that appear to be paint.

RCP12IN-1 Insulation RCP1-2 28" piping weld 90 deg. The insulation for RCP12IN-1 has boron or white powder streak noted on the upper mirror West collar section just West of the North position vertical seam. This is very light and approximately 1" wide by 6" long. Two oval spots of a white substance were noted on the under side of the upper collar in the NorthEast quadrant. Very light indications of dried water accumulation and dripping were present in the south end underside upper collar.

RCP12IN-2 Insulation RC40 2.5" drain Nozzle Weld CL1-2. The insulation for RCP12IN-2 has light boron or white powder streaking noted from the cold leg running to the upper collar for RCP12IN-2. This streaking is present in multiple locations noted from both the East and West views. The streaking is heaviest above this insulation on the cold leg. The material condition inspection of the insulation panels around RCP12IN-2 identified poor material condition as the insulation fit was not fit up well and straight and the seams in multiple locations had less than desired fitup.

This CR was written in accordance with the IP-M-028 Inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure

This was identified per the Reactor Head Degradation Extent of Condition program. No active leakage was identified.

1	02-01735	0	CA	04/29/02	06/13/02			No	DBE	Open	
No	No			1	0	06/13/02	N/A	N/A	No	Various	
INSPECTION FINDINGS FOR IP-M-029 INSPECTION AREA 565-5S									HDW	0575 0576	0575

1. Surface rust observed on u-bolts for instrument piping supports east of valves FIS4234 and FIS 4235. Typical for all supports associated with the piping for these valves. (Representative Photo 565-5S-1.jpg)
2. Minor surface rust on the end of W-section structural member for pipe support. Location is adjacent to valves SP9B4BC and SP9B4BC. (Photo 565-5S-2.jpg)
3. Rust observed on decking for floor elevation 585'-0"/ceiling for Room 217. This a typical observation for all ceiling area for Room 217. Due to location close inspection to determine Categorization could not be verified. (Photo 565-5S-4.jpg)

This Condition Report is generated based on Inspection Area 565-5S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

This CR identifies components with minor surface rust and staining. This minor rust will not prevent the items from performing their design function.

1	02-01997	0	CA	05/13/02	06/27/02			No	PE	Open	
No	No			1	0	06/27/02	n/a	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 565-1P, ROOM 216 - EAST D-RING, INTERIOR FINDING									HDW	0575 0576	9999

This Condition Report is generated based on Area Inspection 565-1, Room 216 - East D-ring, Complete Interior performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

There is an accumulation of boric on the southwest wall on the 565 elevation that has dripped down on 2 stainless steel pipes. One pipe is a Decay Heat Line that contains vent valve DH109. The other is a floor drain.

Digital photos were taken to document the inspection. 565-1P - Piping Upstream of DH109 along South Wall - 1.jpg, 565-1P - Piping Upstream of DH109 along South Wall - 2.jpg,

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029.

Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02004	0	CA	05/13/02	06/27/02			No	DBE	Open	
No	No			1	0	06/27/02	n/a	4	Yes	Various	

**INSPECTION PLAN IP-M-029 AREA 565-1P, ROOM 216 - EAST D-RING, INTERIOR FINDING**

This Condition Report is generated based on Area Inspection 565-1, Room 216 - East D-ring. Complete Interior performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Some of the supports for components in the east D-ring have surface corrosion. These are varied in nature and function. They include Auxiliary Feedwater piping support, OTSG lower support shroud insulation support, and nuts for the Pressurizer support.

Digital photos were taken to document the inspection. 565-1P-Loop 2 AFW Piping ESE side of OTSG 2 - 3.jpg, 565-1P-#2 OTSG Lower Support Shroud Insul Support-1.jpg, 565-1P-Pressurizer Support just above heat bundles -1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01781	1	CA	05/01/02	06/15/02			No	PE	Open	
No	No			5	0	06/15/02	N/A	4	Yes	064-02	

**RCS LOOP COLD LEG DRAIN VALVE INSPECTIONS**

The following conditions were identified during an IP-M-028 Alloy 600, Threaded/Bolted Class 1 Joints and Connections RCS Extent of Conditions Inspections of RC32 Bolted, RC33 Bolted, RC34 Bolted, RC35 Insulation, RC38 Bolted, RC39 Insulation, RC40 Bolted, and RC41 Insulation Connections.

**RC32 BOLTED Loop 2-1 Cold Leg Drain Isolation Valve Inspection.** The inspection identified minor corrosion on the valve yoke and corrosion products / staining covering major areas of the valve body. Traces of boron was found in the packing gland area. The valve appears to have had recent maintenance and the as found information would therefore be following any cleanup / deconning of the valve.

**RC33 BOLTED Loop 2-1 Cold Leg Drain Stop Valve Inspection.** The inspection identified minor Corrosion on the valve yoke and packing gland area. Corrosion products / staining was found on a very small area of the valve body. No visible boron was found on the bolted joint or the packing gland area. The valve appears to have had recent maintenance and the as found information would therefore be following any cleanup / deconning of the valve.

**RC34 BOLTED Loop 2-2 Cold Leg Drain Isolation Valve Inspection.** The inspection identified corrosion products / staining covering over most of the valve body. Visible boron was found in the packing gland area and on the east side of the bolted body to bonnet joint. The valve appears to have had recent maintenance and the as found information would therefore be following any cleanup / deconning of the valve.

**RC35 INSULATED Loop 2-2 Cold Leg Drain Stop Valve Inspection.** The inspection identified surface corrosion present on the Carbon Steel Yoke and it is moderately corroded in the packing gland area. Boron deposits were observed on the south side of the packing gland. White spots on the Northeast and the Southeast corner of the insulation box was present and could be evidence of boron.

**RC38 BOLTED Loop 1-1 Cold Leg Drain Isolation Valve Inspection.** The inspection identified surface corrosion present on the Carbon Steel Yoke. Corrosion products / staining was found over most of the valve body. Visible boron was found in the packing gland area. The valve appears to have had recent maintenance and the as found information would therefore be following any cleanup / deconning of the valve.

**RC39 INSULATED Loop 1-1 Cold Leg Drain Stop Valve Inspection.** This inspection identified minor corrosion on the Carbon Steel Yoke in the packing gland area. No visible boron deposits were observed on either the valve or the insulation. Dust and dirt is moderate to heavy on top of the packing gland area and the insulation box.

**RC40 BOLTED Loop 1-2 Cold Leg Drain Isolation Valve Inspection.** The inspection identified surface corrosion present on the Carbon Steel Yoke. Corrosion products / staining was found over most of the valve body. Visible boron stains streaming from the packing gland area. The valve appears to have had recent maintenance and the as found information would therefore be following any cleanup / deconning of the valve.

**RC41 INSULATED Loop 1-2 Cold Leg Drain Stop Valve Inspection.** This inspection identified minor corrosion on the Carbon Steel Yoke in the packing gland area. No visible boron deposits were observed on either the valve or the

insulation. Dust and dirt is moderate to heavy on top of the packing gland area and the insulation box.

This CR was written in accordance with the IP-M-028 Inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

This was identified per the Reactor Head Degradation Extent of Condition Program. No Active Leakage was identified.

1	02-01693	1	CA	04/25/02	06/09/02			No	PE	Open	
No	Yes			5	0	06/09/02	P36-1	4	Yes	064-02	
INSPECTION PLAN IP-M-028 FINDINGS										HDW	0575 0576 0575

The following conditions were identified while performing inspections for IP-M-028 Alloy 600 Inspection program for package serial numbers insulation inspections for RCPI 11N-1W (RCPI-1 28 inch piping weld, 90 degree bend, inlet)

The inspection for RCPI 11N-1W (RCPI-1 28 inch piping weld, 90 degree bend, inlet) identified what appears to be an active leak. The inspection of the weld identified active leakage on the North / Northeast underside of the pump bowl, originating from above. Streaks of boron could be seen coming down the bowl and piping which appeared to be wet. The weld itself appeared to be in good condition with no evidence of leakage. Boron deposits could be seen on the insulation around the bowl. Boron streaks can be seen over top of the dye penetrant / developer on the East side, Northeast side, and the north side of the pump bowl.

This CR was written in accordance with the IP-M-028 Inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure

This was identified per the Reactor Head Degradation Extent of Condition program. Active leakage was identified.

1	02-02005	0	CA	05/13/02	06/27/02			No	DBE	Open	
No	No			1	0	06/27/02	n/a	4	Yes	050-03	
INSPECTION PLAN IP-M-029 AREA 565-1P, ROOM 216 - EAST D-RING, INTERIOR FINDING										HDW	0575 0576 0575

This Condition Report is generated based on Area Inspection 565-1, Room 216 - East D-ring, Complete Interior performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The Auxiliary Feedwater Piping in the East D-ring has areas of general surface corrosion. Also the nozzle flanges have corrosion on the flange faces and on the closure bolting.

Digital photos were taken to document the inspection. 565-1P-Loop 2 Aux Feed Nozzle flange - 1.jpg, 565-1P-Loop 2 Aux Feed Nozzle flange - 2.jpg, 565-1P-Loop 2 Aux Feed Nozzle flange - 3.jpg, 565-1P-Loop 2 AFW Piping just above main steam outlet - 1.jpg, 565-1P-Loop 2 AFW Piping east of main steam outlet - 2.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01998	0	CA	05/13/02	06/27/02			No	PE	Open	
No	No			1	0	06/27/02	n/a	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 565-1P, ROOM 216 - EAST D-RING, INTERIOR FINDING										HDW	0575 0576 0575

This Condition Report is generated based on Area Inspection 565-1, Room 216 - East D-ring, Complete Interior performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Several valves were found to have boric acid crystals on the packing or packing follower area. Two valves, RC55 and MU282, have already had their packing adjusted and only need to be further deconed. The other valves are as follows: RC508, RC509, RC18A1A, RC206B, RC607, RC608, MU472, MU408, MU282, MU473, HP82.

Digital photos were taken to document the inspection. 565-1P-RC 508-1.jpg, 565-1P-RC 509-1.jpg, 565-1P-RC 55-1.jpg, 565-1P-RC 18A1A-1.jpg, 565-1P-RC 206B-1.jpg, 565-1P-RC 607-1.jpg, 565-1P-RC 608-1.jpg, 565-1P-MU 408 and 408A - 1.jpg, 565-1P-MU 282 - 1.jpg, 565-1P-MU 473 - 1.jpg, 565-1P-HP 82 - 1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01891	1	CA	05/07/02	06/21/02			No	DBE	Open	
No	No			1	0	06/21/02	N/A	N/A	No	Various	
INSPECTION PLAN IP-M-029 AREA 565-1S FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection 565-1S performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

These items exhibited signs of surface rust:

1. The upper steam generator support support has surface rust on the west end of the southwest leg at elevation 628'-0". (photo file 565-1s-1.jpg)
2. Hanger spring cans supports in subject inspection area have minor surface rust on exterior of can, visible internal components, and associated threaded connections. (representative photo file 565-1s-4.jpg, -6.jpg, -18.jpg, -19.jpg)
3. Whip restraint lug for the hot leg has surface rust at approximate elevation 635'-0". (photo file 565-1s-5.jpg)
4. There is surface rust on the support frame on top of the pressurizer. (photo file 565-1s-9.jpg)
5. There is evidence of surface rust in the form of bubbling paint on the bottom flange of the top of the D-ring on the north end. (photo file 565-1s-10.jpg)
6. There is surface rust on northern support on the main steam line on the east wall near the top of the D-ring, on the bracket & pin. (photo file 565-1s-12.jpg)
7. Grating, bolts, and clamp have surface rust, this was typical on the platform west of steam generator at elevation 610'-0". (representative photo file 565-1s-17.jpg, 565-1s-11.jpg.)
8. Support on east side of steam generator at approximate elevation 624'-0" has surface rust. (photo file 565-1s-13.jpg)
9. Surface rust on support for small line 5' north and 5' below the support identified in item 8. (photo file 565-1s-14.jpg)
10. There was surface rust on what appears to be an abandoned reservoir at elevation 638'-0" on the north wall. (photo file 565-1s-7.jpg)
11. Platform support connection rusted on west side of steam generator near valve SP9A60 and near south west side of steam generator at elevation 610'-0". (photo file 565-1s-15.jpg)
12. Pressurizer support nuts rusted on the south end at elevation 603'-0", this is a typical occurrence. (representative photo file 565-1s-22.jpg)
13. Rust on snubber bracket C-208 located approx. 2' above finished floor (A.F.F.) at elevation 565', North of Reactor Coolant Pump 1-2-2. (photo file 565-1s-27.jpg)
14. Rust on Support 33C-CCB-2H27 located near North entrance to D-ring at floor elev. 565' approx. 2' A.F.F. (photo file 565-1s-23.jpg)
15. Rust on saddle support located near the North entrance to the D-ring at floor elev. 565' approx. 2' A.F.F. (photo file 565-1s-24.jpg)
16. Rust on strap located in the overhead at floor elev. 565' in the northwest corner of the D-ring (photo file 565-1s-25.jpg & -26.jpg)
17. Rusted pipe support located in the overhead at floor elev. 565', southeast of the steam generator (photo file 565-1s-30.jpg)
18. Light surface rust on snubber clamp associated with the approx. 6" pipe that circles the Steam Generator and an approx. 2" line that branches from it. Located in the overhead at elev. 565' near the southeast side of steam generator of the D-ring (representative photo file 565-1s-38.jpg)
19. Saddle support on an approx. 6" pipe that circles the Steam Generator has surface rust. Located in the overhead at elev. 565' just inside east entrance of the D-ring at floor elev. 565' (photo file 565-1s-33.jpg)
20. Surface rust on welds and bracket plate for snubbers associated with the Main Feedwater line located in the South end of the D-ring. (photo file 565-1s-34.jpg)
21. Rusted U-bolts on approximately 3/4" S.S. lines. Located 1 platform up from floor elev. 565' at the south end of the D-ring. Typical most U-bolts on these lines valve CC4334A is on one of the lines (representative photo file 565-1s-35.jpg)
22. Piping support on same line and near valve SP9A5B has surface rust at approximate elevation 634'-0" south east of the steam generator. (photo file 565-1s-2.jpg)
23. Rusted snubber bracket near hot leg in overhead at floor elev. 565'. Associated pipeline is steam generator 1-2 lower sheet drain. (photo file 565-1s-39.jpg)
24. Rusted support just inside the east entrance in the overhead of the D-ring at floor elev. 565' (photo file 565-1s-36.jpg)
25. Rusted abandoned support in overhead of the D-ring at floor elev. 565' in Southwest corner (photo file: 565-1s-40.jpg)
26. Rusted U-bolts associated with three copper lines located in the overhead @ elevation 565'-0" near the east entrance of the D-ring. Line runs near east wall (representative photo file 565-1s-41.jpg)
27. Rusted support clamp near interface of southeast and east wall. Approximate elevation is 596'-0". (photo file 565-1s-42.jpg)

The following have staining:

28. Stain on the wall at elevation 638'-0" west of the steam generator. (photo file 565-1s-3.jpg)
29. There is an oil stain on the top flange of the beam supporting the grating at elevation 653'-0", which is typical of

subject inspection area. (photo file 565-1s-8.jpg)

30. Rust stain on support AT2K on the east side of the steam generator at approx. elevation 603'-0". (photo file 565-1s-21.jpg)

31. Stain on grating beam at elevation 603'-0" on the north side of the D-ring. (photo file 565-1s-32.jpg)

32. Stain on H3 support located near the North entrance to the D-Ring at floor elev. 565' approx. 1' A.F.F. (photo file 565-1s-28.jpg)

33. Stain on support under black box. Box has a shaft and a universal joint that extends to valve MS889. Located in the overhead at elev. 565' near the east entrance of the D-ring at floor elev. 565' (photo file 565-1s-31.jpg)

34. Surface rust on unpainted interior surface of tube steel member of pipe support located approx. 10' above the pressureizer surge line. (photo file 565-1s-43)

This CR Identifies components with minor surface rust and staining. This minor surface rust and staining will not prevent the items from performing their design function.

1	02-02000	0	CA	05/13/02	06/27/02			No	PE	Open	
No	No			1	0	06/27/02	n/a	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 565-1P, ROOM 216 - EAST D-RING, INTERIOR FINDIN									HDW	0575 0576	0575

This Condition Report is generated based on Area Inspection 565-1, Room 216 - East D-ring, Complete Interior performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Several valves were found to have surface corrosion or discoloration on the packing follower, packing follower bolts body OR yoke. The valves found are as follows:  
RC220B, RC501, RC260, RC31, RC32, RC33, MU407, MU407A, MU472, MU408, MU408A.

Digital photos were taken to document the inspection. 565-1P-RC 220B -1.jpg, 565-1P-RC 501-1.jpg, 565-1P-RC 260-1.jpg, 565-1P-RC 31.jpg, 565-1P-RC 32-1.jpg, 565-1P-RC 33-1.jpg, 565-1P-MU 407 and 407A - 1.jpg, 565-1P-MU 472-1.jpg, 565-1P-MU408 and 408A.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02002	0	CA	05/13/02	06/27/02			No	PE	Open	
No	No			1	0	06/27/02	n/a	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 565-1P, ROOM 216 - EAST D-RING, INTERIOR FINDIN									HDW	0575 0576	0575

This Condition Report is generated based on Area Inspection 565-1, Room 216 - East D-ring, Complete Interior performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Several secondary side valves were found to have surface corrosion or discoloration on the packing follower, packing follower bolts body OR yoke. The valves found are as follows: SP9A6A, SP9A1A, MS880, SP9A6B, SP9A6BA, SP9A3B, SP9A1B, MS879, SP9A6D, SP9A4B, SP9A6DA, CC321.

Digital photos were taken to document the inspection. 565-1P-SP9A6A -1.jpg, 565-1P-SP9A1A-1.jpg, 565-1P-MS 880-1.jpg, 565-1P-SP9A6B.jpg, 565-1P-SP9A6BA-1.jpg, 565-1P-SP9A3B and 1B-1.jpg, 565-1P-MS 879 - 1.jpg, 565-1P-SP9A6D-1.jpg, 565-1P-SP9A4B.jpg, 565-1P-SP9A6DA and 565-1P - CC321.jpg..

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02126	0	NA	05/17/02	07/16/02			No	PE	Open	
No	No			1	0	07/16/02	n/a	4	Yes	037-02	
INSPECTION PLAN IP-M-029 AREA 585-5P FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Area Inspection 565-5P, Room 317 - Containment Hatch Area, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Three Demineralized Water valves have corroded components. DW313, 312, 148, corroded Packing follower, packing follower bolts and bonnet bolts.

Digital photos were taken to document the inspection.  
585-5P-DW313 and DW312 (typical)-1.jpg  
585-5P-DW148-1.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029.

Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02127 -	0	CA	05/17/02	07/01/02			No	DBE	Open	
No	No			1	0	07/01/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 FINDINGS									HDW	0575 0576	0575

The following conditions were identified while performing inspections for IP-M-028 Alloy 600 inspection program for package serial numbers weld inspections HL2-4, HL2-6 and HL2-7

Inspection zone HL2-3 Weld (RC Loop 2 HL Flowmeter Nozzle). No evidence of leakage was observed at either nozzle weld. Some rust colored streaking can also be seen coming from above and passing East of the nozzle. Some dusting of a white powdery residue can be seen covering the Nozzle and a white powder can be seen in all the stamp marks for the nozzle. Some minor corrosion products were present on the top of the horizontal portion of the nozzle.

Inspection zone HL2-5 Weld (RC Loop 2 HL Press. Tap Nozzle PTA1). Unable to tell whether leakage existed at the Press. Tap to hot Leg weld. The Western two thirds of the nozzle base was completely covered with corrosion products which appear to be originating from above. Some reddish-brown deposits that appeared to be boron and corrosion products were present on the top portion of the nozzle near the hot leg. No evidence of leakage was found on the nozzle to piping weld.

Inspection zone HL2-8 Weld (RC Loop 2 HL RTE Mounting Boss). No evidence of leakage was found at the mounting boss welds. Two additional welds were found that were not on the identified drawing. One of these welds was not blend and white powder was found in this weld area and in the stamp marks on the piping and mounting boss. A light dusting of white powder residue is on the mounting boss base and evidence of white streaking is present. Some rust color staining is present on mounting boss.

Inspection zone HL2-9 Weld (RC Loop 2 HL RTE Mounting Boss). No evidence of leakage was found at the mounting boss welds. Two additional welds were found that were not on the identified drawing. These welds were not blended and white powder was found in the weld area and in the stamp marks on the piping and mounting boss. A very light dusting of white powder residue is on the mounting boss base.

Inspection zone HL2-10 Weld (RC Loop 2 HL Vent Nozzle). No Leakage was found at the Vent nozzle welds. The welds appeared to be in good shape with a very light dusting of white powder present located just above the nozzle and on the horizontal piping. Some minor areas of what appears to be pitting of the base metal is present in the radius of the nozzle on the South and Southwest side. On the Hot Leg piping, some rust colored powder is present again on the South and Southwest side.

Inspection zone TWRC3A1 Bolted. (RC Loop 2 HL Thermowell). No evidence of leakage was observed at the threaded connection on the Thermowell. Some traces of Boron were evident around/between the flange nut and the mounting boss. Area was free of corrosion and no boron deposits were found after the flange nut / mounting boss interface.

Inspection zone TWRC3A3 Bolted. (RC Loop 2 HL Thermowell). No evidence of leakage was observed at the threaded connection on the Thermowell. Some traces of Boron were evident around/between the flange nut and the mounting boss. Area was free of corrosion and no boron deposits were found after the flange nut / mounting boss interface.

Inspection zone HL2I-1 (Loop 2 Hot Leg Target). The top of the Hot Leg looked good with now evidence of leakage down to the first hanger. Below the first hanger, the piping on the Southwest side was covered with moderately heavy rust streaks and corrosion deposits. The heavy corrosion debris and streaking continued down the piping past Pressure Tap PTA1 and covered approximately 20 percent of the piping. The rust and corrosion streaks began to decrease about 10 to 15 feet below this tap. The rust streaks moved more toward the East of the piping as it continued down and the streaking continued to decrease. The rust streaks were apparent nearly 360 degrees of piping where it appears that strapping material went around the pipe. General condition of the piping was such that peeling paint existed throughout the piping below the top U bend with minor corrosion visible in areas where paint has peeled. The origin of the leakage down the piping could not be identified since it appeared to originate above the first nozzle but was not apparent at the top vent.

This CR was written in accordance with the IP-M-028 inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.

Note: The first paragraph under description of condition states that the conditions were identified under inspection serial numbers HL2-4, HL2-6 and HL2-7. As can be seen from the specific observations, these conditions were actually identified under inspection serial numbers HL2-3, HL2-5, HL2-8, HL2-9, HL2-10, TWRC3A1, TWRC3A3 and HL2I-1.

This leakage was identified per Reactor Head Extent of Condition program. The requirements of NG-EN-00324 need to be addressed in the evaluation of this CR.

1	02-02003	0	CA	05/13/02	06/27/02			No	PE	Open	
No	No			1	0	06/27/02	n/a	4	Yes	063-01	

**INSPECTION PLAN IP-M-029 AREA 565-1P, ROOM 216 - EAST D-RING, INTERIOR FINDING**

This Condition Report is generated based on Area Inspection 565-1, Room 216 - East D-ring, Complete Interior performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Secondary side small bore piping has general surface corrosion or discoloration in the east D-ring. Photos representative of the typical corrosion were taken. Two of these pipes are unknown as to their origin. The third is the instrument line for SP9A1A.

Digital photos were taken to document the inspection. 565-1P-Instrument Line SP9A1A (Typical) - 1.jpg, 565-1P-OTSG 2 Secondary Side Sample Line 15' above DH drop line (Typical for 3)-1.jpg, 565-1P- OTSG 2 Secondary Side Tube Sheet Drain at the top of RCP 2-1 East wall-1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02103	0	CA	05/17/02	07/01/02			No	DBE	Open	
No	No			1	0	07/01/02	N/A	4	Yes	064-02	

**INSPECTION PLAN IP-M-028 FINDINGS**

The following conditions were identified while performing inspections for IP-M-028 Alloy 600 inspection program for package serial numbers weld inspections HL2-4, HL2-6 and HL2-7

Inspection zone HL2-4 (Weld RC Loop 2 HL Flowmeter Nozzle). The Flowmeter Nozzle has some rust colored streak which appears to originate at the hot leg to nozzle weld at the 6:00 position. Some rust colored streaking can also be seen coming from above and passing East of the nozzle. Some light dusting of a white powdery residue can be seen covering the nozzle base from approximately 11:00 to 3:00 and a white powder can be seen in all the stamp marks for the nozzle. No evidence of leakage was observed at the nozzle to piping weld, however some rust colored staining was present on the horizontal portion of the nozzle mainly on the top. The buffed area of hot leg piping surrounding the nozzle also had rust colored streaks passing through the area that apparently originated from above.

Inspection zone HL2-6 (Weld RC Loop 2 HL Temp Connection). Evidence of leakage was found at the base of the Temp Connection. White streaking was evident below the tap that appeared to be originating from the base of the connections. There were no visible welds on the connection. A "J" weld on the inside of the hot leg joins the connection and the other end of the connection has a threaded fitting. Rust color stain was found on the connection at the 12:00 position. A white powder residue from the 3:00 to 9:00 position was observed around the connection and streaking was observed trailing away from the connection. Some minor corrosion was observed on the hot leg piping around the top half of the connection. Some white streaking was also observed on the Hot Leg Piping just to the East of the connection that appears to originate from above.

Inspection zone HL2-7 (Weld RC Loop 2 HL Press. Tap PTA2). Evidence of leakage was found at the base of the Press. Tap. White streaking was evident below the tap that appeared to be originating from the tap itself not in the weld areas. White powder was found in the stamp marks and on the tap. A light rust color stain was found on the press. tap at the 12:00 position. Some minor white streaks were observed just north of the tap passing over the base.

This CR was written in accordance with the IP-M-028 inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.

This leakage was identified per Reactor Head Extent of Condition program. The requirements of NG-EN-00324 need to be addressed in the evaluation of this CR.

1	02-02135	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			2	0	07/01/02	LTRC14-1,LTRC1	4	Yes	064-04	

**BORIC ACID RESIDUE ON LTRC14-1, LTRC14-3 PIPING, PT6365B PIPING & PTRC2B2 FLAN**

This Condition Report is generated based on various RCS Pressure Boundary Tubing Inspections performed under Inspection Plan IP-M-29, Attachment 4. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

LTRC14-1T



Boric Acid residue (white) is present on the top of the housing for LTRC14-1RC Pressurizer Level Transmitter. The source of the residue appears to be the test plugs on the top of the transmitter.

**LTRC14-3T**

Boric acid residue is present on the LTRC14-3 RC Pressurizer level transmitter sensing line piping upstream of source valve RC14DB, near a socket weld connection. The socket weld is located in the piping, located outside the D-ring, that runs North-South, approximately 10 feet in the overhead, north of LTRC14-3. The residue source is not known, but may be either from the piping connection or from above the piping. The residue is mainly white, but contains some rusty residue.

**PT6365T**

Boric acid residue (white) was observed on the source line "Tee" fitting located below PT6365B RC EXTENDED RANGE PRESSURE TRANSMITTER, located on the outside of the west d-ring wall, 603 elev. The residue source is not known. The residue is very minor.

**PTRC2B2T**

White boric acid residue was observed on the surface of a bolted Instrument piping flange located in the east D-ring. The flange is located on the RCS Loop 1 pressure Instrumentation piping (common to PTRC2B2 and PTRC2B4 and PSHRC2B4) identified between welds 17A and 17B on VDWG M-329-1139. The Boric acid is on the western flange face, piping to flange weld area and flange bolting. The source of the residue appears to be from the flanged joint. It is not obvious if the residue may be from a current or prior flange leak. The flange and bolting materials were confirmed to be stainless based on the referenced vendor drawing.

Digital photos were taken to document the inspections.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02137*	0	NA	05/17/02	07/16/02			No	PE	Open	
No	No			1	0	07/16/02	E24-1	4	Yes	063-01	

**INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION: SG 1 UPPER MANWA**

Due to a temporary manway cover being installed on the SG 1-1 Upper Manway, a complete inspection of the bolted connection can not be completed as required by Inspection Plan IP-M-028, step 6.4. In accordance with that plan, when a complete inspection can not be made a condition report is to be generated. This will be used to track the target until such time that the inspection can be completed.

None

1	02-02138*	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	RC1BBB	4	Yes	058-01	

**INSPECTION PLAN IP-M-029 AREA 603-3P FINDINGS**

This condition Report is generated based on Area Inspection 603-3P, Room 410A - West Passage Penetration Area, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Several Reactor Coolant system instrument isolation valves have boric acid residue and discoloration on various parts of the valve. (Packing follower, packing follower bolts and nuts, and yoke.)  
RC1BBB, RC1BAE, RC1BAD, RC1BBD, RC1BBE, RC2B2B, RC2B1B.

Digital photos were taken to document the inspection:

- 603-3P-RC1BBB-1.jpg
- 603-3P-RC1BAE-1.jpg
- 603-3P-RC1BAD-1.jpg
- 603-3P-RC1BBD-1.jpg
- 603-3P-RC1BBE-1.jpg
- 603-3P-RC1B2B-1.jpg
- 603-3P-RC1B1B-1.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program will be needed. No immediate actions are required.

1	02-01866	1	CA	05/06/02	06/20/02			No	DBE	Open
No	No			1	0	06/20/02	N/A	4	Yes	Various

**INSPECTION PLAN IP-M-029 AREA 603-4S FINDINGS** HDW 0575 0576 0575

This condition report is generated based on findings in Inspection Area 603-4S, performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. Rusted U-bolt on a support and resulting rust stain down the edge of the support near the southeast corner of the pool at approx. 2' above finished floor (Photo: 603-4S-1)
2. Supports for the CCW line on the west side of the pool have boric acid run-off from condensation on the pipe. No evidence of corrosion or staining. (Photos:603-4S-2, -3)
3. Rusted bolt and rust stains on pads located near water level on the west side of the pool. (Representative photos: 603-4S-4, -6)
4. Rusted shaft on west end of the auxiliary refueling bridge. Typical all off the shafts near the corners of both refueling bridges. (Representative photo: 603-4s-5)
5. Rusted bolting and light surface rust on the skid, motor base, and associated bolting at the south end of the pool. Rusted bolting is typical of each of the skids. (Representative photo: 603-4s-7)
6. Boron deposits on the supports for the winches located on the south end of the pool. No evidence of corrosion or staining. (Representative photo: 603-4s-8)
7. Rusted and stained base plate, angle, and bolting on the floor near the middle of the east edge of the pool. (Photo: 603-4s-9)
8. Rust stain on painted diamond plate near southeast end on pool at floor level. (Photo: 603-4s-10)

The above CR identifies a condition with minor surface rusting, staining, or evidence of boric acid. These findings currently do not affect the structural integrity of the SSCs.

1	02-01885	0	CA	05/06/02	06/20/02			No	DBE	Open
No	No			1	0	06/20/02	N/A	N/A	No	N/A

**INSPECTION PLAN IP-M-029 FINDINGS FOR INSPECTION AREA 565-6S** HDW 0575 0576 0575

Surface rust on top of structural beam flange edge at floor plug. (Photo file 565-6s-12.jpg)

Surface rust on ceiling decking steel throughout entire inspection area (Representative photo file 565-6s-13.jpg)

Rust staining of concrete floor in inspection area. (Representative photo file 565-6s-14.jpg)

This Condition Report is generated based on inspection area 565-6s performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Minor material degradation, but no immediate structural integrity concerns. CR 02-01730 is an associated CR for Inspection Area 565-6s.

1	02-01886	0	CA	05/06/02	06/20/02			No	DBE	Open
No	No			1	0	06/20/02	N/A	N/A	No	N/A

**INSPECTION PLAN IP-M-029 FINDINGS FOR INSPECTION AREA 565-8S** HDW 0575 0576 0575

Surface rust on ceiling decking over entire inspection area. (Photo 565-8S-1.jpg)

This Condition Report is generated based on Inspection Area 565-8S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Minor material degradation, but no immediate structural integrity issues.

1	02-01887	1	CA	05/06/02	06/20/02			No	DBE	Open
No	No			1	0	06/20/02	N/A	4	Yes	N/A

**INSPECTION PLAN IP-M-029 FINDINGS FOR INSPECTION AREA 585-6S** HDW 0575 0576 0575

1. Rust stains are present on concrete floor throughout inspection area. No concrete degradation present. (Representative photo 585-6s-10.jpg)

2. Rust stains on vessel below conduit/cable tray support plates which are welded to vessel. Plates were never painted on the side facing the vessel due to inaccessibility. (Representative Photo file 585-6s-7.jpg)

3. Rust stains and boric acid deposits found on conduit and associated support members adjacent to valve RC146. Boric acid deposits cover baseplates, wall just above wall/floor interface and on conduit. No rusting of components present. Approx. elevation 585'-6" (Photo files 585-6s-5.jpg)

4. Rust stains on concrete column adjacent to stairs. (Photo 585-6s-11.jpg)

5. Rust stains on vessel below penetrations marked 9, 10 and 11. (Representative Photo 585-6s-12.jpg)

This Condition Report is generated for Inspection Area 585-6S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Minor rust stains, there are no structural integrity concerns.  
 CR 02-01721 is an associated CR for inspection area 585-6S

1	02-02110	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	n/a	4	Yes	Various	

**INSPECTION PLAN IP-M-029 AREA 585-6P FINDINGS**

This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 317 and 315, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

- 3 pipes have boric acid residue and surface corrosion or staining.
- \* Copper Instrument Air piping above the doorway to the Incore Instrument Tank.
  - \* Stainless steel Demineralized Water header.
  - \* Stainless steel Pressurizer level transmitter instrument line (12' off of floor just outside elevator)

A digital photo was taken to document the inspections.

- \* 585-6P-Copper Pipe above doorway to Incore Inst Tank-1.jpg
- \* 585-6P-Demin Water Header (Typical)-1.jpg
- \* 585-6P-Pzr Level Transmitter Inst Line 12' off ground just outside elevator (typical).jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02111	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	n/a	4	Yes	064-02	

**INSPECTION PLAN IP-M-029 AREA 585-6P FINDINGS**

This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 317 and 315, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

There is some surface contaminant on the piping between RC145 and RC 5007. This is located just to the left of the door going into the Incore Instrument Tank area.

A digital photo was taken to document the inspection. 585-6P-Pipe Elbow Between RC145 and RC5007-1.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02139	0	NA	05/17/02	07/16/02			No	PE	Open	
No	No			1	0	07/16/02	E24-2	4	Yes	063-01	

**INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION: SG 2 UPPER MANWAY**

Due to a temporary manway cover being installed on the SG 1-2 Upper Manway, a complete inspection of the bolted connection can not be completed as required by Inspection Plan IP-M-028, step 6.4. In accordance with that plan, when a complete inspection can not be made a condition report is to be generated. This will be used to track the target until such time that the inspection can be completed.

None

1	02-02123	0	CA	05/17/02	07/01/02			No	DBE	Open	
No	No			1	0	07/01/02	N/A	N/A	No	Various	

**INSPECTION PLAN IP-M-029 AREA 548-1E FINDINGS**

This condition report is generated based upon an inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 548-1E is the Core Flood Pipe Tunnel, including access from elevation 565". This inspection area contains conduit, lighting fixtures, a convenience outlet and a pump motor. Boric acid crystals and residue, stains and rust were identified in this area. The source for the observed conditions appeared to be from leaks through the South wall of this area..

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky, C - Material corrosion that is loose, flaky, pitted or involves material wastage.

Photos identified below are part of Data Package, Serial 548-1E for IP-M-029.

1. Photo 548-1E-04 shows a lighting receptacle with its outlet box covered with boric acid crystals. The outlet box is located on the South wall of the Core Flood Pipe Tunnel. Since the crystals are white it does not appear that material wastage is present. Category A.

2. Photos 548-1E-05 and 548-1E-06 show two views of the Refueling Canal Drain Pump Motor (MP2040). The actual motor is corrosion free. Rust and boric acid residue was observed on the base plate that supports the motor and pump. Although not clear in this photo, there was approximately 1/2 to 3/4 inch of standing water in the area around the motor and pump. Category B. The source of the water appears to be through cracks in the South wall, as orange stains and boric acid crystals are on that wall.

3. Photo 548-1E-07 shows a convenience outlet located on the South wall in the tunnel. Boric acid crystals are seen on the wall; the conduit and outlet do not show any corrosion.

4. Photo 548-1E-08 shows conduit with boric acid residue. The conduit's support base plate and bolts do not show corrosion. The conduit and support are located on the North wall of the tunnel. Category A.

5. Photo 548-1E-09 shows a lighting receptacle, outlet box and conduit. The orange color on these components appears to be a stain and not active corrosion. The light, box and conduit are located on the South wall in the small room above and at the end of the tunnel. The ladder used to access this room is visible in photo 548-1E-05. Category A.

No immediate actions, material degradation minor in nature. No electrical or structural integrity issue apparent.

1	02-01900	0	CA	05/07/02	06/21/02			No	DBE	Open	
No	No			1	0	06/21/02	N/A	N/A	No	N/A	
INSPECTION FINDINGS FOR IP-M-029 INSPECTION AREA 565-5S									HDW	0575 0576	0575

This Condition Report is generated based on inspection area 565-5s performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1) Rust staining was observed at several location on the floor in this area. (Representative Photo 565-5s-5.jpg)

This CR identifies minor surface staining. This staining will not prevent the floor from performing its design function. CR 02-01735 is an associated CR for inspection area 565-5S.

1	02-01808	0	CA	05/02/02	06/16/02			No	DBE	Open	
No	No			1	0	06/16/02	H11	N/A	No	099-11	
INSPECTION PLAN IP-M-029 AREA 653-2S FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection 653-2s performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. Surface rust was found on the rail bolts for the RX service crane, on the south end. (representative photo file 653-2s-1.jpg)

2. The deck was found to have oil staining and light surface rust. (representative photo file 653-2s-2.jpg)

This CR identifies components with minor surface rust. This minor surface rust will not prevent them from performing their design function.

1	02-02112	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	n/a	4	Yes	064-02	
INSPECTION PLAN IP-M-029 AREA 585-6P FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 317 and 315, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Several valves have boric acid residue around the packing. These valves also have surface corrosion on the valve components. (Packing follower, packing follower bolts, yoke, or valve body.) These valves are: RC14BB, RC14CB, RC14FB, RC14EB, RC14AB, Iso valve for PTRC18B2.

A digital photo was taken to document the inspections.

585-6P-RC14BB-1.jpg

585-6P-RC14CB-1.jpg

585-6P-RC14FB-1.jpg

585-6P-RC14EB-1.jpg

585-6P-RC14AB-1.jpg

585-6P-Iso valve for PT - RC18B2-1.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029.

Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02113	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	fg4840	4	Yes	064-04	

**INSPECTION PLAN IP-M-029 AREA 585-6P FINDINGS**

This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 317 and 315, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The Prz Vent Flow Gauge, FG4840 has boric acid residue around the flange gaskets and the closure bolts for the gauge glass itself. Some of the flange nuts also have surface corrosion.

A digital photo was taken to document the inspection. 585-6P-FG4840-1.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02141	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	n/a	4	Yes	016-04	

**INSPECTION PLAN IP-M-029 AREA 603-3P FINDINGS**

This condition Report is generated based on Area Inspection 603-3P, Room 410A - West Passage Penetration Area, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Two large bore pipes have a crust of boric acid residue on the surface. This appears to be from condensation and deposition of boric acid from the atmosphere around the pipes. These deposits are prevalent for about 30' of piping starting at the floor of the 603' elevation.

Digital photos were taken to document the inspection:

- 603-3P-CC108-1.jpg
- 603-3P-Large bore piping at CC611-1.jpg
- 603-3P-Large bore piping at CC611-2.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program will be needed. No immediate actions are required.

1	02-02142	0	NA	05/17/02	07/16/02			No	PE	Open	
No	No			1	0	07/16/02	n/a	2	Yes	018-01	

**INSPECTION PLAN IP-M-029 AREA 603-3P FINDINGS**

**INSPECTION PLAN IP-M-029 AREA 603-3P FINDINGS**

This condition Report is generated based on Area Inspection 603-3P, Room 410A - West Passage Penetration Area, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The Instrument air piping elbows have corrosion on the elbow and joints connecting the elbows and straight piping.

A digital photo was taken to document the inspection:

- 603-3P-Inst Air Elbow Above Incore Tank (typical)-1.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program will be needed. No immediate actions are required.

1	02-01868	0	CA	05/06/02	06/20/02			No	DBE	Open	
No	No			1	0	06/20/02	N/A	N/A	No	N/A	

**INSPECTION PLAN IP-M-029 AREA 653-1S FINDINGS**

This condition report is generated based on Inspection 653-1S performed under Inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

An area of surface rust was found on the handrail toe plate inside the southwest corner of the west D-ring. Photo 653-1s-1.jpg

This CR identifies an item with minor surface rust. This minor surface rust will not prevent the item from performing its design function.

1	02-01906	0	CA	05/07/02	06/21/02			No	DBE	Open	
No	No			1	0	06/21/02	N/A	N/A	No	Various	
INSPECTION PLAN IP-M-029 AREA 565-2S									HDW	0575 0576	0575

This Condition Report is generated based on inspection 565-2S performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The description of the findings, starting at the bottom of the West D-ring, in the north half are:

- 1) The U-Bolts on the support for a 1/2" diameter sample line (4 pipes per row, 2 rows), approximately 6 feet above the floor has light surface rust and surface staining at several locations.  
(Reference representative photo 565-2S-1.jpg)
- 2) The threaded end of the RCP pipe whip restraint (@565) shows signs of surface rust and staining. (Reference photo 565-2S-2.jpg)
- 3) The inside of the pipe restraint for a 3/4" sample line (@ 569) is not painted and shows signs of surface rust and surface staining. Located on the east wall.  
(Reference photo 565-2S-3.jpg)
- 4) The structural steel for the platform at elev. 577' shows signs of surface staining and surface rust at numerous locations around the platform.  
(Reference photo 565-2S-4.jpg and 565-2S-6.jpg)
- 5) The pipe clamp on a support near #4 above shows signs of surface staining and rust.  
(Reference photo 565-2S-7.jpg)
- 6) Several support members attached to the platform steel (@ 577) were flame cut at the base and not painted. These areas show signs of surface rust and surface staining.  
(Reference photo 565-2S-5.jpg)
- 7) The supports for the 3/4" line for SB9B5A located under the 577 platform shows signs of surface rust and surface staining whenever the pipe comes in contact with the support  
  
(Reference representative photo 565-2S-12.jpg)
- 8) A general note on the condition of the support members at the bottom of the D-ring and the Steam Generator pit is that the surface of these members have multiple chips and scrapes that result in light surface rust.  
(Reference photo 565-2S-8.jpg for a general photo)
- 9) The pipe support stanchion for snubber C-251 shows signs of surface rust and surface discoloration resulted from being in contact with high temperature piping.  
(Reference photo 565-2S-9.jpg)
- 10) The clamp and the stanchion for snubber C-250 shows signs of surface rust and surface staining resulting from being in contact with high temperature piping.  
(Reference photo 565-2S-10.jpg)
- 11) The clamp and the stanchion for snubber C-246 shows signs of surface rust and surface staining resulting from being in contact with high temperature piping.  
(Reference photo 565-2S-11.jpg)
- 12) Platform steel in front of the Steam Generator manway opening at elev. 577 shows signs of surface rusting and surface staining.  
(Reference photo 565-2S-13.jpg)
- 13) The clamps for the Ulega snubbers (adjacent valve SS 674) shows signs of surface rust and surface staining.  
(Reference photo 565-2S-14.jpg)
- 14) The Bolts on the Spring Can (adjacent valve SS 674) shows signs of surface rust and surface staining.  
(Reference photo 565-2S-15.jpg)
- 15) The pipe clamp for snubber H23 shows surface rust and surface staining. This is typical of the other supports

associated with this line.

(Reference typical photo 565-2S-15 and 565-2S-16)

16) The stanchion for snubber C-248 and stanchions for vertical restraint shows signs of surface rust and surface staining.  
(Reference photo 565-2S-16.jpg)

17) General Note: There are several uninsulated and unpainted pipes in the D-Ring that show signs of rust. The pipe supports that come in contact with these pipes also show signs of surface rust, surface staining, and or surface discoloration.

18) The bolts for the pipe support (clamp) directly above FT 4238 (@ 569) shows signs of surface staining and surface rust.  
(Reference photo 565-2S-17.jpg)

19) The bolts for snubber C-245 shows signs of surface rust and surface staining.  
(Reference photo 565-2S-18.jpg)

20) The cold leg support at the bottom of the RCP shows signs of surface staining and surface rust.  
(Reference photo 565-2S-19.jpg)

21) Platform bolting between the S.G. and the Hot Leg (@ 592'-9") shows signs of slight surface rust and surface staining  
(Reference photo 565-2S-20.jpg)

22) On the NW wall there are surface stains that are streaking down the wall. It appears it could come from the Main Steam line restraint above.  
(Reference photo 565-2S-21.jpg)

23) The vertical pipe with its supports shows signs of surface staining on the anchors and base plate. It appears the staining is from a restraint above.  
(Reference photo 565-2S-22.jpg)

24) The end bracket for Main Steam restraint SR-9 shows signs of surface rust and surface staining.  
(Reference photo 565-2S-23.jpg)

25) Directly above the Steam Generator, the main structural support beams for the 653 floor show signs of surface staining.  
(Reference photo 565-2S-24.jpg)

26) The main lateral support for the Steam Generator (near the top of the S.G.), the bolts and nuts show signs of surface staining and surface rust.  
(Reference photo 565-2S-25.jpg)

27) The support for SP9B5B shows signs of surface staining and surface rust  
(Reference photo 565-2S-26.jpg)

28) The support beam for a constant spring support near SR-9 (item 24) shows signs of surface staining.  
(Reference photo 565-2S-27.jpg)

29) The web stiffener for a lateral brace on the Main Steam line restraint located directly west of the top of the Steam Generator shows signs of surface rust and paint blistering.  
(Reference photo 565-2S-28.jpg)

30) The main lateral support for the upper Steam Generator beam shows signs of surface discoloration and paint peeling.  
(Reference photo 565-2S-29.jpg)

31) The support channel for the platform at elevation 632'-3" shows signs of surface rust and surface staining.

(Reference photo 565-2S-30.jpg)

32) The top bolts for SR-32 and the lateral stiffener shows signs of surface staining and surface rust.

(Reference photo 565-2S-32 and 565-2S-33.jpg)

33) The concrete wall shows signs of surface staining resulting from an unpainted 2 inch pipe.

(Reference photo 565-2S-31.jpg)

34) The vertical support for main steam line constant spring support has surface staining and surface rust on the threaded rod and pipe clamp.

(Reference photo 565-2S-34.jpg)

35) South side lateral support for the AFW pipe clamp bolt, there is surface staining on the pipe clamp bolt (between the clamp ears).

(Reference photo 565-2S-35.jpg)

36) The platform steel and channel (@621) above items #34 shows signs of surface rust and surface staining.

(Reference photo 565-2S-36.jpg)

37) The vert spring support for the AFW (located below M 1155 H3) has surface staining and surface rust on the pipe clamp bolt.

(Reference photo 565-2S-37.jpg)

38) The platform for the Hot Leg (@ 610) shows signs of surface staining and surface rust in an area that was cut out to make room for routing a pipe.

(Reference photo 565-2S-38.jpg)

39) The platform steel (vertical members on the underside of the platform @ Elev 596) shows signs of surface staining and surface rust on the bolted connectons.

(Reference photo 565-2S-39.jpg)

40) The source of the heavy wall staining (see Item 22) appears to be from a small valve MS 752. This line is unpainted and adjacent to the concrete wall. The surface rust starts at the top of this valve.

(Reference photo 565-2S-40.jpg)

The above CR identifies areas with surface staining and surface rust. The surface staining and rust will not adversely affect the structural integrity of the SSC.

1	02-02114	0	CA	05/17/02	07/01/02		No	PE	Open		
No	No			1	0	07/01/02	LTRC14-1	4	Yes	064-04	
INSPECTION PLAN IP-M-029 AREA 585-6P FINDINGS								HDW	0575	0576	0575

This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 317 and 315, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Pressurizer Level Transmitter LTRC14-1 has boric acid residue on top of the instrument closure bolting and a foreign material on the DP cell casing.

A digital photo was taken to document the inspection. 585-6P-(LT-RC14-1)-1.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.



1	02-02115	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	RC145A	4	Yes	064-04	
INSPECTION PLAN IP-M-029 AREA 585-6P FINDINGS									HDW	0575 0576	0575
<p>This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 317 and 315, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.</p> <p>2 valves have corrosion on the packing follower bolts. RC145A and RC198.</p> <p>A digital photo was taken to document the inspection. 585-6P-RC145A-1.jpg, 585-6P-RC198-1.jpg</p> <p>Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.</p>											
1	02-02143	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION FINDINGS									HDW	0575 0576	0575
<p>The following conditions were identified during an IP-M-028 (Extent of Condition) inspection on the East D-ring RCP 2-2 suction nozzle weld. IP-M-028 component serial # is RCP22IN-1.</p> <p>Water streaks noted on the lower portion of the RCP bowl and across the suction nozzle weld. These streaks appeared insignificant and were almost transparent in places. Also, white stains were noted on the pump bowl.</p> <p>Photo #'s RCP22IN-1 thru 3 document conditions</p> <p>This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure</p> <p>Identified per Reactor Head Degradation Extent of Condition program. No active leakage was identified. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.</p>											
1	02-02116	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	RC18A1A	4	Yes	064-02	
INSPECTION PLAN IP-M-029 AREA 585-6P FINDINGS									HDW	0575 0576	0575
<p>This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 317 and 315, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.</p> <p>RC18A1A, RCP 2-1 2ND SEAL CAVITY PRESSURE SOURCE VALVE, has boric acid residue around the valve packing follower. No corrosion has been noted.</p> <p>A digital photo was taken to document the inspection. 585-6P-Iso valve for PT-RC18A1-1.jpg.</p> <p>Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.</p>											
1	02-02117	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	MS881	4	Yes	083-01	
INSPECTION PLAN IP-M-029 AREA 585-6P FINDINGS									HDW	0575 0576	0575
<p>This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 317 and 315, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.</p> <p>MS881, STEAM GENERATOR 1-2 VENT VALVE TO CONTAINMENT VENT, corrosion on the packing follower.</p> <p>A digital photo was taken to document the inspection. 585-6P-MS881-1.jpg.</p> <p>Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.</p>											

1	02-02147*	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			2	0	07/01/02	RC14AB, RC14B	4	Yes	064-04	

MINOR SURFACE CORRSION ON RCS INSTRUMENT SUPPORTS HDW 0575 0576 0575

This Condition Report is generated based on various RCS Pressure Boundary Tubing Inspections performed under Inspection Plan IP-M-29, Attachment 4. The requirements of NG-EN-00324 need to be complied with in the evaluation of this CR.

**LTRC14-2T**

RC14AB, LTRC14-2 MAINT ISO VLV, packing bushing has light rusty surface corrosion. Also, its bonnet has light rust/discoloration around the circumference of the bonnet.

RC14BB, LTRC14-2 MAINT ISO VLV, bonnet has light rust/discoloration around the circumference of the bonnet..

**LTRC14-3T**

RC14CB, LTRC14-3 MAINT ISO VLV, packing bushing has light rusty surface corrosion. Also, its bonnet has light rust/discoloration around the circumference of the bonnet.

**PT6365BT**

The common instrument piping for PT6365B, PTRC2B2, PTRC2B4, PSHRC2B4, located on Ctrmt elevation 603, outside the D-ring, has corrosion/boric acid residue in the annular space between the piping and the piping support collar. The source of the residue is unknown. The residue is a rusty color.

**PTRC2B2T**

The PTRC2B2, RCP LOOP 1 HLG NR PRESSURE TRANSMITTER, RPS CH1, mounting bracket horizontal surface has a pile of loose corrosion/rust particles or residue. The transmitter is located on Ctrmt 603 elev, outside the west D ring, near the d ring wall. The source appears to be from either: 1) a motor operated valve support rod directly above the transmitter by approximately four feet, or 2) threaded plug leakage on the top of the transmitter housing.

Also, there is a dark fiber type residue adhering around the top surface of the common sensing line piping inside the d-ring near the flange with weld numbers 17A and 17B, (ref VDWG M-329-1139). The residue appears to be from old tape and or a tag.

**FTRC1B2T**

FTRC1B2 has minor surface rust on the transmitter support channel. The rust appears to be located where a mounting bracket was previously installed. The five valve manifold and edges of the support channel have light rusty staining. Minor touchup may be desired

**FTRC1B4T**

FTRC1B4 has minor surface rust on the transmitter support channel. The rust appears to be located where a mounting bracket was previously installed. Minor touchup may be desired.

Digital photos were taken to document the inspections.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02152*	0	CA	05/17/02	07/01/02			No	DBE	Open	
No	No			1	0	07/01/02	N/A	4	Yes	Various	

INSPECTION PLAN IP-M-029 AREA 565-1S FINDINGS HDW 0575 0576 0575

This condition report is generated based on Inspection 565-1S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Surface rust and boric acid residue has accumulated on the pipe whip restraint for the hot leg at elevation 606' (photo file 565-1s-44.jpg, 565-1s-45.jpg and 565-1s-46.jpg).

Pressurizer support on the south side of the pressurizer has rusted bolts. This is a typical occurrence. Representative photo 565-1s-47.jpg

Minor surface rust was identified and this will not prevent the items from performing their function.

1	02-01809	0	CA	05/02/02	06/16/02			No	DBE	Open	
No	No			1	0	06/16/02	N/A	N/A	No	N/A	
INSPECTION PLAN IP-M-029 AREA 671-1S FINDINGS									HDW	0575 0576	0575
<p>This condition report is generated based on Inspection 653-2s performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.</p> <p>1. It was found that a few of the ceiling deck support angles and bolts have surface rust. (representative photo file 671-1s-2.jpg, -3.jpg)</p> <p>2. Lifting beam support brackets were found to have surface rust. (representative photo file 671-1s-3.jpg)</p> <p>3. The stairway on elevation 653'-0" going to the 671'-0" elevation elevator room was found to have rust staining on the stringer. (representative photo file 671-1s-1.jpg)</p> <p>This CR identifies components with minor surface rust. This minor surface rust will not prevent them from performing their design function</p>											
1	02-01864	0	CA	05/06/02	06/20/02			No	DBE	Open	
No	No			1	0	06/20/02	N/A	N/A	No	N/A	
INSPECTION PLAN IP-M-029 AREA 653-3S FINDINGS									HDW	0575 0576	0575
<p>This condition report is generated based on Inspection 653-3S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.</p> <p>These items have surface rust:</p> <p>1. The missile shields have areas on the edge angles where the paint has chipped away and there is surface rust. (representative photo file 653-3s-1.jpg, -3.jpg)</p> <p>2. Steel sleeves for handrail on missile shields have surface rust. (653-3s-4.jpg)</p> <p>These items have staining:</p> <p>3. There is some staining on the side of missile shields. (representative photo file 653-3s-2.jpg)</p> <p>This CR identifies components with minor surface rust. This minor surface rust will not prevent them from performing their design function</p>											
1	02-02118	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	RC240A	4	Yes	064-04	
INSPECTION PLAN IP-M-029 AREA 585-6P FINDINGS									HDW	0575 0576	0575
<p>This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 317 and 315, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.</p> <p>Two valves have discoloration on the body of the valve that appear to be corrosion related. (Although these are stainless steel valves.) Also, RC5007 has red tape around the top part of the body area of the valve.</p> <p>A digital photo was taken to document the inspection. 585-6P-RC240A-1.jpg, 585-6P-RC5007-1.jpg.</p> <p>Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.</p>											
1	02-02153	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			2	0	07/01/02	FTRC01A, SP12	4	Yes	011-01	
SP12A2 PACKING LEAK									HDW	0575 0576	0575
<p>This Condition Report is generated based on the inspection of Area 603-2 as prescribed by Inspection Plan IP-M-029 in Containment at elevation 603. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.</p> <p>Inspection of Area 603-2 as prescribed by Inspection Plan IP-M-029 for PE revealed the following conditions. All evidence of Boric Acid noted below is attributed to an airborne source. Inspection of the surrounding areas revealed no other source for the Boric Acid residue that could cause this condition.</p> <p>The manual isolation valve SP12A2A shows signs of leakage from the packing gland. The leakage is free of Boric Acid residue and inactive. The leakage is rust colored streaking that has run down the adjoining piping to the pipe support below the valve. Minor Boric acid residue is evident on the pipe support. The gland flange is approximately 40% covered with surface rust. The valve stem is covered in surface rust and pitted (photo 603-2P-16).</p> <p>The source of the leakage is attributed to a packing leak on SP12A2A since this is the area where the streaking originated.</p>											

No active Boric Acid leakage was found on SP12A2A.

1	02-02140	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	SP12B1A	4	Yes	083-01	

INSPECTION PLAN IP-M-029 AREA 603-3P FINDINGS HDW 0575 0576 0575

This condition Report is generated based on Area Inspection 603-3P, Room 410A - West Passage Penetration Area, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Several secondary side valves have corrosion on parts of the valve. (Packing follower, packing follower bolts and nuts, and yoke.)  
SP12B1A, SP12B2A, CC626, CC611.

Digital photos were taken to document the inspection:

- 603-3P-SP12B1A-1.jpg
- 603-3P-SP12B2A-1.jpg
- 603-3P-CC626-1.jpg
- 603-3P-CC611-1.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program will be needed. No immediate actions are required.

1	02-02083	0	CA	05/16/02	06/30/02			No	DBE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	Various	

INSPECTION PLAN IP-M-029 AREA 565-4E FINDINGS HDW 0575 0576 0575

This condition report is generated based upon an inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 565-4E is Room 215 - Letdown Coolers Area and contains conduit, cable tray, electrical boxes and instruments. White indications, stains and rust were identified in this area. No source for the observed conditions could be identified. The noted indications in this area were minor.

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky.

Photos identified below are part of Data Package, Serial 565-4E for IP-M-029.

Inspection Area 565-4E is divided by yellow colored lead shielding. On the northeast side (delay coil side) of the shielding electrical components consist of conduit, motors and instruments. On southwest side of the lead shielding the electrical components consist of conduit and boxes. Boric acid residue and surface rust was observed on both sides of the shielding.

Observations for Inspection Area 565-4E:

1. The overhead conduit and supports show signs of boric acid residue and surface rust. The conduit is over the area surrounded by the lead shielding, near the letdown coolers. The residue is dispersed throughout the area. The drip patterns could not be associated with a source. Category A and B. (Photo files 565-4E-01.jpg, 565-4E-02.jpg)
2. The overhead conduit and supports show signs of boric acid residue and surface rust. The conduit is over the area surrounded by the lead shielding, near the letdown coolers. Category A and B. Condensation dripping from the yellow pipes can not explain all the boric acid residue seen in this area. (Photo files 565-4E-03.jpg, 565-4E-04.jpg, 565-4E-05.jpg)
3. There is an overhead box exhibiting boric acid residue and corrosion. The box is mounted on a column, high in the overhead area just outside the shielding for the letdown coolers. The corrosion is visible in the photo files, which are different views of the box. Photo file 565-4E-08.jpg locates the box relative to walking into the inspection area. Category A and B. (Photo files 565-4E-06.jpg, 565-4E-07.jpg, 565-4E-08.jpg)
4. The conduits, supports and boxes located against the containment vessel directly in front of the lead shielding for the letdown coolers, show signs of boric acid residue and surface rust. Category A and B. Photo file 565-4E-10.jpg shows the top of the boxes. (Photo files 565-4E-09.jpg, 565-4E-10.jpg)
5. The pull box that is located just East of the components described in #4 above shows signs of surface rusting.

Category B. (Photo file 565-4E-11.jpg)

6. The large flexible conduits going into the same box described in #3 above show rust stains. Category A. (Photo files 565-4E-12.jpg, 565-4E-13.jpg)

7. The bolt heads for the bracket for PS-4101 drain valve are rusty. Category B. (Photo file 565-4E-14.jpg)

8. The root valves for FIS-4133, 4, 5 and 6, located above the letdown coolers, are rusty. Category B. (Photo file 565-4E-15.jpg)

9. The conduit support near south wall of the Letdown Cooler Room has surface rust. Category B. (Photo file 565-4E-16)

10. The conduit support near pipe support CCA-18-H10 has surface rust on the unistrut, base plate, anchor bolts and staining on the grout pad. Category B. (Photo file 565-4E-17.jpg).

No immediate actions, material degradation minor in nature. No electrical or structural integrity issue apparent.

1	02-02120*	0	CA	05/17/02	07/01/02			No	PE	Open	
No	Yes			2	0	07/01/02	SUB011-01	3	Yes	011-01	
DEGRADATION OF SERVICE WATER PIPING IN CONTAINMENT AT ELEV 603.										HDW	0575 0576 0575

This Condition Report is generated based on the inspection of the Service Water piping in Containment at elevation 603 (Ref. Inspection file 603-2P) as prescribed by Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection of the Service Water (SW) Piping in Containment at elevation 603 revealed the following conditions. The exact location of each of these conditions is documented in the inspection report maintained by SYME. All evidence of Boric Acid noted below is attributed to an airborne source that when combined with condensation from the SW piping, scrubbed the Boric Acid from the atmosphere and then may have acted as a catalyst to cause the noted rusting. Inspection of the surrounding areas revealed no other source for the Boric Acid residue noted below.

1) Approximately 60% of the surface area of the piping is covered by a light film of Boric Acid crystal (photos 603-2P-6, -9).

2) The paint on the service water piping is cracked, chipped, bubbling and peeling. Predominantly, the paint is cracking along the length of the pipe and where paint cracks are present, paint is beginning to curl off of the piping, leaving exposed areas of bare metal which are covered by surface rust. Chips in the painted surface where the bare pipe is exposed are also covered in a layer of surface rust. Some painted areas of the paint are beginning to bubble suggesting rust is beneath the paint and pushing the paint outward. (photos 603-2p-1, -2, -7, -8, -9, -11, -12, -13, -14)

3) Service Water piping located in the overhead just outside the personnel hatch revealed dried streaking of rust colored liquid flowing from the top surface of the piping and then wrapping around to the bottom of the pipe and onto the floor (photos 603-2P-2, -3, -6). Inspection of the upper surface of this piping could not be viewed due to structural pipe supports blocking the inspection by ladder. The rusty streaks are believed to be due to condensation of Service Water piping where the piping is not painted or has degraded to a point where it no longer provides a protective barrier. (CR 02-02108 written to document the obstructed view of the overhead piping).

4) Several of the piping welds have evidence of surface rust that appear to be attributed to cracking of the painted surface (photo 603-2P-8).

5) The Service Water piping of drain valve SW363 is covered in a layer of clumped Boric Acid crystal. The paint on approximately 30% of the piping surface area is missing and replaced with a thick layer of surface rust. (photo 603-2P-4).

6) The gland flanges, studs, nuts of the Service Water fire protection valves SW391, SW392 and SW393 are rusted a completely void of any paint. The worst rust is located on the flange gland, studs and nuts of SW392. The rusted surfaces of SW392 are also pitted with shards of rust beginning to separate from the base metal. Boric Acid crystal is also present on SW392 at the interface of the body/bonnet, inside the packing gland flange, packing cavity and attached to the valve shaft inside the cavity (photos 603-2P-5, -10, -15).

7) Approximately 6 feet of Service Water piping directly adjoining SW393 is covered with a thin layer of surface rust that appears to be due to a breakdown of the painted surface or a lack of paint (photos 603-2P-10, -15).

8) Approximately 13-15 feet downstream of SW392 is a blemish on the SW piping that is bubbled and appears pitted. This area should be examined by Ultrasonic wall thickness measurement to determine the extent of the pitting (photo 603-2P-14).

No active Boric Acid leakage was noted in the inspection area.

1	02-02149	0	CA	05/17/02	07/01/02			No	DBE	Open	
No	No			1	0	07/01/02	N/A	N/A	No	Various	
FINDINGS FOR AREA 585-4E FOR IP-M-029									HDW	0575 0576	0575

This condition report is generated based upon an inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 585-4E is Outside D-Ring - Between Rooms 316 and 317 and contains conduit, cable tray, electrical boxes and instruments. White indications, stains and rust were identified in this area. No source for the observed conditions could be identified. The noted indications in this area were minor.

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky, C - Material corrosion that is loose, flaky, pitted or involves material wastage.

Photos identified below are part of Data Package, Serial 585-4E for IP-M-029.

1. Trays BLBP03 and BLP003 where the trays exit the D-Ring show evidence of boric acid. Conduit and supports in that area also show evidence of boric acid. (Photos 585-4E-01 and 585-4E-02)
2. Trays BLBP03 and BLP003 have white stains on the bottom, potentially boric acid. (Photo 585-4E-03)
3. Support for tubing for PT-SP-12B2 is corroded. Category B. (Photo 585-4E-04)
4. Conduit under trays BCBP01 and BLP001 show evidence of boric acid stains on bottom. (Photo 585-4E-05)

No immediate actions, material degradation minor in nature. No electrical or structural integrity issue apparent.

1	02-02151	0	CA	05/17/02	07/01/02			No	DBE	Open	
No	No			1	0	07/01/02	N/A	N/A	No	Various	
FINDINGS FOR INSPECTION AREA 653-4S FOR INSPECTION PLAN IP-M-029									HDW	0575 0576	0575

Surface rust found on bolting on Polar Crane (Representative photo 653-4S-1.jpg, 653-4S-8.jpg)

Surface rust observed on pipe support for Containment Spray support 34-HCB-4-H39 (dual spring can configuration) (Photos 653-4S-2.jpg & 653-4S-4.jpg).

Support for hand winches (west side) have surface rust on weld between support member and vessel plate.

Surface rust found on mounting blocks for west hand winches at approx. 735' elevation (Photo 653-4S-6.jpg)

Surface rust on flanged joints for Polar Crane winch assembly drive axle (Photo 653-4S-7.jpg)

This Condition Report is generated based on Inspection 653-4S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Minor material surface rust, there is no immediate structural integrity concerns.

1	02-02269	0	CA	05/24/02	07/08/02			No	PE	Open	
No	No			2	0	07/08/02	E37-2	3	Yes	011-01	
DEGRADED CONTAINMENT AIR COOLER #2 PIPING IN CONTAINMENT AT ELEV 597									HDW	0575 0576	0575

This Condition Report is generated based on the inspection of the Service Water piping in Containment at elevation 585 (Ref. Inspection file 585-6P) as prescribed by Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection of the Service Water (SW) Piping in Containment at elevation 585 revealed the following condition. The exact location of this condition is documented in the inspection report maintained by SYME.

At elevation 597 (per M-241F) in Containment, approximately 2-3 feet of Service Water (SW) Containment Air Cooler #2 supply piping is severely rusted and pitted. The color of the rust is red/brown and has all the hallmarks of Boric Acid corrosion on Carbon Steel. However, no evidence of Boric Acid appears present on this section of SW pipe nor in the surrounding area except directly over this section of pipe at approximately elevation 648. At approximately elevation 648, a Stainless Steel drain line (used for floor drainage at elevation 653) is routed below the decking of elevation 653. Examination of this drain line using binoculars revealed localized white streaks are present around the circumference of the pipe directly over the section of corroded SW piping as described above. It could not be determined if the drain line has a hole in it or liquid is running along the top of the drain pipe and then dripping off the bottom at a possible low point that just happens to be directly over the Service Water piping. The affected section of SW pipe is located just in front of and below the personnel hatch at elevation 597.

SYME recommends Containment Air Cooler #2 is isolated to prevent possible leakage until the affected section of SW pipe is inspected by ultrasonic wall thickness measurements to assess the extent of the corrosion.

As a conservative measure, recommend OPS isolate CAC #2 until ultrasonic wall thickness measurements can be obtained and evaluated.

1	02-01862	1	CA	05/06/02	06/20/02			No	PE	Open	
No	No			1	0	06/20/02	MU369	4	Yes	065-01	
INSPECTION PLAN IP-M-029 EXTENT OF CONDITION: 565-4P									HDW	0575 0576	0575

During the area walkdown boron was found on the packing of the valve of MU369. This condition report is generated based on Inspection 565-4P performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The referenced deficiency was previously identified during the Mode 5 Boric Acid Corrosion Control (BACC) Program walkdowns. Following the Mode 5 BACC observation, the valve was confirmed to have had the packing adjusted and reported to have been deconned. This CR confirms that the valve still has BA residue present.

1	02-02099	0	CA	05/16/02	06/30/02			No	DBE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 565-12E FINDINGS									HDW	0575 0576	0575

This condition report is generated based upon an inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 565-12E is Transfer Tube Access Area and contains conduit, cable tray, electrical boxes and instruments. White indications, stains and rust were identified in this area. No source for the observed conditions could be identified. The noted indications in this area were minor.

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky.

Photos identified below are part of Data Package, Serial 565-12E for IP-M-029.

Inspection Area 565-12E contains conduit and supports. The area is covered with boric acid crystals, "popcorn" and powder. Discoloration and surface rust was observed on bases of conduit support. Boric acid crystals and residue were observed on conduit. Photo files 565-12E-01.jpg, 565-12E-02.jpg, 565-12E-03.jpg

No immediate actions, material degradation moderate in nature. No electrical or structural integrity issue apparent.

1	02-02001	0	CA	05/16/02	06/30/02			No	DBE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 603-3E FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 603-3E is Room 410A - West Passage Penetration Area and contains conduit, cable tray, electrical boxes and instruments. White indications, stains and rust were identified in this area. No source for the observed conditions could be identified. The noted indications in this area were minor.

The following categories are used to describe the discoloration or rust observed: A - surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky. Photos identified below are part of Data Package, Serial 603-3E for IP-M-029.

The majority of electrical equipment located in 603-3 does not show any indications of boric acid corrosion. However, it is being noted that the outside bottoms of cable tray above the electrical penetrations exhibit a white film, Photo files 603-3E-01.jpg & 603-3E-02.jpg are typical of this observation. It is not believed that this film is boric acid because it has been observed outside containment, for example the cable tray bottoms in the spent fuel corridor (Room number 404). Photo file 603-3E-03.jpg of Room 404 cable tray bottoms depicts this condition.

Specific Observations in Area 603-3E:

1. A 1" field run conduit at elevation 613' on the west wall of West D-ring, 5 feet north of the ventilation duct, shows signs of rust. Appears that there may be condensation or liquid getting inside the conduit. Category B. Photo files 603-3E-04.jpg & 603-3E-05.jpg.
2. The conduits just below the 653' elevation grating on the west wall of the West D-ring, show signs of staining. Cause of stains unknown. Photo files 603-3E-06.jpg & 603-3E-07.jpg.

3. The tubing from LT-1627 has white specks on it. No source could be identified. Photo file 603-3E-08.jpg.
4. The tubing from PT-616, where it turns to go down to the next elevation, has a white substance on it. No source could be identified. Photo file 603-3E-09.jpg.
5. A root valve for PDI-5055 is rusty. Category B. Photo file 603-3E-10.jpg.

No immediate actions, material degradation minor in nature. No electrical or structural integrity issue apparent.

1	02-02124	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	n/a	4	Yes	067-01	
INSPECTION PLAN IP-M-029 AREA 585-5P FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Area Inspection 565-5P, Room 317 - Containment Hatch Area, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Several Spent Fuel Skimmer Pump and Filter components have accumulated boric acid residue and corrosion.

- The piping just downstream of SF107 has boric acid residue on the pipe.
- Both flanges between SF101 and 102 has an accumulation of boric acid and has corrosion on the closure nuts.
- SF101 has an accumulation of boric acid around the packing and packing follower.
- SF102 has an accumulation of boric acid around the packing and packing follower.

Digital photos were taken to document the inspection.

- 585-5P-Piping between SF107 and filter-1.jpg
- 585-5P-SF101 and flange-1.jpg
- 585-5P-SF102-1.jpg
- 585-5P-SF102-2.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02125	0	CA	05/17/02	07/01/02			No	PE	Open	
No	No			1	0	07/01/02	CF10	4	Yes	051-01	
INSPECTION PLAN IP-M-029 AREA 585-5P FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Area Inspection 565-5P, Room 317 - Containment Hatch Area, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Several Core Flood valves have corrosion residue or have corroded components.

- CF10, corroded packing follower bolts.
- CF15, corrosion residue on the packing follower, packing follower bolts and nuts, yoke and handwheel.
- CF100, corrosion residue on the packing follower, packing follower bolts and nuts, yoke and handwheel.
- CF58, corrosion residue on the packing follower bolts.

Digital photos were taken to document the inspection.

- 585-5P-CF10-1.jpg
- 585-5P-CF15-1.jpg
- 585-5P-CF100-1.jpg
- 585-5P-CF58-1.jpg

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-01916	0	CA	05/08/02	06/22/02			No	PE	Open	
No	No			1	0	06/22/02	DH76	4	Yes	049-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on inspection of DH76 performed under Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be addressed in the evaluation of this CR.

This was an inspection of the Bolted Connection and surrounding Valve components and piping of Decay Heat 76. A very small Boric Acid deposit was found surrounding the packing leak off plug on the valve. The boric acid was a white deposit left behind following evaporation of leaking coolant. The deposit is 1cm or less in length from the plug. It is not thick.



Work Order 02-2527-00 has been initiated to have the plug welded closed permanently.

No Immediate actions (work order was already in the system)

1	02-01966	0	CA	05/14/02	06/28/02			No	DBE	Open	
No	No			1	0	06/28/02	T2*RC	4	Yes	064-04	
INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION: PZR-07									HDW	0575 0576	0575

During extent of condition walkdown of the pressurizer nozzle near valve RC14D, It was noted that there was:

- rust colored area on PZR around nozzle where paint is missing
- white stains on nozzle

The condition report is generated based on inspection PZR-05 performed under inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

None

1	02-02249	0	CA	05/23/02	07/07/02			No	DJET	Open	
No	No			1	0	07/07/02	N/A	4	Yes	N/A	
INSPECTION PLAN IP-M-029 AREA 585-6E FINDINGS									HDW	0575 0576	0575

This condition report is generated based upon an inspection performed under inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 585-6E is Outside D-Ring between Rooms 316 and 315 and contains conduit, cable tray, electrical boxes and instruments. White stains, Boric Acid residue and crystals and rust were identified in this area. The cause of the boric acid in this area appeared to be associated with the Service Water pipes routed through the area. Possibly due to condensation dripping from the pipes. It was also noted that sections of conduit below valve DH2735 showed boric acid residue and crystal. Compared to other IP-M-029 inspection areas involving electrical equipment, the degree of boric acid in 585-6 was significant. The degree of corrosion observed has not caused the evaluators to question the structural integrity of any electrical equipment..

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky, C - Material corrosion that is loose, flaky, pitted or involves material wastage.

Photos identified below are part of Data Package, Serial 585-6E for IP-M-029.

Unless noted otherwise, the paragraph numbers given below correspond to areas/items annotated on the boundary of the 585-6E inspection area, which is on page 2.

1. Random white stains appear on the bottom of cable tray CLBF02 and CLBF03. Similar appearing white stains appeared on cable tray bottoms in both the Auxiliary and Turbine Buildings. For example, trays BLWD27 and 28. Turbine Building elevation 603 near C4301 show similar stains, therefore, we are hesitant to call them boric acid residue. No Category assigned. Typical stains are depicted on Photo 585-6E-1.
2. The several conduit in the conduit bank at approx. elevation 595", near the containment wall on the south end of this area, exhibit white drip stains believed to be boric acid residue. The only source for these drips is through the floor grating at elevation 603. Surface rust on the edges and surfaces of some unistrut conduit supports. Category A. The drip stains are visible in photos 585-6E-1, 585-6E-2 and 585-6E-3, photo 585-6E-2 shows the surface rust.
3. As the conduit bank, discussed in paragraph 2 proceeds northward, boric acid stains increase significantly. Several conduit exhibit crystals (white and orange are visible), some conduit also show rust, see photo 585-6E-4. The conduit are below valve DH2735. Valve DH2735 could not be determined as the source of the boric acid residue and crystals. Category A and B.
4. The next 7 photos (585-6E-5 through 585-6E-11) document the condition of cable trays BCBD02 and BLBE02 and conduit in vicinity. Both trays enter inspection area 585-6E from the east D-ring near the south boundary of 585-6E. Both trays end in area 585-6E as there cables enter penetrations boxes located along the containment vessel. Photo 585-6E-5 shows boron crystals escaping from seams in tray bottom. Photo 585-6E-6 is close up as tray enters D-ring. Photo 585-6E-7 shows boric acid crystals inside tray, note that some cables are partially encased in the boric acid crystal. Photo 585-6E-8 shows the first and second tray support, rust and boric acid residue evident, after trays exit D-ring. Also note the conduit in the area is covered with boric acid residue and corrosion. Photos 585-6E-9 and 585-6E-10 show boric acid crystals and rusting on the tray and conduits. Photo 585-6E-11 shows both tray and conduit looking up to 603 elevation floor grating. Boric acid residue and crystals observed on these conduits. Category A, B and C.
5. The conduit entering top of C3921 show boric acid stains, crystals and surface rust. Category A and B. Photo 585-

6E-12.

6. The support base plates for JT3921 and two instrument-tubing supports show surface rust and staining. Category A and B. Photo 585-6E-13.

7. The cover on cable tray CLBG02, behind C3921, has a layer of boric acid residue and large rust spot. This cable tray is below Service Water pipes. Category A and B. Photo 585-6E-14 s

8. Close up picture (photo 585-6E-15) of conduit above cable tray BCBD02 showing boric acid crystals and corrosion. Category B.

9. Overhead conduit in the vicinity of C3021 show boric acid residue, and surface rust. Category A and B. Photos 585-6E-16 and 585-6E-17.

10. White stains and rust on the bottom of tray ACBE02 and boric acid residue on adjacent conduit. Photos 585-6E-18, and 585-6E-19. Photo 585-6E-18 also shows brown/orange stains on containment wall, which are believed to be rust stains from conduit supports. Category A and B.

11. Photos 585-6E-20 and 585-6E-21 show rust stains on bottom of cable tray ALBD02. Photo taken approximately 7 yards south of stairwell. Category B. Also visible in Photo 585-6E-20 is boric acid residue on conduit above tray ALBD02.

12. Photo 585-6E-22 shows bank of conduit routed north-south. Conduits and supports show Boric acid residue and some surface rust. Photo taken approximately 4 yards south of stairwell looking toward elevator. Category A and B.

13. Photos 585-6E-23, 585-6E-24, and 585-6E-25 show conduit and supports with boric acid residue and surface rusting. Photo 585-6E-23 top left shows tray ALBD02 (see #11 above) with white stain and conduit bank (see #12). Photos 585-6E-24 and 585-6E-25 are close ups to more clearly show the degree of rust. Category A and B.

14. Photos 585-6E-26, 585-6E-27 and 585-6E-28 show conduit near the corner of the D-Ring right across from the elevator at Elevation 600', with boric acid residue and surface rusting. Boric acid crystals are visible in photo 585-6E-28, which is a close-up of corrosion that can be seen in 585-6E-26. Category A and B.

15. Rust on root valve for PT-RC18A1 (Photo 585-6E-29) Category B.

16. The conduit and support above Service Water pipes in subarea 4 have areas of surface rust, corrosion and boric acid residue. Photos 585-6E-30 and 585-6E-31. Photo 585-6E-31 is a close up of the support surface rust. Category A, B and C.

No immediate actions, no electrical or structural integrity issue apparent.

1	02-01920	0	NA	05/09/02	07/08/02			No	PE	Open	
No	No			2	0	07/08/02	SUB060-05		No	060-05	
BORIC ACID EXTENT OF CONDITION INSPECTION OF THE CTMT RECIRC VENTILATION S										HDW	0575 0576 0575

This condition report is generated based on inspection CRSV performed under inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

An inspection of the CTMT Recirc System Ventilation revealed the following deficiencies:

1) Fan C56-2 ductwork, horizontal run at elevation 624' and outside of the D-Ring East side, has rust colored stains on bottom of duct in several locations. It appears that these are low spots where condensation accumulates and any air borne rust is collected. The ductwork has no signs of active corrosion and there are no indications of active leakage in the area. The area is shown in digital pictures numbered CRSV-P-01 through CRSV-P-05.

2) Fan C56-2 ductwork, horizontal run at elevation 600' (immediately below metal floor grating at El. 603'), has corrosion that has created openings in the top of the ductwork. These openings are irregularly shaped and approximately 1/4" to 3/4" in diameter. This corrosion runs in a line of about 8 feet long directly below a service water line. It appears that condensate collected on the service water line and dripped onto the top surface of the ductwork. The damaged ductwork is depicted in digital pictures numbered CRSV-P-06 through CRSV-P-15 and CRSV-P-17 through CRSV-P-27.

3) Fan C56-2 ductwork, just upstream of Item 2 above, shows white traces streaking down the side of the ductwork. There is no corrosion or indications of active leakage. Again, it appears that condensation traveled along the ductwork until it found the lowest elevation and collected. This is pictured in picture CRSV-P-16.

4) Fan C56-1 ductwork, El. 600' west side of CTMT outside of D-Ring, has two areas of rust colored stains along the sides and on the bottom of the ductwork. Both are at locations where the seismic duct hangers are attached. Again, they appear to be the low spots in the duct run. Condensation would collect on the top of the duct until it gathered in a sufficient amount to drip down the sides of the duct. Here it again collect on the bottom side of the ductwork. The airborne rust then collected on this wet surface. There is no indication of active leakage or corrosion in this area. This area is shown in pictures CRSV-P-28 through CRSV-P-34.

The ductwork holes are near the exhaust register and have no impact on the CRSV performing its design function of mixing CTMT air. The system is non-Q.

1	02-01999	0	CA	05/13/02	06/27/02			No	DBE	Open	
No	No			1	0	06/27/02	N/A	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 565-5E FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 565-5E is Outside D-Ring - Between Rooms 215 and 217. The following categories are used to describe the discoloration or rust observed: A- Surface stain: discoloration of surface only, no evidence of corrosion, B- Surface rust but NOT loose or flaky and C- Material corrosion that is loose, flaky, pitted or involves material wastage. The photos are part of Data Package, Serial 565-5E for IP-M-029. The following adverse conditions were observed.

1. Instrument root valve RC28 shows signs of rust. Category B. (Photo 565-5E-01)
2. The tubing in the area as represented by the tubing going to PS-4201 shows sign of corrosion and has white stains. (Photo 565-5E-02)
3. The tubing and manifolds for LT-SP9B1, 2, 3, 4, 5, 6, & 7 all show signs of rust and white stains. Category B. (Photo 565-5E-03)
4. The mounting brackets for LT-SPB1, 2, 3, 4, 5, 6, & 7 all show signs of rust and white stains. Category B. (Photo 565-5E-04)
5. The root valves for LT-SPB1, 2, 3, 4, 5, 6 and 7 all show signs of rust. Category B (Photo 565-5E-05)
6. Conduit, conduit, support bracket and clamp and connection head for TE4693A show signs of rust and boric acid deposition. Category B. (Photo 565-5E-06)
7. Electrical outlet box in area shows signs of rust. Category B. (Photo 565-5E-06)
8. Conduit, condulets, junction boxes, supports and clamps for LT-SPB1, 2, 3, 4, 5, 6 and 7 all show signs of rust and white stains, possibly boric acid. Category B. (Photos 565-5E-06, 565-5E-07 and 565-5E-08)

N/A None of the defects appear to be structurally significant.

1	02-02006	0	CA	05/13/02	06/27/02			No	DBE	Open	
No	No			1	0	06/27/02	N/A	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 565-6E FINDINGS									HDW	0575 0576	0575

Inspection Area 565-6E is Room 217 - Core Flood Tank No. 2 Area.

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR. The following categories are used to describe the discoloration or rust observed: A- Surface stain: discoloration of surface only, no evidence of corrosion, B- Surface rust but NOT loose or flaky and C- Material corrosion that is loose, flaky, pitted or involves material wastage. The photos are part of Data Package, serial 565-6E for IP-M-029. The following adverse conditions were observed.

1. Conduit box has rust stain and drain valve is rusty on FIS4236. (Photo 565-6E-01). Category A
2. Conduit and support under RC83 have rust and white stains on them. (Photo 565-6E-02) Category B
3. Conduit from JB2932 over to CAC plenum in north-south portion at elevation 575' has white stains. (Photo 565-6E-03) No corrosion.
4. Conduits and conduit box near CAC-2 have rust and boric acid deposits on them. (Photo 565-6E-04) Category B.
5. Conduits, conduit supports, clamps and conduit box near CAC-3 have rust and boric acid deposits on them. (Photo 565-6E-04) Category B. (Photo 565-6E-05 and Photo 565-6E-06)
6. The root valves for FIS-4333, FIS-4334, FIS-4335, & FIS-4336 are rusty. (Photo 565-6E-07) Category B.
7. The root valves for FIS-4233, FIS-4234, FIS-4235, & FIS-4236 are rusty. (Photo 565-6E-08) Category B.
8. The manifold for FIS-4435 is showing signs of rust and there is particle accumulation on it and other instrument supports in the area. (Photo 565-6E-09) Category B.
9. Support straps for instrument piping to LT-CF3A1 were not painted after installation and are now showing signs of rust. (Photo 565-6E-10) Category B.
10. There is white particle accumulation on the manifold for LT-CF3A2. The manifold is stainless steel. The accumulation appears to be boric acid crystals due to a leak. The crystals are dry, white and flaky. It does not appear that the leak has dripped on items below, although some of the crystals have fallen off onto items below. (Photo 565-6E-11)
11. The support for LT-CF3A2 has white particles which appear to have come from the instrument manifold above. (Photo 565-6E-12)

- 12. The reducing nipple into PT-CF4A1 shows signs of rust. Category B. (Photo 565-6E-13)
- 13. The tubing to PI-640A and PT-640, located in front of the CAC's, has white boric acid residue. (Photo 565-6E-14 and Photo 565-6E-15)
- 14. The root valve for PI-640A and PT-640 has boric acid residue and is showing signs of rust. Category B. (Photo 565-6E-16)
- 15. The bolt heads for PS-4201 drain valve bracket are rusty. Category B. (Photo 565-6E-17)
- 16. The root valve for PS-4201 is rusty. Category B (Photo 565-6E-18).

N/A Initial evaluation of defects does not indicate any impact on operability.

1	02-02088/	0	CA	05/16/02	06/30/02			No	DBE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 585-5E FINDINGS									HDW	0575 0576	0575

This condition report is generated based upon an inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 585-5E is Room 317 - Containment Hatch Area and contains conduit, cable tray, electrical boxes and instruments. White indications, stains and rust were identified in this area. No source for the observed conditions could be identified. The noted indications in this area were minor.

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky, C - Material corrosion that is loose, flaky, pitted or involves material wastage.

Photos identified below are part of Data Package, Serial 585-5E for IP-M-029.

The corrosion in this inspection area is mainly confined to over head conduit. The more severely corroded conduit will need cleaned/scraped to make a determination as to whether the structural integrity of the conduit is diminished by the corrosion. The source of corrosion in this inspection area appears to be coming from Service Water pipes and possibly drippings from elevation 603.

The numbers below refer to "sub-areas" annotated on the outline of Containment Area Inspection 585-5E. (Scanned Attachment) Use the "sub-area" numbers to locate the item(s) being discussed.

1. Conduits at approx. 595' and 599' show boric acid residue, staining and corrosion. Category A, B and C. Appears the source of boric acid is from Service Water (SW) pipes, which are above ceiling grating. Photo files 585-5E-01.jpg & 585-5E-02.jpg.

2. Conduits along D-ring and West of SW pipes with corrosion, staining and boric acid residue. Source of boric acid is believed to be from SW pipes above grating. Category A, B and C. Photo files 585-5E-03.jpg & 585-5E-04.jpg.

3. Bank of conduits with corrosion and boric acid residue in this sub-area. These conduit are routed parallel to SW pipes. Category A & B. Photo file 585-5E-05.jpg.

4. Bank of conduits above the elevator with boric acid residue. Some minor corrosion is evident on the cantilever supports. Category A & B. The bank of conduits above the elevator tie into the bank of conduit in front of the containment air coolers described in paragraph 5 below. Photo files 585-5E-06.jpg. & 585-5E-07.jpg.

5. Bank of conduits routed in front of and parallel to the containment air coolers exhibit boric acid crystals, boric acid residue, corrosion and rust. Photo file 585-5E-09 shows the relationship between corrosion on electrical equipment and SW piping over head. Scaffolding and some corrosion removal is needed to determine structural soundness of these conduits. Photo file 585-5E-14 was taken at the far end of CAC 1-1 to show that the boric acid corrosion on this conduit bank is limited to the area in front of the CACs. Category A, B, & C. Photo files 585-5E-08.jpg, 585-5E-09.jpg, 585-5E-10.jpg, 585-5E-11.jpg, 585-5E-12.jpg, 585-5E-13.jpg & 585-5E-14.jpg.

6. There are a few conduits and electrical boxes behind the Containment Air Coolers. No indications of boric acid or corrosion were observed on these conduits and boxes. No photos of electrical components behind the CACs were taken.

7. There are conduits and cable trays in this area. No indications of boric acid corrosion were observed in this sub area. However, it was noted that the cable tray has white stains on the bottom that are similar to white stains observed on cable tray outside of containment such as Auxiliary Building Room A04 and Turbine Building Area 3 Elevation 603 Cable Trays BLWD27 and 28. Photo file 585-5E-15.jpg.

8. The tubing from PT-SP12A1 and 2 routes through the overhead across from the elevator, above the speaker. It shows signs of rust and white speckles. Also note that there is a foreign object caught between the tubing runs. Category B. Photo file 585-5E-16.jpg.

9. The termination box on TE-1358, which is in front of the CAC's, is rusty. Category B. Photo file 585-5E-17.jpg.

10. The manifolds, tubing tray and root valves for PDI-5056, PDI-5057, and PDI-5061, behind the CAC's show signs of boric acid residue and rust. Category B. Photo files 585-5E-18.jpg, 585-5E-19.jpg, & 585-5E-20.jpg.

No immediate actions, material degradation moderate in nature. No electrical or structural integrity issue apparent.

1	02-02007	0	CA	05/13/02	06/27/02			No	DBE	Open	
No	No			1	0	06/27/02	JT2901	4	Yes	099-02	
INSPECTION PLAN IP-M-029 AREA 565-7E FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Area 565-7E is the Upper Normal Sump Area (South of Room 217)

The following categories are used to describe the discoloration or rust observed: A- Surface stain: discoloration of surface only, no evidence of corrosion, B- Surface rust but NOT loose or flaky and C- Material corrosion that is loose, flaky, pitted or involves material wastage. The photo is part of Data Package, serial 565-7E for IP-M-029. The following adverse condition was observed; JT2901 exhibits minor surface corrosion around the edges of the cover. Category B. (Photo 565-7E-01)

The corrosion observed is minor, structural integrity is not affected.

1	02-02010	0	CA	05/13/02	06/27/02			No	DBE	Open	
No	No			1	0	06/27/02	N/A	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 565-8E FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Area 565-8E is Outside D-Ring - Between Rooms 217 and 220.

The following categories are used to describe the discoloration or rust observed: A- Surface stain: discoloration of surface only, no evidence of corrosion, B- Surface rust but NOT loose or flaky and C- Material corrosion that is loose, flaky, pitted or involves material wastage. The photos are part of Data Package, serial 565-8E for IP-M-029. The following adverse conditions were observed.

1. There is rust on valve bonnets for level transmitter root valves in this area. An example are the valves for LT-SP9A4 and LT-225. Category B. (Photo 565-8E-01 and Photo 565-8E-02)
2. The piping to the above level instruments is painted in the inspection area, however, when it goes into the D-ring, the piping is unpainted and is covered with surface rust. Category B. (Photo 565-8E-03)
3. The bracket supports for level instruments LT-SP-9A1, LT-SP-9A2, LT-SP-9A3 and LT-SP-9A5 are covered with an accumulation of dust and particles and light corrosion. An example is the bracket for LT-SP9A3. (Photo 565-8E-04) and LT-SP-9A5 (Photo 565-8E-05)
4. The manifold for LT-SP9A1 shows signs of dirt and corrosion. (Photo 565-8E-06)
5. The bolt heads for LT-SP9A9 are rusty. Category B. (Photo 565-8E-07)

N/A Defects are minor in nature.

1	02-01957	0	CA	05/09/02	06/23/02			No	PE	Open	
Yes	No			3	0	06/23/02	N/A	N/A	No	N/A	
EXTENT OF CONDITION AREA EVALUATIONS/PRESERVATION									ERO	2779 0576	2775

Efforts are ongoing to release the 603-2 "Front Porch" area for decontamination and restoration/preservation. Key participants recently met to review evidence collected for area 603-2 in an effort to release the area for decon. This CR is initiated to question whether all inspections are completed, documented and evaluated such that all evidence can be removed through decon and restoration process.

Area inspection plan IP-M-029 specifies that each area is to be inspected by DEMS, DEEC, Plant Eng, a ventilation inspection and piping/tubing walkdown. Inspection results are recorded on area data sheets and through initiation of a CR for any leakage, residue, or corrosion. Currently one CR has been initiated based on a structural walkdown of area 603-2. Inspections for electrical and ventilation (ref. CR 02-1920) in the area have been conducted, draft CRs written, but these CRs have not been issued. Additionally, evidence has been collected through a plant engineering walkdown of the area, specifically service water piping, but the inspection results have not been documented on a CR. Also, of the 4 inspections performed IAW IP-M-029 for area 603-2 (DEMS, DEEC, PE, VENT), only the DEMS

walkdown datasheet/evidence has been completed and approved by the supervisor.

The inspection plan and supporting documents require completion of documentation and suggest evaluation of the condition (CR) prior to removal of the evidence. For example:

- Inspection Plan 029, Containment Area Inspections,
- step 6.12 Record the inspection results on the data sheet,
- step 6.13.4 Initiate a CR to (administratively track follow-up actions and remedial actions)
- step 6.13.6 Do not request or perform decon of area until authorized by the project manager, and,

A white paper on condition report processing for the extent of condition (in draft) and a flow chart for CR resolution (in draft) differ in the sequence of events, but both start with a completed inspection and CR documenting the condition. The white paper guidance on condition report processing states to conduct a cause evaluation followed by CAF to include: inspecting corrosion for boric acid (if necessary), removal of deposits and restoration. None of the CRs pertaining to area 603-2 either issued or in draft contain an evaluation or proposed CAs.

**Recommendations:**

Determine whether documentation of inspections and evidence, and evaluation of the condition is current and supports both the plan guidelines and efforts to remove the evidence.

Complete efforts and publish guidance for evaluating extent of condition inspection discrepancies. Ensure guidance is consistent with Inspection Plans and NG-EN-00324, BACC Program

Track area inspection results and CR status in a spreadsheet, similar to component inspections (P-M-028), to ensure all evidence is documented and evaluated prior to decon/restoration efforts.

Recommend processing as a CA.

Assigned organization agreed to take at CA level with the "A" allowing for evaluation of the recommendations.

1	02-02038	0	CA	05/14/02	06/28/02			No	PE	Open	
No	No			1	0	06/28/02	HP57		No	052-01	
<b>INSPECTION PLAN IP-M-028 FINDINGS COMPONENT HP57</b>									HDW	0575 0576	0575

This Condition Report is generated based on Component Inspection HP57 under Inspection Plan IP-M-28. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

HP57, HPI LINE 2-1 STOP CHECK VALVE, has boric acid residue on the stainless steel packing follower and some surface corrosion on the yoke.

A digital photo was taken to document the inspection. HP 57 - 1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02037	0	CA	05/14/02	06/28/02			No	PE	Open	
No	No			1	0	06/28/02	RC28	4	Yes	064-02	
<b>INSPECTION PLAN IP-M-029 AREA FINDINGS</b>									HDW	0575 0576	0575

This Condition Report is generated based on Inspection Component LT 10596, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

RC28, HLLMS/RV LVL LOW SIDE REF LEG DRAIN VALVE, has a corroded packing follower and packing follower bolting. This was identified during inspection of the instrumentation piping for the transmitter that this valve is an isolation for.

A digital photo was taken to document the inspection. LT 10596 - RC 28 - 1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02089	0	CA	05/16/02	06/30/02			No	PE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	064-02	
<b>INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION FINDINGS</b>									HDW	0575 0576	0575

The following conditions were identified during an IP-M-028 (Extent of Condition) inspection on the West D-ring RCP 1-1. This examination covered the pump flange area, studs and the RCP pump bowl OD. The insulation was removed in 2 locations and from the bottom nozzle. IP-M-028 component serial # is RCP 1-1 CLS Cover/Studs.

White and rust colored streaks run down the side of RCP 1-1 bowl. These streaks extend past the suction nozzle onto the RCS piping. The pump flange joint (lower flange) which would be the expected source of this leakage showed no evidence of leaks. The upper flange surfaces (top and bottom surface) show evidence of past leaking. I believe the source of this leakage comes from the top of the upper flange and migrated to the bottom surfaces through the holes in the flange or by way of the stud holes or other joints in the flange. Leakage detected mainly on the east side of the pump.

Also, rust colored deposits were noted on the bottom of the upper flange. These deposits may be boric acid crystals. These deposits take up approx. a 4" diameter area. Appear to be old. Located on the SE side of the pump.

Minor surface corrosion was noted on the upper flange surfaces and on stud/nut surfaces.

Photo #'s RCP11CLS COVER&STUD-1 thru 10 of above conditions.

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. No active leakage was identified. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-02086	0	CA	05/16/02	06/30/02			No	PE	Open	
No	No			1	0	06/30/02	RC11	4	Yes	064-04	
INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION: RC11 BOLTING										HDW	0575 0576 0575

During the extent of condition inspection of the bolting of the bonnet of RC11 it was discovered that in the past there was a leak from the packing area that resulting in 1-2 drops of borated water to drip down onto the the inlet nozzle of the valve. It was also noted that the washers on the packing pusher appear to have surface rust. This condition report is generated based on inspection RC11 Bolting performed under inspection plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

There is no boric acid buildup in the packing area and thus this boric acid appears to be from a past leak. The packing and washers are already scheduled for replacement in the near future based on discussions with the MOV engineer.

1	02-02039	0	CA	05/14/02	06/28/02			No	PE	Open	
No	No			1	0	06/28/02	E24-2	4	Yes	063-01	
UNIDENTIFIED RUST SOURCE ON OTSG 2-A										HDW	0575 0576 0575

Red rust powder accumulation was observed on mirror insulation directly below a steam line penetration to the 2-A OTSG. This condition requires investigation.

This Condition Report is generated based on inspection OTSG-2 Target, performed under inspection plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR

N/A

1	02-02040	0	CA	05/14/02	06/28/02			No	PE	Open	
No	No			1	0	06/28/02	hp56	4	Yes	052-01	
INSPECTION PLAN IP-M-028 FINDINGS COMPONENT HP56										HDW	0575 0576 0575

This Condition Report is generated based on Component Inspection HP56 under inspection plan IP-M-28. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

HP56, HPI LINE 2-2 STOP CHECK VALVE, has boric acid residue on the stainless steel packing follower and some surface corrosion on the yoke.

A digital photo was taken to document the inspection. HP 56 - 1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02101	0	CA	05/16/02	06/30/02			No	DBE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	064-04	
INSPECTION PLAN IP-M-029 AREA 636-1E FINDINGS										HDW	0575 0576 0575

This condition report is generated based upon an inspection performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 636-1E is the PORV Area and contains conduit, cable tray, electrical boxes and instruments. White

indications and stains were identified in this area. No source for the observed conditions could be identified. The noted indications in this area were minor.

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion.

Photos identified below are part of Data Package, Serial 636-1E for IP-M-029.

Boric acid residue was observed on a bank of conduit that is routed east-west and includes conduit 49700A and is near the ceiling of the PORV room. The source of the residue could not be determined. Category A. Photo file 636-1E-01.jpg

No immediate actions, material degradation minor in nature. No electrical or structural integrity issue apparent

1	02-01838	0	CA	05/03/02	06/17/02			No	DBE	Open	
No	No			1	0	06/17/02	N/A	N/A	No	N/A	
INSPECTION PLAN IP-M-029 AREA 565-11S FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection 565-11s performed under inspection plan IP-M-029.

The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Description of Identified Leakage or Corrosion (6.7-6.13):

1. Pipe support anchor bolts have surface rust on ends. Pipe support located on Northeast wall. (photo file 565-11s-2.jpg)
2. The Northeast wall has rust staining. (photo file 565-11s-1.jpg)
3. The missile shield grating has surface rust on the cut out corner where the paint had scraped off. (photo file 565-11s-3.jpg)

This CR identifies components with minor surface rust. This minor surface rust will not prevent them from performing their function.

1	02-02026	0	CA	05/14/02	06/28/02			No	DBE	Open	
No	No			1	0	06/28/02	N/A	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 537-2E FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

This inspection covered area 537-2E/Normal Sump Area, including Vertical Passage as described in inspection plan IP-M-029.

The following categories are used to describe the discoloration or rust observed: A- Surface stain: discoloration of surface only, no evidence of corrosion, B- Surface rust but NOT loose or flaky and C- Material corrosion that is loose, flaky, pitted or involves material wastage. The photos are part of Data Package, serial 537-2E for IP-M-029. Except for the stainless components, most electrical components in this area showed evidence of rust. The following specific adverse conditions were observed.

1. LE4618 shows boric acid residue and surface rust. Category B. (Photo 537-2E-02)
2. Conduit 39177 shows boric acid residue on support, conduit fittings and box. Surface rust visible on bolts. Category B. (Photo 537-2E-03)
3. Conduit 49173B shows boric acid residue and surface rust on conduit fittings and bolts. Category B. (Photo 537-2E-04).
4. LE4617 shows boric acid residue and surface stains. Surface rust is visible on bolt used to attach equipment ground conductor. Category B. (Photo 537-2E-05)
5. LSH1546A shows boric acid residue, surface stain and surface rust. Category B. (Photo 537-2E-06)
6. There are surface stains, surface rust and boric acid residue on conduits 29072A and 29073A and associated connection boxes. Category B. (Photo 537-2E-07)
7. There is rust on the bolts on the sensors for LT1546A and LT1546B. The sensors have rust stains apparently from rusted bolts. Category B. (Photos 537-2E-14 and 537-2E-08). There are white specks, possibly boric acid, on the transmitter case of LT1546A. (Photo 537-2E-09)



8. LSH1546B has surface rust on switch housing, connection box and conduit fittings. Boric acid residue is also visible on the connection box and conduit fittings. Category B. (Photo 537-2E-10)

9. JB4594 and JB4595 are heavily corroded. Category C. (Photos 537-2E-11 and 537-2E-12)

10. The conduit and support at Elevation 550, by the ladder in shaft leading to the normal sump area have boric acid residue and surface rust. Category B. (Photo 537-2E-13)

11. LS-4612 and associated conduit have surface rust. (Photo 537-2E-15)

N/A The rust observed is not significant enough to affect the integrity of the components.

1	02-02019*	0	CA	05/14/02	06/28/02			No	PE	Open	
No	No			1	0	06/28/02	FI4839	4	Yes	064-02	

INSPECTION PLAN IP-M-029 AREA 565-1P, ROOM 216 - EAST D-RING, INTERIOR FINDING HDW 0575 0576 0575

This Condition Report is generated based on Inspection 565-1P, Room 216, East D-ring Interior Area performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The Loop 2 Hot Leg Vent Sight Glass flanges has boric acid residue on the flange gasket and on the closure bolting. (It has some discoloration although this is a stainless steel connection.)

A digital photo was taken to document the inspection. 565-1P-FI 4839 - 1.jpg.

Identified during the Reactor Head Degradation Extent of Condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02090*	0	CA	05/16/02	06/30/02			No	PE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	064-02	

INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) LIMITED EXAMINATION ERO 3450 0576 3450

This CR has been written to document incomplete examinations per IP-M-028 (Extent of Condition) inspection plan. IP-M-028 component serial numbers are RCP 1-2 CLS, RCP 2-1 CLS & RCP 2-2 CLS Cover/Studs Bolted.

The Insulation on RCP 1-2, 2-1 & 2-2 was removed in 2 locations around the flange area 180 degrees apart. The extent of condition examination utilized a mirror on a pole to examine the areas of the flange where the direct line of site could not see in between the stud. Due to the whip restraint cables and drooping insulation sections only (approx.) 50% of the flange surface could be examined.

Note: RCP 1-1 was 100% inspected. One of the whip restraint cables had been removed and the insulation remained in place.

The Inspection plan requires a CR to be initiated for all visual examinations where 100% of the component is not examined.

Limited examination per Reactor Head Degradation Extent of Condition program. Additional evaluation of affected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-01840*	0	CA	05/03/02	06/17/02			No	DBE	Open	
No	No			1	0	06/17/02	N/A	N/A	No	Various	

INSPECTION PLAN IP-M-029 AREA 565-10S AND 565-10E FINDINGS HDW 0575 0576 0575

This condition report is generated based on Inspection 565-10s performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

565-10s Findings:

1. Pipe clamp for support 33C-CCA-4H7 has flaking and surface rust. Snubber housing also has surface rust. (photo file 565-10s-1.jpg)
2. Anchor bolts for base plates and structural members have surface rust. This condition is typical for all piping supports in subject inspection area. (representative photo file 565-10s-2.jpg, -3.jpg)
3. Pipe support H6 has rust on the anchor bolts and nuts. (photo file 565-10s-4.jpg, -5.jpg)
4. Structural steel has corrosion throughout subject inspection area all support steel for pit cover has surface rust on all members and member connections including bolting. (representative photo file 565-10s-6.jpg)
5. Pipe support near valve DH-49 has surface rust. (photo file 565-10s-9.jpg)
6. Blowing out of paint due to rust on pit cover support steel. (photo file 565-10s-10.jpg)
7. Rust stains on walls. (representative photo file 565-10s-7.jpg)

565-10E findings:

8. Surface rust on conduits, primarily on threaded portions.. (representative photo file 565-10E-1.jpg)

9. Surface rust on conduit support base plate. (representative photo file 565-10E-2.jpg)

This CR identifies components with surface staining and rust. This minor staining and rust will not prevent them from performing their design function

1	02-01932 #	0	CA	05/08/02	06/22/02			No	DBE	Open	
No	No			1	0	06/22/02	N/A	N/A	No	N/A	
INSPECTION PLAN IP-M-029 FINDINGS FOR INSPECTION AREA 565-11E									HDW	0575 0576	0575

This Condition Report is generated based on Inspection Area 565-11E. Emergency Sump performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

These items have surface rust:

1. Conduit support on Northeast wall has rust staining. Support has no observable surface rust. (Photo 565-11E-1.jpg)

The above CR identifies surface staining. This staining will not adversely affect the structural integrity of the item.

1	02-01933 #	0	CA	05/08/02	06/22/02			No	DBE	Open	
No	No			1	0	06/22/02	N/A	N/A	No	N/A	
INSPECTION PLAN IP-M-029 AREA 537-2S FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Inspection Area 537-2S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in evaluation of this CR.

White crystals, residue, and deposits are evident in various locations of the subject inspection area. Note that this material looks like boric acid but may be tri-sodium phosphate.

1. Flaky and pitted U-bolt and support with a trace of white crystals. Typical of two, located at approx. 1' and 10' above grating. (Representative photo: 537-2S-1)

2. Surface rust on support and base plate. Located at approx. 2' above grating. (Photo: 537-2S-2)

3. Flaky and pitted spring cans. Cat. C. Associated support, base plate and pipe clamp have surface rust. All have a trace of white crystals. Located at approx. 4' above grating. (Photos: 537-2S-3, -5)

4. Surface rust on supports associated with a vertical pipe with a trace of white crystals. Typical of 4 supports up the west wall. (Photo: 537-2S-4, -13)

5. Two supports near DW316 have surface rust (Cat. B) and another support approx. 15' above grating has flaky rust (Cat. C). Nearly every support in the subject area has some evidence of surface rust. (Representative photo: 537-2S-6, -10, & 11)

6. Surface rust on and in spring can located approx. 8' above grating. Associated support has surface rust. Cat. B (Photo: 537-2S-7)

7. Stained wall and floor. Cat. A (Representative photo: 537-2S-8, -5, -6, -15)

8. Wall staining above door to access path to the reactor. Cat. A (Photo: 537-2S-12)

9. Minor surface rust on hanger and associated support approx. 8' above grating. Cat. B (Photo: 537-2S-14)

10. Stain and white residue coming from a crack in the wall located approx. 4' above grating. Cat. A (Photo: 537-2S-15)

11. White deposit on lowest platform above elev. 537'. No evidence of corrosion or staining. (Photo: 537-2S-16)

12. Surface rust on support located above first platform above elev. 537'. Cat. B (Photo: 537-2S-17)

13. Surface rust on support base plate near highest platform above elev. 537'. Cat. B (Photo: 537-2S-18)

14. Surface rust on support near ladder. Cat. B (Photo: 537-2S-19)

15. Surface rust on pipe strap and support near the highest platform above elev. 537' on the west wall. Cat. B (Photo: 537-2S-20)

16. Supports and liner below the grating at elev. 537' and the grating appear to be stainless steel and subsequently do not show evidence of corrosion or staining. However, they are coated with foreign material of which most is rust colored. Typical for all supports located under the grating. (Representative photo: 537-2S-21)

17. Deposits of boric acid on wall and drain pipe. Between 2nd and 3rd highest tri-sodium phosphate beds inside the sump area. No evidence of corrosion. (Photo: 537-2S-22)

18. White deposits and residue on wall crack near 2nd and 3rd highest tri-sodium phosphate beds inside the sump area. No evidence of corrosion. (Photo: 537-2S-23)

The above CR identifies a condition with rust, pitting, and staining. This condition is currently not significant enough to adversely affect the structural integrity of the SSCs.

1	02-02036	0	CA	05/14/02	06/28/02			No	PE	Open	
No	No			1	0	06/28/02	Rework CF30	4	Yes	051-01	

**INSPECTION PLAN IP-M-028 FINDINGS COMPONENT CF30**

HDW 0575 0576 0575

This Condition Report is generated based on Component Inspection CF 30 Bolted Core Flood Tank 2 Outlet Check Valve, performed under Inspection Plan IP-M-28. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

CF 30, Core flood Tank 2 Outlet Check Valve, has boric acid residue on the body to bonnet gasket, bolting and some on the bottom of the flange. All these components are stainless steel.

A digital photo was taken to document the inspection. CF 30 - 1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02041	0	CA	05/14/02	06/28/02			No	PE	Open	
No	No			1	0	06/28/02	hp48	4	Yes	052-01	

**INSPECTION PLAN IP-M-028 FINDINGS COMPONENT HP48**

HDW 0575 0576 0575

This Condition Report is generated based on Component Inspection HP48 under Inspection Plan IP-M-28. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

HP48, HPI LINE 1-1 STOP CHECK VALVE, has some surface corrosion on the carbon steel yoke.

A digital photo was taken to document the inspection. HP 48 - 1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-028. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02098	0	CA	05/16/02	06/30/02			No	DBE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	Various	

**INSPECTION PLAN IP-M-029 AREA 565-9E FINDINGS**

HDW 0575 0576 0575

This condition report is generated based upon an inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 565-9E is Room 220 - Incore Instrument Trench Area and contains conduit, cable tray, electrical boxes and instruments. White indications, stains and rust were identified in this area. No source for the observed conditions could be identified. The noted indications in this area were minor.

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion. B - Surface rust but NOT loose or flaky.

Photos identified below are part of Data Package, Serial 565-9E for IP-M-029.

Inspection Area 565-9E contains conduit, boxes, cable tray, four instruments, solenoids and free air cable. Evidence of boric acid residue and minor rusting was observed on electrical components in this area. The boric acid residue was dispersed throughout the South-east half of the room (half more toward containment vessel). A source for the observed boric acid residue could not be determined. Our best guess is that boron entered through the grating separating elevations 565 and 585 or through the threshold to area 565-9.

Specific observation in Area 565-9E:

1. A bank of conduits that passes between a beam and the containment vessel shows traces of boric acid residue. The conduit in the top center also shows surface rust. Category A and B. Photo file 565-9E-01.jpg.
2. The conduits in the South-east corner of the room also show signs of boric acid residue. This is the same bank of conduit shown in #1 above. Also there are two conduits routed below the grating (top right on photo), which show surface rust. Category A and B. Photo file 565-9E-02.jpg.
3. The large conduits and support (on left) entering the transfer tube access area (Inspection Area 565-12), show rust colored staining. Category A. Photo file 565-9E-03.jpg.
4. The air tubing and its channel near V1773A have white spots. These were assumed to be boron however it could

also be paint splatters. Surface rust is visible on the tubing channel. Category A and B. Photo file 565-9E-04.jpg.

5. Cable trays CLBF and CLBE show minor surface rust and white staining on bottoms. The white stains on these trays have been observed on other cable tray bottoms in Containment, the Auxiliary building and on the Turbine Building (Area 3, Elevation 603 Tray BLWD 27 & 28). Boric Acid was not observed inside the cable tray. Category A and B. Photo file 565-9E-05.jpg & 565-9E-06.jpg.

6. The free-air cables that hang above the Incore Instrument tunnel show signs of boric acid residue. Boric acid residue on cable jackets is not one of the Attachment 5 categories. Photo file 565-9E-07.jpg & 565-9E-08.jpg.

7. The manifolds and brackets for FIS-4333, FIS-4334, FIS-4335 and FIS-4336 are caked with dust and particle matter. Unable to determine if boric acid residue might be present. None of the Attachment 5 categories apply. Photo file 565-9E-09.jpg.

No immediate actions, material degradation minor in nature. No electrical or structural integrity issue apparent.

1	02-020847	0	CA	05/16/02	06/30/02			No	PE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION FINDINGS										HDW	0575 0576 0575

The following conditions were identified during an IP-M-028 (Extent of Condition) inspection in the east D-ring on valve RC-35 (Loop 2-2 cold leg drain line). IP-M-028 component serial # is RC-35 Bolted.

White Boron crystals detected at the packing gland area of valve. Also the threads of the studs are filled with whitish substance (could also be boron).

Rust colored stains from previous leakage noted on both flange surfaces and valve body.

The yoke of the valve is corroded.

Photo ID#'s of above condition are: RC36-BOLTED-1 through 7.

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-019527	0	CA	05/09/02	06/23/02			No	DBE	Open	
No	No			1	0	06/23/02	N/A	N/A	No	099-07	
INSPECTION PLAN IP-M-029 OF AREA 671-1S										HDW	0575 0576 0575

This Condition Report is generated based on inspection 671-1s performed under inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

1. The stairs to the elevator machine room have rust staining on the treads and rails. (Photo file 671-1s-1.jpg)
2. At the elevator shaft ceiling there are support members that are unpainted and have developed surface rust. (Photo file 671-1s-4.jpg and 671-1s-7.jpg)
3. At the elevator shaft ceiling there has been some torching that has burned off the coating and surface rust has developed. (Photo file 671-1s-5.jpg)
4. A few of the anchor bolts for the elevator ceiling shaft metal deck have surface rust. (Representative photo file 671-1s-6.jpg)
5. Typical for the entire length of elevator shaft, there are embedded struts in the wall that have surface rust, and a few have some pitting. (Representative photo files 671-1s-8.jpg and 671-1s-11.jpg)
6. The counter weight assembly has 2 threaded tie rods that are unpainted and have surface rust. (Photo file 671-1s-9.jpg)
7. The lower side of the counter weight assembly has surface rust on the frame, tie rod, nut, and base plate. (Photo file 671-1s-10.jpg)
8. There is minor surface rust along the entire length of the unpainted portion of the elevator rails. (Representative photo file 671-1s-12.jpg)
9. The underside the elevator cab has chipped paint with surface rust. (Photo file 671-1s-13.jpg)
10. The elevator has surface rust on the doors at the point of contact when closed. (Representative photo file 671-1s-14.jpg)
11. The support base of the counter weight has surface rust (Photo file 671-1s-15.jpg)
12. The springs at the floor of the shaft have surface rust. (Representative photo file 671-1s-16)

The areas of degradation are minor and are not an immediate concern.

1	02-02092	0	CA	05/16/02	06/30/02			No	PE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION FINDINGS								HDW	0575	0576	0575

The following conditions were identified during an IP-M-028 (Extent of Condition) inspection on the West D-ring RCP 1-2. This examination covered the pump flange area, studs and the RCP pump bowl OD. The insulation was removed in 2 locations and from the bottom nozzle. This examination was limited due to the restraint cables and drooping insulation. IP-M-028 component serial # is RCP 1-2 CLS Cover/Studs.

Evidence of minor leakage found on the pump bowl (white streaks). Slight signs of leakage residue on flange surface. No signs of boric acid crystals were noted on the RCP flange

Minor surface corrosion was noted on the RCP Studs and parts of the upper flange surfaces. Also, there is debris on the top of the RCS bowl.

Photo #'s RCP1-2CLS COVER&STUD-1 thru 10 document conditions

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. No active leakage was identified. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-02209	0	CA	05/22/02	07/06/02			No	PE	Open	
No	No			1	0	07/06/02	C56-1	4	Yes	060-06	
BORIC ACID EXTENT OF CONDITION INSPECTION OF THE CTMT RECIRC VENT SYSTEM								HDW	0575	0576	0575

This condition report is generated based upon inspection Serial Number CRSV performed under Extent of Condition Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Fan C56-1 ductwork hanger bolt was observed with surface rust. Hanger located on West side of CTMT and viewed from the Polar Crane.

The surface rust does not effect the ability of the system to perform its design function. The ductwork is non-safety related but seismically mounted.

1	02-01960	0	CA	05/09/02	06/23/02			No	PE	Open	
No	Yes			1	0	06/23/02	RC47	4	Yes	064-02	
INSPECTION PLAN IP-M-028 FINDINGS.								HDW	0575	0576	0575

This Condition Report is being written as a result of inspection performed at Serial Number 'RCP12OUT1-1 (RCP 1-2 Outlet Pipe and RCP 1-2) in accordance with Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this Condition Report.

A pile of white boron crystals is present on the piping leading to valve RC47 within the penetration of the RCP 1-2 discharge piping through the D-Ring wall. This accumulation is limited to a small area of the piping within the penetration and is in the vicinity of a pipe strap. Rusting is evident on the pipe strap and a stalactite of brown boric acid is hanging below, which has created a deposit of crystals within the support. Although no evidence of liquid was noted, the deposits appeared fresh and this will be classified as a potential active leak.

Refer to Inspection Plan IP-M-028 data sheets for additional information.

Source of leakage has not been identified but it may be from historical seal plate leakage. The affected pipe is a leakoff pipe for the RCP inner gasket.

1	02-02068	0	CA	05/15/02	06/29/02			No	PE	Open	
No	No			1	0	06/29/02	N/A		No	064-02	
QUESTION FUNCTION OF V-BLOCK ATTACHED TO LOOP 1 HIGH POINT VENT								HDW	3450	0576	3450

While performing inspections for IP-M-028 Alloy 600 inspection program for package serial number HL1-9 Weld (RCS Loop 1 Hot leg Vent Nozzle). A "V-block" of approximate dimensions of 5 inches square by 3 inches deep was found mounted as low as possible on the nozzle from the hot leg for the high point vent. This block is fastened with two u-bolts. The function of this block is unknown.

Suggest evaluating the ability of removing this V-block.

**FINDINGS IDENTIFIED DURING THE ISI INSPECTION, REF. CR 02-01320.**

PAINT CHIPS HAVE PREVIOUSLY BEEN FOUND ON CONTAINMENT FLOOR AREAS (REF. CR 01-3085)

THE PAINT CONDITION, ESPECIALLY THE DELAMINATION AND PEELING IDENTIFIED IN THIS CONDITION REPORT IS AN IMMEDIATE FME CONCERN FOR THE OPEN REACTOR VESSEL.

EWR 01-0505 PROVIDES FOR REPAINTING OF THE AFFECTED AREAS.

The Manager of Maintenance was requested by the Design Engineering Manager to put the cover over the reactor.

1	02-02100	0	CA	05/16/02	06/30/02			No	PE	Open	
No	No			1	0	06/30/02	RC195	4	Yes	064-02	
<b>INSPECTION PLAN IP-M-029 AREA 565-8P FINDINGS</b>										HDW	0575 0576 0575

This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 217 and 220, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

RC195, SG1-1 Secondary Vent to Containment Vent Header Vent Valve, has boric acid residue around the packing follower. Also the packing follower bolts are corroded.

A digital photo was taken to document the inspection. 565-8P-RC195-1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02097	0	CA	05/16/02	06/30/02			No	PE	Open	
No	No			1	0	06/30/02	N/A	4	Yes	064-02	
<b>INSPECTION PLAN IP-M-028 FINDINGS</b>										HDW	0575 0576 0575

This Condition Report is being written as a result of inspections performed at Serial Numbers 'RCP11OUTI-1 (RCP 1-1 Outlet Pipe and RCP 1-1), 'RCP11INI-1' (RCP 1-1 Inlet Pipe), 'RCP11IN-2' (RC Piping Loop 1 2.5" Drain Nozzle Weld CL 1-1), 'RCP12IN-2' (RCP 1-2 Inlet Pipe), and 'HL1-1 (Loop 1 Hot Leg Level Tap Nozzle) in accordance with Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this Condition Report.

Serial HL1-1: Faint pale coloration on nozzle that appears to be at insulation juncture.

Serial RCP12IN-2: White writing on nozzle. Minor oxidation on nozzle.

Serial RCP11IN-2: White writing on nozzle. Minor trailing marks and oxidation on nozzle.

Serial RCP11OUTI-1: A brass pipe plug is installed in the spare thermowell on the RCP 1-1 discharge piping. Although this is a well type RTD, uncertain if the use of brass is appropriate. White trails lead from the pump area onto the pump discharge piping. Debris is present inside the insulation at the pump discharge. Minor paint peeling noted. The steel liner associated with the penetration support through the D-ring wall has separated slightly from the concrete. A loose bolt is lying in the vanes of this support, but the support does not appear to be missing any bolting.

Serial RCP11INI-1: Bright orange rust spot on top of piping just inside support skirt. Uncertain what created this spot, but may have been dripped on from above. Boric acid trails lead from this spot and travel down the piping to the underside of the pipe. There appears to be rusting, and possibly pitting at this bottom point. White trails lead from the pump bowl area and extend onto the pump suction piping. Lug welds associated with the anchor for this piping section are rusty.

Refer to Inspection Plan IP-M-028 data sheets for additional information.

None

1	02-02102	0	CA	05/16/02	06/30/02			No	PE	Open	
No	No			1	0	06/30/02	n/a	4	Yes	063-01	
<b>INSPECTION PLAN IP-M-029 AREA 565-8P FINDINGS</b>										HDW	0575 0576 0575

This Condition Report is generated based on Area Inspection 565-8P, Outside D-ring between Rooms 217 and 220, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Several secondary valves instrument isolation valves have corroded components including yoke, packing follower and packing follower bolting. The affected valves are: SP9A4BE, SP9A4AE, SP9A4BC, SP9A4BA, SP9A4AC, SP9A4AA, SP9A2BA, SP9A2AA, SP9A3BA, SP9A3AA, SP9A5BA, SP9A5AA, SP9A1BA, SP9A1AA, SP9A3AE, SP9A3BA, SP9A3BC.

A digital photo was taken to document the inspections. 565-8P-add specific valve number-1.jpg.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program will be needed. No immediate actions are required.

1	02-02158	0	CA	05/19/02	07/03/02			No	DJET	Open	
No	No			1	0	07/03/02	N/A	4	Yes	N/A	
INSPECTION PLAN IP-M-029 AREA 565-2E FINDINGS									HDW	0575 0576	0575

This condition report is generated based upon an inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 565-2E is the West D-Ring and contains conduit, cable tray, electrical boxes, motors and instruments. Stains and rust were identified in this area. No source for the observed conditions could be identified. The stains and rust in this area were minor.

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky, C - Material corrosion that is loose, flaky, pitted or involves material wastage.

Photos identified below are part of Data Package, Serial 565-2E for IP-M-029.

1. Surface rust is present on fittings and clamps for two conduit in Inspection Area 565-2E. These conduit are attached to a 'swing arm' which can be positioned over Reactor coolant pump motor MP362. The fittings attach rigid steel to flexible conduit. The clamps are the first attachment for the rigid steel conduit to 'swing arm support'. Category C. The conduit with rusty fittings and clamps are shown in photo 565-2E-01.jpg.
2. Cable trays BCBP04 and BLBG04 are solid-bottom open-top tray that route cables through the West D-Ring for MP362. Both trays have random brownish stains on the interior of their solid bottoms. Category A. Trays BCBP04 and BLBG04 are shown in Photo file 565-2E-02.jpg.
3. Cable trays ALBN04 and ACBN03 are solid-bottom open-top tray that route cables through the West D-Ring from MP361. Both trays exhibit random rust colored stains on the interior bottoms and side rails. The rust colored stains are also present on the cable jackets. Category A and B. The cables and trays are shown in photos 565-2E-03, 565-2E-04, 565-2E-05 and 565-2E-06.

No immediate actions, material degradation minor in nature. No electrical or structural integrity issue apparent.

1	02:02224	0	CF	05/22/02	07/06/02			No	MAIN	Open	
No	No	Yes		2	0	07/06/02	VARIOUS		No	064-02	
GASKET AND FASTENER RELAXATION INSTRUCTION FOR VELAN BOLTED BONNET VALVE									WMO	2200	2200

As part of the Boric Acid Extent of Condition for RC39 under IP-M-028, the Mechanical Maintenance Procedure, DB-MM-09133 was reviewed and found not to contain any torque checks or leveling passes (per EPRI Good Bolting Practices) to account for relaxation of the fasteners or body to bonnet gasket.

Gasket and fastener relaxation is a known industry condition that can lead to loss of "Preload" and result in leakage if the condition is not corrected through the use of torque checks or leveling passes.

As part of the Corrective Action under the BA Extent of Condition program, the body to bonnet gaskets of certain Reactor Coolant drain valves will be replaced. Therefore this procedure needs to incorporate industry best practices for torquing the bolting to prevent recurrence of leakage.

Attempted to contact Andy Wilson.

1	02-02108	0	CA	05/16/02	06/30/02			No	PE	Open	
No	No			2	0	06/30/02	SUB011-01	4	Yes	011-01	
OBSTRUCTED VIEW OF SERVICE WATER PIPING									HDW	0575 0576	0575

This Condition Report is generated based on the inspection of the Service Water piping in Containment at elevation 603 (Ref. Inspection file 603-2P) as prescribed by Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection of the Service Water (SW) Piping in Containment at elevation 603 revealed the following condition. The exact location of this condition is documented in the inspection report maintained by SYME. All evidence of Boric Acid noted below is attributed to an airborne source that when combined with condensation on the SW piping, allowed the condensation to scrub the Boric Acid from the atmosphere and then acted as a catalyst to cause the noted rusting. No other evidence of Boric Acid leakage from any other source in the area was found.

Service Water piping located in the overhead just outside the personnel hatch revealed dried rust colored streaking

that is flowing from the top surface of the piping, wrapping around to the bottom of the pipe and onto the floor (Ref. 603-2P inspection package and associated photos 603-2P-2, -3, -6). Inspection of the upper surface of the piping could not be viewed due to structural pipe supports blocking inspection by ladder. The rusty streaks are attributed to either condensation of the Service Water piping that occurred at an area where the piping is not painted or the protective paint has degraded to a point where the paint no longer provides a protective barrier and the pipe is rusting out.

Recommend installing scaffold to allow access to inspect the above piping.

No immediate action required. SYME will inform Scheduling that scaffolding is required to perform an inspection of this area.

1	02-02159	0	CA	05/19/02	07/03/02			No	DJET	Open	
No	No			1	0	07/03/02	N/A	4	Yes	N/A	
INSPECTION PLAN IP-M-029 AREA 565-1E FINDINGS									HDW	0575 0576	0575

This condition report is generated based upon an inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 565-1E is the East D-ring and contains conduit, cable tray, electrical boxes, motors and instruments. White particles of an unknown nature and staining were observed in the interiors of cable tray in this area

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky, C - Material corrosion that is loose, flaky, pitted or involves material wastage.

Photos identified below are part of Data Package. Serial 565-1E for IP-M-029.

1. Pressurizer heater cables are routed in solid-bottom, open-top cable trays APBB01, APBB02, BPBA02 and BPBA01. These trays are located at approximately elevation 598'. All trays contain bits of dirt and debris. It is suspected that the dirt and debris falls from the various D-Ring gratings above the trays. Some of the debris particles are white. It was apparent that some of the white particles were paint chips or flakes, the nature of other white particles is unknown. Various stains are visible on the inside of the tray bottoms. The colors of these stains range from yellow-green to rust. The condition of these trays is shown in photos 565-1E-01, 565-1E-02, 565-1E-03, and 565-1E-04. Inspection Area Category A.

2. Cables for the Reactor Coolant pump and motor 1-2-2 are routed in cable trays ALBD04 and ACBE04. These trays enter the East D-Ring at approximately elevation 597'. They make a 12' elevation change before distributing their cables to the pump and motor. Sections of tray that are horizontally routed contain bits of dirt and debris and near the motors have rust colored stains on the tray bottoms. It is suspected that the dirt and debris falls from the various D-Ring gratings above the trays. Some of the debris in the tray bottoms is white. Some of the white debris is paint chips the nature of other white particles is unknown. The condition of ALBD04 and ACBE04 is shown in photos 565-1E-05, 565-1E-06, 565-1E-07, 565-1E-08, 565-1E-09, 565-1E-10 and 565-1E-11. Photo 565-1E-09 shows white stains on the outside bottom of a vertical section of ALBD04. The nature of these white stains is unknown. These stains have been observed on the bottom of Containment, Auxiliary Building and Turbine Building cable tray. For example cable tray BLWD27 and 28 in Turbine Building Area 3 elevation 603 has similar white stains. Inspection Area Category A.

3. Cables for the Reactor Coolant pump and motor 1-2-1 are routed in cable trays BCBD03 and BLBD03. These trays enter the East D-ring at approximately elevation 595' and drop to approximately 585' near the Reactor Coolant Pump motor. Tray BCBD03 is over BLBD03 for most of the route in the D-Ring. Small amounts of debris including paper and spent tie-wraps were observed in BCBD03. Some of the debris particles were white. It was apparent the some of these white particles were paint splatters and chips. Randomly located faint brownish stains were observed in the bottom of BCBD03. Category A. Tray BCBD03 is shown in photos 565-1E-12 and 565-1E-13.

No immediate actions, material degradation minor in nature. No electrical or structural integrity issue apparent.

1	02-02165	0	CA	05/20/02	07/04/02			No	PE	Open	
No	No			1	0	07/04/02	C1-1	4	Yes	060-05	
INSPECTION PLAN IP-M-029 AREA CAC1V FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The following observations were made as part of the Boric Acid Extent of Condition Area Inspection Plan, IP-M-029 Serial # CAC1V.

Categorization of findings is defined as category A - surface stain: discoloration of surface only, no evidence of



corrosion, category B - Surface rust but not loose or flaky, category C - material corrosion that is loose, flaky, pitted or involves material wastage.

1) The interior of the fan housing has multiple areas of Boron streaking and rust accumulation. The straightening vanes are covered in a thin Boron/rust colored residue. The power and thermocouple conduits show signs of surface rust and Boron. Motor support bracing has surface rust and Boron. Category A & B. Reference pictures CAC1V-P-76. The flexible joint collars are rusted. Category C. Source is from Boron being washed from the coils and drawn into the fan housing. Reference picture CAC1V-P-71.

2) The exterior surface of the dropout register has an accumulation of Boron and rust. Category B. The interior surfaces of the dropout registers have Boron and surface rust. Source is from water being drawn into the fan housing during previous coil cleanings. Reference pictures CAC1V-P-70 and 73. Category B

3) Top of the cooling coil housing has surface rust directly below the service water lines running overhead of the cooling coil housing. Source is airborne Boron condensing on the service water piping and dripping onto the top of the coil housing. Category B. Reference pictures CAC1V-P-84 & 85.

4) The fan inlet, blades, hub, and interior of the coil housing has white/red residue from cleaning of the cooling coils. Wherever the paint has been damaged, surface rust is present. Hold down bolts are encased in crust of Boron/rust. Reference pictures CAC1V-P-86 through 96. Category B

No active leakage was identified.

Identified per Reactor Head Degradation Extent of Condition program. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-02172,	0	NA	05/20/02	07/19/02			No	PE	Open	
No	No			1	0	07/19/02	N/A	4	Yes	060-05	
INSPECTION PLAN IP-M-029 AREA CAC1V FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The following observations were made as part of the Boric Acid Extent of Condition Area Inspection Plan, IP-M-029 Serial # CAC1V.

Categorization of findings is defined as category A - surface stain: discoloration of surface only, no evidence of corrosion, category B - Surface rust but not loose or flaky, category C - material corrosion that is loose, flaky, pitted or involves material wastage.

1) Ductwork inside the D-rings findings

- White streaks along the top, sides, and bottom of ductwork in various places. Probable source is water running along the sides of the D-rings and dripping onto the ductwork. Category A. Reference pictures CAC1V-P-01, 03, 05, 07, 15, 16, 20, 21, 22, 23 and 26

- All registers have rust colored dirt buildup. This debris extends into the volume control dampers directly behind the registers. Wherever paint is missing corrosion is present. Category B. Reference pictures CAC1V-P-02, 04, 05, 06, 19, 24, 27, 31, 32, 33, and 36.

- Some duct surfaces have a light coating of red colored debris that appears to have been airborne rust that collected on a wet surface. Category A. Reference pictures CAC1V-P-17, 18, 21 and 26.

- Register located directly above the Quench tank, T3 appears to have been secured with carbon steel, hex head bolts. All bolt heads have surface rust. Category B. Reference pictures CAC1V-P-34 and 35.

2) Ductwork outside the D-Rings findings

- White streaks along the top, sides and bottom of the ductwork in several places. The surface of all the spot welds have minor corrosion where the galvanization was burned off. Category A & B. Reference pictures CAC1V-P-41, 42, 43, 44, 45, 48, 49, 51, 52, 53, and 55.

- All of the registers have a rust colored dirt buildup. Debris is lodged behind the registers. Where paint is missing, rust is evident on the registers. Reference pictures CAC1V-P-46 and 47.

- Boron has collected on the bottom of the registers on the west side of CTMT. Category A. Reference pictures CAC1V-P-54, 55 and 56.

- Ductwork internals were inspected through an access door downstream of the volume control damper. No corrosion of the ductwork or internal supports was evident. The top and sides of the duct have a light white coating with red rust particles. The bottom of the duct has very thin coating of material that is white/red in color. The surface of the volume control damper is also coated. Category A. Reference pictures CAC1V-P-77 through 83 and CAC1V-P-97 through 105.

3) Inferior of the plenum findings

- Small hole approximately 1/2" diameter in the southeast corner near the elevator. This has been previously identified in CR 02-01748 and CR 02-01139. Category C. Reference picture CAC1V-P-136
- Portions of the floor are severely corroded. Category C. Reference pictures CAC1V-P-113, 114, 115, 116, 119, 123, 124 and 127.
- Lower third of the plenum wall has moderate corrosion. Category B. Reference pictures CAC1V-P-130 and 131.
- Middle section of the wall has slight corrosion. Category B. Reference picture CAC1V-P-131.
- Lower turning vanes on the east and west ends are severely corroded and wastage on the lower vanes. Category C. Reference pictures CAC1V-P-106 through 112.
- Vertical supports have moderate corrosion. Category B. Reference pictures CAC1V-P-120, 121, 122 and 125.
- Top of the plenum has slight corrosion near the backdraft damper openings. Category B. Reference pictures CAC1V-P-117 and 118.

4) Plenum exterior findings

- Front and rear of the plenum have white/red residue from previous cleanings of the CAC cooling coils and several areas of surface corrosion. Category A and B. Reference pictures CAC1V-P-132 through 140 and CAC1V-P-143 through 149.
- Plenum drain lines are severely corroded. Category C. Reference pictures CAC1V-P-141 and 142.
- Top of the plenum is covered with rust and Boron. Surface rust is evident on most bolting. Source of Boron from previous cleanings of the CAC cooling coils and water dripping through the floor grating and collecting on top of the plenum. Category A and B. Reference pictures CAC1V-P-60, 61, 63 through 69, and 71 through 75.

No active leakage was identified.

Plenum and ductwork are non-Q and non-safety related.

Identified per Reactor Head Degradation Extent of Condition program. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-02179	0	CA	05/20/02	07/04/02			No	PE	Open	
No	No			1	07/04/02		C1-3		No	060-05	
INSPECTION PLAN IP-M-029 AREA CAC3V INSPECTION FINDINGS									HDW	0575 0576 0575	

This condition report is generated based on inspection performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The following observations were made as part of the Boric Acid Extent of Condition Area Inspection Plan, IP-M-029 Serial # CAC3V.

Categorization of findings is defined as category A - surface stain: discoloration of surface only, no evidence of corrosion, category B - Surface rust but not loose or flaky, category C - material corrosion that is loose, flaky, pitted or involves material wastage.

- 1) The exterior of the fan housing has several white streaks. Boron has accumulated on top of the dropout registers. Probable source is Boron from previous coil cleanings. Most unpainted surfaces show sign of rust. This includes places where the paint is missing. Many nuts are covered with white/red debris. Category A & B. Reference pictures CAC3V-01, 12-19, 24, 25.
- 2) The interior of the fan housing white streaks and is rusted where paint is missing. The conduit and motor support bracing has surface rust. Source is from previous coil cleanings. The fan blades, straightening vanes and hub have white residue and surface rust where the paint is missing. Category A & B. Reference pictures CAC3V-P-11, 20, 21, 22 and 23.
- 3) The top of the cooling coil housing is rusted directly under the service water supply and return lines for the unit. The source is Boron from the atmosphere condensing on the service water piping and dripping on to the housing. Category B. Reference pictures CAC3V-P-05 and 06.
- 4) The fan Inlet grating has minor surface rust and Boric acid deposits. Two hold down bolts were missing from the grating. The fan hold down bolts have rust and debris surrounding them. Source is from previous coil cleanings. Category A & B. Reference pictures CAC3V-P-04, 06, 07 and 10.
- 5) The backdraft damper has surface stains on the blades from previous coil cleanings. Category A. Reference picture CAC3V-P-19.

6) Interior of the dropout register has white residue and surface rust. Category A & B. Reference picture CAC3V-P-19. Identified per Reactor Head Degradation Extent of Condition program. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-01954	0	CA	05/09/02	06/23/02			No	DBE	Open	
No	No			1	0	06/23/02	N/A	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 603-2E FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 603-2E is Room 410-East Passage Penetration Area and contains conduit, cable tray, boxes, and instruments. Boric acid residue, crystals and all categories of rust were observed in this area. Cable trays APCB01 and BPCA01 in the vicinity of JT3952 and JT3952 exhibit significant amounts of boric acid corrosion. Corrosion and rust is mainly confined to components close to the 'D-ring' wall. Equipment installed close to the containment vessel liner did not reveal corrosion. The source of the corrosion that was observed in this area is assumed to be from condensation dripping from Service Water (SW) in the area. It was noted that components above the SW pipes did not show evidence of corrosion.

The following categories are used to describe the discoloration or rust observed: A- Surface stain: discoloration of surface only, no evidence of corrosion, B- Surface rust but NOT loose or flaky and C- Material corrosion that is loose, flaky, pitted or involves material wastage. Photos identified below are part of Data Package, Serial 603-2E for IP-M-029.

**SPECIFIC OBSERVATIONS IN AREA 603-2E**

1. JT4904 has rust on top and right and bottom edges of front cover. JT4904 is located in area below Service Water (SW) pipes. (Photo 603-2E-1). Category B.
2. There is corrosion on painted 1½-inch conduit to JT3920 and support above JT4904. Conduit and Cables in JT3920 are "field routed" so they have no IDs. Both conduit and support exhibit corrosion and boric acid accumulation. Conduit and supports are below SW pipes. (Photo 603-2E-2). The corrosion depicted in the photo extends over most of the conduit. Category B.
3. Conduit 38089A, conduit and support 9755-410-SE have rust on them. These are located below SW pipes. (Photo 603-2E-3). Category B.
4. Oil-Rite boxes have stains and surface rust. White spots appear to be pain drippings vs. boric acid. The Oil-Rite boxes are below SW pipes. (Photo 603-2E-4). Category A and B.
5. U410A has stains and rust around front cover edges, especially bolts and bolt-holes. Pointing to white-orange substance believed to be boric acid. U410A is below SW pipes. (Photo 603-2E-5). Note, the red material appears to have been applied to block liquid from getting behind and into this box. Category A and B.
6. RE2389 and supports for conduit 2-490115A have boric acid residue and rust and corrosion. Located below SW pipes. (Photo 603-2E-6). Category A and B.
7. Cable trays APCB01 and BPCA01 (Photo 603-2E-7, Photo 603-2E-8, Photo 603-2E-9, Photo 603-2E-10 and Photo 603-2E-11) have boric acid, corrosion and rust both inside and outside of trays. Cables are routed in flexible conduit which appear to be splattered with boric acid. (Photo 603-2E-7) shows how the tray bottom has pulled apart. These trays are below SW pipes. (Photo 603-2E-11) shows the corrosion and rust on the flexible conduit exiting the trays and entering JT3954 and JT3953. Category A, B and C.
8. There is rust on Conduit 2-9110A (to JT3954) and support. Below SW pipes. (Photo 603-2E-12). Category A, B and C.
9. JT3954 and JT3952 have corrosion on tops and support between JT3954 and JT3952. The tops of these boxes and the support appear structurally sound. Anchorage for these boxes was not visible. These boxes are located below SW pipes. (Photo 603-2E-13). Category A, B and C
10. JT3953 and JT3951 have corrosion on top and sides (Photos 603-2E-14 and 603-2E-23). Both boxes appear structurally sound, anchorage not visible. Below SW pipes. Category A, B and C.
11. ¾-inch galtronics conduit behind JT3953 and JT3952 has surface corrosion/rust visible. Conduit below SW pipes. (Photo 603-2E-15). Category C
12. 1½-inch and 1-inch conduits have surface rust and boric acid crystals. These conduit are just north of JT3954. (Photo 603-2E-16). Category A.
13. PT6365A has corrosion and boric acid residue, rust also on manifold below. (Photo 603-2E-17). Category C.
14. Local corrosion on conduit 49100A. Structurally sound. Below SW piping. (Photo 603-2E-18). Category C.
15. Corrosion on support and outlet box for exit lamp. Below SW pipes. (Photo 603-2E-19). Category C.
16. Support 13677-410-SE has rusted conduit clamp. (Photo 603-2E-20). Category C.
17. There are boric acid stains on cable tray BCCD01 and two conduit. The photos (603-2E-21 and 603-2E-22) were taken from stairs leading to PORV room, 2 landings below the PORV room. Category A.
18. White substance on case of PT-618. No indication as to source. (Photo 603-2E-24)
19. Rust on manifold for PT-618. Category B. (Photo 603-2E-25)

No Immediate actions, material degradation moderate in nature. No electrical or structural integrity issue apparent.

1	02-01974	0	CB	05/10/02	06/24/02			No	DBE	Open	
No	No			1	0	06/24/02	N/A	4	Yes	Vsrious	
INSPECTION PLAN IP-M-029 AREA 548-1S FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on Inspection Area 548-1S performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in evaluation of this CR.

Description of findings for upper room in East/ West portion of tunnel (Valve CF31):

1. Active leakage with white boric acid crystals predominately at east end of the south wall. Leakage initiates at the wall-ceiling joint and extends down the wall. Boric acid residue also extends out along hairline cracks in concrete ceiling. (See representative Photos # 548-1S-5, 7 & 8)
2. Light surface rust on wall embeds. (See representative Photo # 548-1S-6)
3. Light surface staining/ rust on grating in southeast corner. (See Photo # 548-1S-7)

Description of findings for lower pit in East/ West portion of tunnel (Valve DH92):

4. Pipe support off north wall has heavy surface corrosion. (See Photos # 548-1S-16 & 17)
5. Boric acid residue on south wall at pipe penetration, continuing to floor of pit. (See Photo # 548-1S-13)

Description of findings for main East/ West portion of tunnel:

6. Active leakage with white boric acid crystals down south wall near ladder to upper room. Leakage is continuation of leakage from upper room. (See Photo # 548-1S-1, 2, 3 & 12)
7. Active leakage with white boric acid crystals along south wall. Leakage originates from horizontal wall crack approximately 4' above floor. (See Photo # 548-1S-9 & 10)
8. Standing water and boric acid residue on floor near Refueling Canal Drain Pump. (See Photos # 548-1S-4, 11 & 12)
9. Surface corrosion on base anchorage for Refueling Canal Drain Pump. (See Photo # 548-1S-11)
10. Surface rust on pipe support for Refueling Canal Drain Pump suction (near valve DH104). (See Photo # 548-1S-11)
11. Surface rust on unpainted portion of pipe supports (Typ. 2) for Refueling Canal Drain Pump discharge (downstream of valve DH108). (See Photos # 548-1S-1 & 3)
12. Surface rust on spring cans and threaded rod for pipe support CCA-6-H2. (See Photo # 548-1S-14)
13. Light surface staining/ rust on ladder to upper room. (See representative Photo # 548-1S-4)

Description of findings for main North/ South portion of tunnel:

14. Horizontal wall crack continues from east/ west portion along east wall, across south end wall and back along west wall. Boric acid residue from leakage at various spots along east wall. Heavier residue at south wall, with active leakage in southeast corner. No leakage/ boric acid along west wall. (See Photos # 548-1S-19 & 20)
15. Surface rust on pipe supports CCA-6-H4, H5 & CCB-5-H1. (See representative Photo # 548-1S-18)
16. Surface rust on pipe support for small bore line near valve CF39. (See Photo # 548-1S-20)

This CR identifies minor material degradation, but no immediate structural integrity concerns. The boric acid residue has been previously identified under CR 02-01845.

1	02-01987	0	CA	05/13/02	06/27/02			No	PE	Open	
No	No			1	0	06/27/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION FINDINGS									HDW	9999 0576	9999

The following conditions were identified during an IP-M-028 (Extent of Condition) inspection on the Pzr. spray line nozzle to RCS pipe (off RCP 2-2 discharge). IP-M-028 component serial # is RCP22OUT-6 weld.

White paint like substance adhered to side of nozzle. Photo # RCP22OUT-6-1.JPG documents condition.

This CR is written in accordance with the inspection plan which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324, Boric Acid Corrosion Procedure.

Identified per Reactor Head Degradation Extent of Condition program. No active or inactive leakage was identified. Additional evaluation of effected areas per the Extent of Condition plan may be needed. No immediate actions required.

1	02-01989	0	NA	05/13/02	07/12/02			No	PE	Open	
No	No			1	0	07/12/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 (EXTENT OF CONDITION) EXAMINATION									ERO	3450 2779	3450

This CR has been written to document an Incomplete examination per IP-M-028 (Extent of Condition) inspection plan. IP-M-028 component serial # is MU-1B Bolted.

Valve MU-1B (RC Letdown Cooler 1-2 Inlet Isolation valve) is disassembled for maintenance. The Inspection Plan requires a CR be initiated for all visual exams where 100% of the component is not examined.

Limited examination per Reactor Head Degradation Extent of Condition program. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-02054	0	CA	05/15/02	06/29/02			No	PE	Open	
No	No			2	0	06/29/02	Head to Hot-Le		No	064-02	
UNEXPECTED DEPOSITS ON RCS PIPING									HDW	9999 0576	9999

The head to hot leg vent line has what appears to be melted plastic deposited on an area of the elbow near the flange attachment to OTSG 2-A. These deposits may contain unacceptable contaminants.

This Condition Report is generated based on Inspection OTSG-2 Target, performed under Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR

N/A

1	02-02063	0	CA	05/15/02	06/29/02			No	PE	Open	
No	No			1	0	06/29/02	N/A	4	Yes	064-02	
INSPECTION PLAN IP-M-028 FINDINGS									HDW	0575 0576	0575

The following conditions were identified while performing inspections for IP-M-028 Alloy 600 inspection program for package serial numbers weld inspections for HL1-2, HL1-3, HL1-6, HL1-9 and target inspection for HL1-1.

Inspection zone HL1-2 (RCS Loop 2 HL Flowmeter Nozzle). Indications of white streaking is apparent through the nozzle weld area and running down the hot leg. This streaking does not appear to be originating from the nozzle or weld as it is present above the hot leg nozzle weld and continues down the hot leg. White powder residue is covering the nozzle and hot leg out too the outer nozzle weld. Reddish brown staining is present on the upper portion of the nozzle approximately 3 inches from the hot leg. All match marks are filled with white powder. Most all of the scratched surfaces in the painted area of the piping have some corrosion present. General area cleanliness issue with heavy dark brown gritty residue on transition from the hot leg to the horizontal surface of the nozzle and light indications of same on the hot leg.

Inspection Zone HL1-3 (RCS Loop 1 Hot Leg Flowmeter Nozzle) Indications of white streaking is apparent through the nozzle weld area and running down the hot leg. This streaking does not appear to be originating from the nozzle or weld as it is present above the nozzle weld and continues down the hot leg. White powder residue is on the nozzle with a partial ring at the apparent junction of the outer insulation. Other miscellaneous residue locations are present on the nozzle. All match marks are filled with dull white powder. Most all of the scratched surfaces in the painted area of the piping have some corrosion present. General area cleanliness issue with dark brown gritty residue on the horizontal surface of the nozzle.

Inspection zone HL1-6 Weld (RCS Loop 1 Hot leg Pressure Tap Nozzle PTB1, RC2B1) Indications of white streaking is apparent through the nozzle weld area and running down the hot leg. This streaking does not appear to be originating from the nozzle or weld as it is present above the nozzle weld and continues down the hot leg. White powder residue is covering the nozzle from the hot leg out too approximately 4 inches. This again appears to be the result of the captive area inside the insulation. All match marks are filled with dull white powder. Most all of the scratched surfaces in the painted area of the piping have some corrosion present. General area cleanliness issue with dark brown gritty residue on the horizontal surface of the nozzle and light indications of same on the hot leg.

Inspection zone HL1-9 Weld (RCS Loop 1 Hot leg Vent Nozzle) A streak of white residue is running from the nozzle approximately 10 to 12 inches down the north side of the hotleg. The general area around the nozzle appears to be intact however carryover boron or white powder is present on everything in the area. The powder appears to have originated from lower on the hot leg away from the steam generator and moved up through the insulation. At points the powder residue is granular in appearance. Small sections of both light white and reddish brown streaking were noted originating from the nozzle and running within the weld area. This appears to have run off a V-block on the nozzle. In the south west quadrant of the hot leg it looks like a couple small weld strikes or splatter is on the horizontal surface.

Inspection zone HL1-1 (West Hot Leg Target, Partial Inspection of Upper Portion of HL1) The general condition of the

Insulation was good, light dust /dirt present and boron residue was present on the end caps at the high point vent. The insulation support ring on top of the steam generator had small flakes and some whitish residue in the small opening between the support and the lower insulation section. A considerable amount of white powder was present on top of the hot leg to the east of the high point vent; this was very loose residue. Inspection of the insulation identified on the north side, looking inside the insulation for the 90 going down the hot leg a large amount of free loose white powder was present. It appeared this had carried up the inside of the insulation and was deposited, due to convective air circulation and some exited out the high point vent opening and at the seams in the insulation. Moving down the hot leg the seismic support above the upper SG platform has paint blistered on the north side, a general discoloration is present due to heating on all the supports. The insulation is off above HL1-8 and HL1-9 just below the seismic restraint. It appears to be residue from tape is running down the hot leg from the insulation junction at the southeast and northeast locations. Only a very small streak of white is present running down the north side from the insulation above the SG upper platform.

The rest of the inspection was bare pipe as the insulation was removed to the 615-foot elevation. Above HL1-6 by approximately 10 to 12 inches on the northeast side of the hot leg a large amount of white powder residue is present with streaking trails running down the hot leg. This appears to be at a location a seam would be in the insulation. A band is also around the hot leg at this point and some locations of reddish brown corrosion / streaking is also present. Multiple locations of the buildup and streaking are noted continuing down the hot leg to the 615-foot elevation.

General surface condition of the hot leg is poor in this area as any area the paint has been scratched corrosion is present. Many locations of blistering hot leg paint were also noted. Some areas have more of a gritty multi colored from white to reddish brown texture to the residue on the side of the hot leg.

At the 615-foot elevation the hot leg was insulated. At this point white and reddish brown streaking was still continuing into the insulation in the north and west locations. The insulation below appeared to have only surface dirt and dust present as no seepage through the seams was noted.

This CR was written in accordance with the IP-M-028 Inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure.

This leakage was identified per Reactor Head Extent of Condition program. No active leakage was identified. The requirements of NG-EN-00324 need to be addressed in the evaluation of this CR.

1	02-02053	NA	05/15/02	07/14/02		No	PE	Open	
No	No		1	07/14/02	N/A	4	Yes	060-03	
INSPECTION PLAN IP-M-029 AREA CPV FINDINGS								HDW	0575 0576 0575

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The following observations were made as part of the Boric Acid Extent of Condition Area Inspection Plan, IP-M-029 Serial # CPV, Containment Purge Ventilation Ductwork and Supports.

- 1) White residue was found on the Containment Purge Supply duct. Residue is on the duct elbow at the 565' elevation near CFT 1-1. No corrosion or active leakage was found. Source unknown. Reference picture CPV-P-5.JPG
- 2) White residue was found on the Containment Purge Supply duct downcomer located on the West side of containment. Residue was on the bottom of the duct on the 565' elevation as the duct branches north and south. No active leakage was found. Source unknown. Reference pictures CPV-P-04.JPG and CPV-06.JPG.
- 3) White residue was found on the Containment Purge Exhaust ductwork on the 565' elevation near CFT 1-2. Duct is 7" diameter located near the ceiling. Probable source is water dripping down from 585' elevation during previous cleanings of the Containment Air Cooler coils. No active leakage was found. Reference picture CPV-01-.JPG.
- 4) White powdery substance was found on the 7" diameter exhaust duct located at the 555' elevation next to the ladder leading down to the Containment Normal Sump. Duct support had minor surface rust. Small amount of rust residue is evident on the duct from the 555' elevation to 545' elevation. No active leakage was found. Source unknown. Reference picture CPV-P-02.JPG and CPV-P-07.JPG
- 5) White residue was found on the Containment Purge Exhaust duct on the 603' elevation near the tee just downstream of CV5007. No active leakage was found. Source unknown. Reference picture CPV-P-03.JPG.
- 6) The portion of the ductwork inside the Incore Instrumentation tank was not accessible for inspection.

The inspection findings do affect the ability of the system to perform its design function. No immediate action is required.

1	02-02067	0	CA	05/15/02	06/29/02			No	PE	Open	
No	No			1	0	06/29/02	RC41	4	Yes	064-02	

**INSPECTION PLAN IP-M-028 FINDINGS**

This Condition Report is being written as a result of inspections performed at Serial Number 'RC41' in accordance with Inspection Plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this Condition Report.

Heavy accumulation of boron is present on valve RC41. The source of leakage appears to be the packing leakoff plug and the body to bonnet joint. Corrosion is evident on the valve yoke. This is being classified as an active leak.

Refer to Inspection Plan IP-M-028 for further details.

None

1	02-02065	0	CA	05/15/02	06/29/02			No	PE	Open	
No	No			1	0	06/29/02	TWRC3B	4	Yes	064-02	

**INSPECTION PLAN IP-M-028 FINDINGS**

The following was identified while performing an inspection for IP-M-028 Alloy 600 inspection program for package serial number HLI-4 (RCS Loop 1 Hot Leg Temperature Connection TWRC3B).

White residue is present 360 degrees around the area of the TW nozzle penetration of the hot leg. The weld for this application is on the ID of the pipe which leaves a non finished outer surface. The residue is present in the annular space between the hot leg and the nozzle. Due to the prior white streaking on the hot leg the source of leakage can not be identified. Indications of white streaking is apparent running down the hot leg in the area which had the paint removed around the TW nozzle. This streaking appears to be old and has previously been partially removed. Light reddish brown corrosion is present on the cleaned area of the hot leg and reddish brown staining or corrosion products are on the TW nozzle area which would be covered with insulation.

This CR was written in accordance with the IP-M-028 inspection plan, which directs writing a CR for any indications of leakage or corrosion. The CR shall comply with NG-EN-00324 Boric Acid Corrosion Procedure

This leakage was identified per the Reactor Head Extent of Condition program. No active leakage was identified. The requirements of NG-EN-00324 need to be addressed in the evaluation of this CR.

1	02-02046	0	CA	05/14/02	06/28/02			No	DBE	Open	
No	No			1	0	06/28/02	N/A	4	Yes	Various	

**INSPECTION PLAN IP-M-029 AREA 585-1E FINDINGS**

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The scope of this CR is the electrical equipment in Inspection Area 585-1E, Room 315 - Incore Instrument Tank Area. Defective piping was also identified.

The following categories are used to describe the discoloration or rust observed: A- Surface stain: discoloration of surface only, no evidence of corrosion, B- Surface rust but NOT loose or flaky and C- Material corrosion that is loose, flaky, pitted or involves material wastage. The photos are part of Data Package, serial 585-1E for IP-M-029. The following adverse conditions were observed.

The lines to MU403 and MU416 and the conduit below them have boric acid stains and rust on them. Category B. Photos 585-1E-01 and 585-1E-02.

N/A The defects appear to be confined to the surface of the components.

1	02-02048	0	CA	05/14/02	06/28/02			No	DBE	Open	
No	No			1	0	06/28/02	N/A	4	Yes	Various	

**INSPECTION PLAN IP-M-029 AREA 585-3E FINDINGS**

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The scope of this CR is the electrical equipment in Area 585-3E /Core Flood Tank No.1 Area per IP-M-029.

The following categories are used to describe the discoloration or rust observed: A- Surface stain: discoloration of surface only, no evidence of corrosion, B- Surface rust but NOT loose or flaky and C- Material corrosion that is loose, flaky, pitted or involves material wastage. The photos are part of Data Package, serial 585-3E for IP-M-029. The following adverse conditions were observed.

1. Conduit and supports exhibit boric acid residue. White stains were observed on the bottom of cable trays. (Note: The origin of these stains is unknown, similar stains have been observed on cable tray outside containment, specifically in Room 404.) Surface rust on a cable tray support is also visible. These observations were made above penetration boxes PAL2N1 and PAP2P1. (Photo 585-3E-01)

2. The root valve for PT-RC18B2 is rusty and there is white popcorn around the valve stem. Category B. (Photo 585-3E-02)

3. The bolt heads on the bracket, which secures the PT-RC18B2 drain valve is rusty. Category B. (Photo 585-3E-03)

N/A The defects observed do not appear to affect integrity of equipment.

1	02-02194/	0	CA	05/21/02	07/05/02			No	PE	Open	
No	No			1	0	07/05/02	C1-2	4	Yes	060-05	
INSPECTION PLAN IP-M-029 AREA CAC2V FINDINGS									HDW	0575 0576 0575	

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The following observations were made as part of the Boric Acid Extent of Condition Area Inspection Plan, IP-M-029 Serial # CAC3V.

Categorization of findings is defined as category A - surface stain: discoloration of surface only, no evidence of corrosion, category B - Surface rust but not loose or flaky, category C - material corrosion that is loose, flaky, pitted or involves material wastage.

- 1) The dropout register housing has white streaks and Boron deposits. The dropout register bolting, hinges and fusible links have Boron residue and surface rust. Parts of the exterior of the dropout register are beginning to rust. The interior of the dropout registers has spots of surface rust and Boron buildup. Category A & B. Source is from previous coil cleanings. Reference pictures CAC2V-P-01, 02, 03, 07, 09, 10, 11 and 17.
- 2) The exterior of the fan housing has multiple areas of Boron. The flexible joint collar is rusting. Wherever paint is missing rust is present. Boron deposits have accumulated on the ceiling. Category A & B. Source is from previous coil cleanings. Reference pictures CAC2V-P-03, 04, 05, 06, 08, 12, 13, 15 and 16.
- 3) Conduit and unistrut running behind the fan housing has surface rust. The conduit interfaces with junction box JB3922. Category B. Reference pictures CAC2V-P-13 & 14.
- 4) The interior of the fan housing has multiple streaks of Boron white/red in color. Wherever paint is missing surface rust is present. The internal conduits, motor supports, fan blades and straightening vanes have surface rust and Boron present. Category A & B. Source of Boron is from previous coil cleanings. Reference pictures CAC2V-P-18, 19 - 24.
- 5) The fan inlet and grating have minor surface rust and Boron buildup. Wherever paint is missing on the coil housing, fan inlet, grating and bolting; rust is present. Category A and B. Source of Boron is from previous coil cleanings. Interior of the coil housing was not accessible for photos at this time. Photos will be taken prior any work being performed. Previous observations found the same conditions present in CAC#2 as were noted in CAC#1 and CAC#3. Representative pictures are contained in CAC3V-P-04, 05, 06, 07, 08, 09 and 10.

No active leakage was identified.  
 Identified per Reactor Head Degradation Extent of Condition program. Additional evaluation of effected areas per the Extent of Condition plan will be needed. No immediate actions required.

1	02-02047/	0	CA	05/14/02	06/28/02			No	DBE	Open	
No	No			1	0	06/28/02	N/A	4	Yes	Various	
INSPECTION PLAN IP-M-029 AREA 585-2E FINDINGS									HDW	0575 0576 0575	

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The area being covered by this CR is 585-1E / Room 315 - Incore Instrument Tank Area.

The following categories are used to describe the discoloration or rust observed: A- Surface stain; discoloration of surface only, no evidence of corrosion, B- Surface rust but NOT loose or flaky and C- Material corrosion that is loose, flaky, pitted or involves material wastage. The photos are part of Data Package, serial 585-2E for IP-M-029. The following adverse conditions were observed.

Surfacing rusting, boric acid residue and discoloration were observed on the conduit and conduit supports in the overhead conduit bank at elevation 595' - 600'. Photo files 585-2E-01.jpg, 585-2E-02.jpg, 585-2E-03.jpg and 585-2E-



04.jpg

The source of the boric acid appears to be from a large pipe above the conduit.

N/A The adverse conditions appear to be confined to the surface of the conduit.

1	02-02196	0	CA	05/21/02	07/05/02			No	PE	Open	
No	No			1	0	07/05/02	E24-2	4	Yes	063-01	
INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION: OTSG-2								HDW	9999	0576	9999

During target inspection of Steam Generator 1-2 it was noted that there was a white stain on the outside of the mirror insulation under the feedwater nozzles on the north-east side (mirror insulation panel No. SG-1B-1A4). Inspection of the inside of the mirror insulation did not reveal any significant condition that would explain the large white stain on the outside.

This condition report is generated based on inspection OTSG-2 performed under inspection plan IP-M-028. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

None

1	02-02192	0	CA	05/21/02	07/05/02			No	PE	Open	
No	No			1	0	07/05/02	E24-2	4	Yes	063-01	
INSPECTION PLAN IP-M-028 ALLOY 600 EXTENT OF CONDITION: OTSG-2								HDW	0575	0576	0575

During the target inspection of the Steam Generator 1-2, it was noted that:

-A bright white stain was noted on a section of mirror insulation on the south side of the SG. Based on the orientation and lack of any nearby sources, it may be paint and not boric acid.

-Below the feedwater nozzles on the east to south-east side a bright white stain was noted. This could possibly be paint since no boric acid crystals could be seen.

-On lower half on east and north various white and brown stains were noted where the insulation was removed. No material loss or boric acid buildup was noted. Past signs of leakage from a secondary side hand-hole on the east side of the SG was seen. This could be the source for some of these stains.

This condition report is generated based on inspection OTSG-2 performed under inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

None

1	02-02294	0	CA	05/28/02	07/12/02			No	DBE	Open	
No	No			2	0	07/12/02	E37-1	4	Yes	011-01	
DEGRADATION OF CONTAINMENT AIR COOLER #1 DUE TO BORIC ACID CORROSION								HDW	0575	0576	0575

This condition report is being written as a result of inspection performed at Serial Number "585-5P Containment Air Cooler #1" in accordance with inspection plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this Condition Report. Inspection of the exterior surface area of Containment Air Cooler (CAC) #1 revealed the following observations. Unless otherwise noted below, the corrosion described below is attributed to a combination of airborne Boric Acid residue and CAC coil sweating due to exposure in the humid Containment atmosphere.

The CAC coils are Seismic Category I. The seismic integrity of the CAC coils is maintained by the galvanized steel framework that makes up each coil. Unless otherwise noted below, the corrosion found is on the galvanized steel framework of the coils.

1) The southwest bottom corner of the tube sheet on the top coil is severed from the bottom frame of the coil due to corrosion. Inspection of the severed area revealed a large hole in the tube sheet that is estimated at 1 inch high by 2 inches long. Next to the hole is a red/brown Boric Acid deposit mixed with rust flakes and within the fins that is tight to the framework. The tube sheet area surrounding the hole indicates additional on-going rust activity from the outside and between the tube sheet and the CAC structure. Boric Acid streaking is evident from the side of the CAC structure and the tube sheet and is originating from inside the CAC structure itself. The bottom frame of the tube coil is rusted, pitted and stained with dried pools of Boric Acid residue. Approximately 10-15% of the wall thickness of the coil bottom frame is degraded due to rusting. (Photos 585-5P-CAC1-1.JPG).

2) The southeast bottom corner of the tube sheet on the top coil appears to be severed from the bottom frame of the coil due to corrosion. Inspection of the severed area indicates the tube sheet in the corner has a visible crack that extends to the edge of the tube sheet and CAC frame. Inspection of the severed area revealed a red/brown Boric Acid deposit mixed with rust flakes is present next to the severed area. Boric Acid residue is present between the tube sheet and the inside surface of the CAC structure. A thin coating of Boric Acid residue is present on the surface area of the CAC fins. The fins are corroded as evident by a green discoloration to the fins. The exterior surface of the CAC structure has dried white colored streaks of Boric Acid residue. The fasteners retaining the coil bundles in the CAC structure are covered in a layer of surface rust. (Photo 585-5P-CAC1-2.JPG).

3) The bottom corner of each of the five vertical baffles for the top, middle and bottom tube coils has a buildup of Boric Acid residue mixed with small flakes of rust. Some of the deposits are masking pitting and active rusting in these areas plus possible through wall perforation. The exterior surface area of the CAC structure is covered in a white film of Boric Acid residue. The fasteners used to secure the CAC coils to the CAC structure are covered in a layer of surface rust. (Photo 585-5P-CAC1-3.JPG, 585-5P-CAC1-4.JPG).

4) The south side bottom corners of the middle coil tube sheet is rusted and pitted due to corrosion. Pitting is evident in the corner where the fins abut the tube sheet. The bottom framework of the coil in the southwest corner is covered by a loose layer of powdered surface rust. A dried pool of Boric Acid residue is evident on the bottom frame and within the fins. Dried drips of Boric Acid residue were found coming out of the CAC structure where the middle coil is fastened to the CAC structure. Similar dried drips were found dripping down from inside the CAC framework of the middle coil on the southwest side. (Photo 585-5P-CAC1-4.JPG through 585-5P-CAC1-7.JPG).

5) The bottom coil tube sheet in the southwest corner is pitted at the point where the fins are adjacent to the tube sheet. The pitting is approximately 50% through wall and approximately 0.75 inches in diameter. Dried streaks of white Boric Acid residue were found coming from inside the tube bundle. The bottom frame of the coil is covered with a layer of surface rust that is pitted, loose and flaking. The fins are covered with a light green layer of corrosion. (Photo 585-5P-CAC1-5.JPG, 585-5P-CAC1-7.JPG).

6) The bottom coil tube sheet in the southeast corner is covered with surface rust around the holes in the tube sheet where the tubes penetrate the tube sheet. The bottom frame of the coil is covered with a layer of surface rust that is pitted, loose and flaking. The fins are covered with a light green layer of corrosion. (Photo 585-5P-CAC1-6.JPG).

7) The bottom coil tube sheet on the west-side right corner is nearly rusted through by pitting. Dried splashes of Boric Acid residue is evident and appears to be dripping from within the CAC structure just above this area. The bottom frame of the coil is covered with a layer of surface rust that is pitted, loose and flaking. The fins are covered with a light green layer of corrosion. (Photo 585-5P-CAC1-8.JPG).

8) The middle coil tube sheet on the west right corner revealed a small area of surface rust where the tube sheet is abutted by the coil fins. Dried splashes of white Boric Acid residue is evident and appears to be dripping from above and within the CAC structure. The bottom frame of the coil is covered with a layer of rust that is pitted, loose and flaking. The bottom of the baffle where it abuts the bottom framework of the coil is degraded by a large pit (1 inch wide x 3 inches long) that is estimated to be approximately 30% through wall. (Photo 585-5P-CAC1-9.JPG, Photo 585-5P-CAC1-10.JPG).

9) The top coil tube sheet on the west right bottom corner is severed from the bottom frame of the coil due to corrosion. The corrosion is loose, pitted and flaking. Dried streaks of white Boric Acid (BA) residue is evident on the tube sheet and appears to be originating from within the CAC structure where the top of the tube bundle is fastened. The bottom frame of the coil is covered with a layer of rust that is pitted, loose and flaking. (Photo 585-5P-CAC1-11.JPG).

10) The top coil tube sheet on the west-side left bottom corner is nearly pitted through wall due to corrosion where the tube sheet abuts the coil fins. Immediately adjacent to the pitted area is evidence of white Boric Acid residue that is within the fins and on the bottom framework of the coil. The bottom end of the tube baffles between the two outer ends of the coil revealed signs of surface rust and dried white/red/brown Boric Acid residue. The corrosion in the pitted area is loose and flaking. The bottom frame of the coil is covered with a layer of surface rust that is tight to the coil frame (Photo 585-5P-CAC1-12.JPG).

11) The exterior surface of the tube sheets in the northwest corner is covered with a layer of rust that is loose and flaking in the form of small rust particles. The rust is masked in some areas of the tube sheet by a moderate layer of red/brown/white deposits of Boric Acid residue. (Photo 585-5P-CAC1-13.JPG).

12) The Boric Acid does not appear to have an appreciable affect on the CAC fins/tubes because there is no evidence of aggressive attack comparable to that of the Carbon Steel surfaces. (Photo 585-5P-CAC1-13.JPG).

13) The standpipe drain line of SW320 is covered in a layer of rust that is loose and in the form of small rust particles. The rusting is attributed to the exposure of an unpainted pipe in the humid Containment atmosphere combined with pipe sweating and airborne Boric Acid residue. The bottom of the standpipe is scuffed to bare metal due to maintenance during 13RFO. (Photo 585-5P-CAC1-14.JPG).

14) The top coil tube sheets in the northwest and northeast bottom corners are covered in a layer of surface rust where the tube sheet meets the bottom frame of the coil. The bottom frame of the coil is severely rusted and pitted with evidence of loose rust fragments/particles. The pitted areas are large in cross section and are approximately 50% through wall. The tube baffles between the tube sheets are rusting and pitted at the bottom of the baffles where the fins abut the baffle. Dried red/brown Boric Acid residue is evident in the same corners abutting the baffles. The color

of the bottom frame is red/brown with rust evident on all of its exposed surface area. A light layer of Boric Acid is evident in the fins and parallel to the tubes within. The fins parallel to the coil tubes appear to be slightly affected by the Boric Acid residue because the green tarnished film in this area has been removed, leaving a tan/brown hue to the fins. It is not known if the fin discoloration is attributed to corrosion or erosion due to the flow of BA particles through the coil. Next to the pitted area is evidence of white Boric Acid residue that is within the fins and on the bottom frame of the coil. The corrosion in the pitted areas is loose and flaking. On the surface of the bottom frame is evidence of dried pools and splashes of white Boric Acid residue that is originating from within the framework of the CAC structure above the tube coil. (Photo 585-5P-CAC1-15.JPG, 585-5P-CAC1-16.JPG, 585-5P-CAC1-17.JPG).

15) Small cracks are present in the fins (as indicated by the small points at the leading edge of the fins) parallel to the tubes in the horizontal plane in the top and middle tube bundles. These cracks appear to be manufacturing caused by excessive yielding of the fin material when the tubes were expanded into the fins. The cracks are not evident on all tube bundles. The fin material in the same area on other tube bundles revealed indications of material stretching where the material has yielded to the tube expansion process. (Photo 585-5P-CAC1-16.JPG).

16) The bottom frame of the top, middle and bottom coil is severely rusted and pitted. The pitted areas are large in cross section and approximately 50% through wall. Dried pools and splashes of white Boric Acid residue is present on the surface area of the frame. Red/brown Boric Acid residue is present in all the corners of the tube sheets and baffles. The bottom corners of all the baffles on the north side of CAC1 are corroded due to pitting and may be through wall in some areas under the Boric Acid deposits. Boric Acid residue is present within the fins and caked up on the outside and within the coil where the fins about the bottom of the coil frames. Dried streaks of white Boric Acid residue are present on the surface of the CAC structure and appear to be originating from with the structure at the top of the CAC. (Photo 585-5P-CAC1-16.JPG through Photo 585-5P-CAC1-21.JPG).

17) Dried streaks of white and red/brown Boric Acid residue is present on the surface of the CAC structure and appear to be originating from within the structure at the top of the CAC and then dripping down the faces of the coil framework. The surface of the bottom coil frame has evidence of dried pools and splashes of white Boric Acid residue. Evidence of large plates of rust are present that are lifting off the bottom coil framework where the fins about the bottom of the coil frame. The plates of rust are estimated to make up approximately 50% of the wall thickness of the bottom framework of the coil bundles. The corners of the baffles have a moderate amount of dried red/brown Boric Acid residue that is suspected to be masking through wall pitting where the bottom of the baffles, about the fins. (Photo 585-5P-CAC1-22.JPG through 585-5P-CAC1-24.JPG, 585-5P-CAC1-30.JPG).

18) The exterior surface of the top, middle and bottom tube sheets in the southeast corner is covered with a layer of rust that is loose and flaking in the form of small rust particles/flakes. The rust is masked in some areas of the tube sheets by a moderate layer of red/brown/white deposits of Boric Acid residue. (Photo 585-5P-CAC1-25.JPG through 585-5P-CAC1-27.JPG).

19) Then drip trays beneath the tube bundles have a moderate amount of dried white Boric Acid residue that covers nearly 100% of the surface area and is approximately 1/8 inch thick. Beneath the layer of residue is evidence of rusting which is loose and fragmenting. Evidence of white and red/brown Boric Acid streaks are present on the CAC frame below the drip trays. The streaking appears to be originating from the drip trays and the tube sheets directly above this area. (Photo 585-5P-CAC1-28.JPG, 585-5P-CAC1-29.JPG).

20) Based on the above exterior inspection of CAC #1 it is believed there is a moderate amount of Boric Acid residue still present within the tube coils and the CAC structure that is not readily observable. (see above photos)

Based on engineering judgement, Containment Air Cooler #1 is functional pending further evaluation of its Selsmic Integrity.

1	02-02297	0	CA	05/28/02	07/12/02			No	DBE	Open	
No	No			1	0	07/12/02	N/A	4	Yes	N/A	
INSPECTION PLAN IP-M-029 AREA 603-4E FINDINGS									HDW	0575 0576	0575

This condition report is generated based upon an inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Inspection Area 603-4E is the Area Above Refueling Canal Between the D-Rings and contains conduit, cable tray, electrical boxes and instruments. The noted indications in this area were minor.

The following categories are used to describe the discoloration or rust observed: A - Surface stain: discoloration of surface only, no evidence of corrosion, B - Surface rust but NOT loose or flaky, C - Material corrosion that is loose, flaky, pitted or involves material wastage.

Photos identified below are part of Data Package, Serial 603-4E for IP-M-029.

- 1) Rust was observed on the inside of the motor housing on the South-East corner of the Main Fuel Handling Bridge. (Photo 603-4E-04) Category B.
- 2) Rust observed on plate near pool on South-West corner. Category B (Photo 603-4E-02)
- 3) Boric acid crystals were observed for 4-5 inches above the pool surface, on the Control Rod Handling Mast on the Main Fuel Handling Bridge, apparently left from the pool evaporating down. (Photo 603-4E-03)
- 4) The CCW line on the West Side of the pool has paint flaking off on lower side of pipe from condensation and potential boric acid accumulation. A support, approximately 1/2 way along between corner and connection to reactor service structure had dark brown stain. (Photo 603-4E-01).

None required, the conditions observed were minor in nature.

1	02-02289	0	CA	05/28/02	07/12/02			No	PE	Open	
No	No			1	0	07/12/02	E24-2	4	Yes	063-01	
OTSG 2 CORROSION AGAINST SHELL									HDW	0575 0576	0575

This Condition Report is generated based on Area Inspection 565-1, Room 216 - East D-ring, Complete Interior, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The shell of OTSG 2 has an area of accumulated corrosion just below MS884, STEAM GENERATOR 1-2 STEAM ANNULUS DRAIN VALVE.

A digital photo was taken to document the inspection. 565-1P-SP9A6D-1.jpg.

Note that MS884 is slated to be replaced which will require the insulation to be removed in that area. This will facilitate further inspections of the corrosion against the OTSG.

Identified during the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02330	0	CA	05/30/02	07/14/02				DBE	Open	
No	No			2	0	07/14/02	E37-2	4	Yes	011-01	
DEGRADATION OF CONTAINMENT AIR COOLER #2 DUE TO BORIC ACID CORROSION									HDW	0575 0576	0575

This condition report is being written as a result of inspection performed at Serial Number 585-5P-CAC2 in accordance with Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this Condition Report.

Inspection of the exterior surface area of Containment Air Cooler (CAC) #2 revealed the following observations. Unless otherwise noted below, the corrosion described is attributed to a combination of airborne Boric Acid residue and CAC coil sweating due to exposure in the humid Containment atmosphere.

- 1) On the South side of CAC #2, the lower framework of the top, middle and bottom coils are severely rusted/pitted with loose particles and small flakes of rust present on the frame. The entire surface area of the lower frame of each coil is covered with a minor to moderate layer of red/brown Boric Acid (BA) residue. Beneath the BA residue, the lower frame of each coil is clearly rusted and pitted with a red/brown coloration that is typical for the presence of BA corrosion on Carbon Steel. (Photos 585-5P-CAC2-1.JPG through 585-5P-CAC2-4.JPG)
- 2) On the South side of CAC #2, the bottom corners of the tube sheets and tube baffles for the top, middle and bottom coils are rusted/pitted with loose/small flakes of rust scale evident. Boric Acid (BA) residue that is red/brown and white in color is present in these same corners. Through wall pitting is suspected beneath some of the BA deposits. (Photos 585-5P-CAC2-1.JPG, 585-5P-CAC2-2.JPG)
- 3) On all four sides of CAC #2, dry streaks of Red/brown and white Boric Acid residue is evident on all four sides of the CAC/coil framework. In some areas of the tube bundles, white Boric Acid residue appears to have been streaming out of the coils from the top and bottom of each coil. On the South side, white BA residue is still evident at the bottom of each tube bundle and on the surface of the coil fins. A light film of BA residue is present on 100% of the external surface area of the CAC. The fins of the tube coils also have a green tarnish color that appears to have worn away in some areas suggesting the BA residue may have a slight corrosive affect on the CAC tube bundle fins. (Photos 585-5P-CAC2-1.JPG, 585-5P-CAC2-2.JPG, 585-5P-CAC2-5.JPG through 585-5P-CAC2-13.JPG)
- 4) On the South side of CAC #2, Dry Boric Acid residue is evident coming out of the CAC structure where the upper coil tube sheet abuts the CAC structure in the southwest corner of the tube sheet. Rusting of the tube sheet is also evident in this same area with a characteristic red/brown discoloration typical for Boric Acid corrosion of Carbon Steel. (Photo 585-5P-CAC2-3.JPG)

5) The fasteners on all four sides of CAC #3 are covered with surface rust that is tight to the fastener. (Photo 585-5P-CAC2-3.JPG)

6) On the West side of CAC #2, the bottom southwest corner of the tube sheet on the top, middle and bottom coils is severely rusted/pitted. Minor Boric Acid (BA) residue is also present that is red/brown in color. It is suspected that beneath the BA residue the tube sheets may be pitted through wall or possibly severed from Boric Acid corrosion in these areas. (Photos 585-5P-CAC2-5.JPG, 585-5P-CAC2-7.JPG)

7) On the West side of CAC #2, the tube baffle that is immediately adjacent to the tube sheets in Item #6 above for all three coils is severely pitted through wall at the bottom of the baffle. The estimated through wall hole size at the bottom of the baffles is approximately 0.75 inches by 1.5 inches. The fasteners used to secure the baffles to the coil framework are completely covered with red/brown Boric Acid residue that obscure the extent of fastener degradation. (Photos 585-5P-CAC2-5.JPG, 585-5P-CAC2-7.JPG)

8) On the West side of CAC #2, the lower framework of the top, middle and bottom coils are severely rusted/pitted with loose particles and small flakes of rust present on the frame. Approximately 50% of the surface area of the lower frame of each coil is covered with a moderate amount of red/brown Boric Acid (BA) residue where the remaining 50% is stained/rusted with a red/brown discoloration that is typical of the presence of Boric Acid Corrosion. (Photos 585-5P-CAC2-5.JPG through 585-5P-CAC2-7.JPG)

9) On the West side of CAC #2, evidence of active rusting is occurring on the baffle edges for the middle and bottom tube coils. The source of the rusting appears to be due to dried streaks of Boric Acid residue that is running down the face of the baffles from the upper coil. (Photos 585-5P-CAC2-5.JPG, 585-5P-CAC2-7.JPG)

10) On the West side of CAC #2, the tube sheet of the middle coil is bowed inward by approximately 1.0 inch. The bowing of the tube sheet is attributed to mishandling. As a result, the tube sheet is applying an upward load to the bottom of the tubes entering the tube sheet. (Photo 585-5P-CAC2-6.JPG)

11) The fasteners used to anchor the coil baffles to the upper and lower framework of the coils on all four sides of the CAC are covered in a layer of surface rust that is tight to the fastener. Some of the fasteners are completely covered with a layer of red/brown Boric Acid residue. (Photo 585-5P-CAC2-5.JPG)

12) On the North side of CAC #2, the bottom corner of the upper tube sheet on the northwest side is pitted through wall and appears severed from the bottom of the coil frame as indicated by a large crack approximately 2.5 inches long. Dried red/brown streaks of Boric Acid residue is evident coming from inside the coil face and from inside the CAC structure. Evidence of rusting is also present where the tube sheet abuts the CAC structure in this same area. (Photo 585-5P-CAC2-8.JPG)

13) On the North side of CAC #2, most of the baffles of the upper coil are pitted through wall or are severed in the bottom corners where the baffles abut the coil frame. These same areas are covered with a moderate deposit of Boric Acid residue that is red/brown in color intermixed with loose flakes/particles of rust. Some of the baffle corners are very rusty and may be near through wall due to pitting. (Photos 585-5P-CAC2-9.JPG, 585-5P-CAC2-10.JPG)

14) On the North side of CAC #2, the lower framework of the middle and bottom coils is severely rusted and pitted with loose flakes of rust/particles located on the surfaces. The coil frames also have a minor accumulation of Boric Acid residue that is gold/red/brown in color and indicative of active Boric Acid corrosion of Carbon Steel. The discoloration of the lower framework of the middle coil is very pronounced compared to the other coils suggesting heavy corrosive attack. White Boric Acid residue is also present in the bottom of the coils. (Photos 585-5P-CAC2-9.JPG through 585-5P-CAC2-11.JPG)

15) On the East side of CAC #2, the middle baffle of the upper coil has a through wall hole in the bottom of the baffle. The hole is approximately 0.5 inch in diameter and appears to be flanked by cracking on either side of the baffle. The baffle surface surrounding the hole is pitted and degraded by surface rust. A minor accumulation of red/brown Boric Acid residue is evident adjacent to the baffle on the coil framework. The Boric Acid residue appears to have come from inside the coil and from overhead dripping. (Photo 585-5P-CAC2-12.JPG)

16) On the East side of CAC #2, most of the baffles for all three coils are stained with a minor layer of red/brown Boric Acid residue. Inspection of the areas revealed corrosion is just beginning to attack the galvanized coating of the baffles. (Photos 585-5P-CAC2-12.JPG, 585-5P-CAC2-13.JPG)

17) On the East side of CAC #2, the lower frames of all three coils is corroded and pitted. Loose deposits of rust particles/flakes are present on all surfaces. (Photos 585-5P-CAC2-12.JPG, 585-5P-CAC2-13.JPG)

18) On the east side of CAC #2, the bottom corners of the tube sheets reveal evidence of surface rusting combined with minor deposits of Boric Acid residue. (Photo 585-5P-CAC2-13.JPG)

19) The exterior side of the coil tube sheets for all coils of CAC #2 are covered in a moderate layer of dry red/brown Boric Acid residue. Beneath the residue, the tube sheets are rusted with loose particles of rust evident. (Photo 585-5P-CAC2-14.JPG)

20) There appears to be a moderate amount of Boric Acid still present inside the CAC structure, coils, tube sheets and coil drip pans that in some cases is not readily observable. All of these components reveal evidence of streaming white and red/brown Boric Acid residue that has dried in place. (Photo 585-5P-CAC2-1.JPG through 585-5P-CAC2-13.JPG)

Based on engineering judgement, Containment Air Cooler #2 is functional pending further evaluation of its seismic integrity.

1	02-02318	0	CA	05/29/02	07/13/02				PE	Open	
No	No			1	0	07/13/02	C1-3	4	Yes	060-05	
INSPECTION PLAN IP-M-029 AREA CAC3V INSPECTION FINDINGS									HDW	0575 0576	0575

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

The following observations were made as part of the Boric Acid Extent of Condition Area Inspection Plan, IP-M-029 Serial # CAC3V.

The flexible connection collar for CAC#3 has rust on the band and on the bolts. Reference pictures CAC3V-P-01, 15 and 18.

No active leakage was identified.

Identified per Reactor Head Degradation Extent of Condition program. Additional evaluation of effected area per the Extent of Condition plan will be needed. No immediate actions required.

1	02-02327	0	CA	05/30/02	07/14/02				PE	Open	
No	No			1	0	07/14/02	MU2A	4	Yes	065-01	
EXTENT OF CONDITION INSPECTION FOR AREA 565-3P FINDINGS									HDW	0575 0576	0575

This Condition Report is generated based on a detailed inspection that was performed per NG-EN-00324. It has also been documented in Area Inspection 565-3, Room 214 CF Tank 1 Area, performed under Inspection Plan IP-M-29. The requirements of NG-EN-00324 will need to be considered in the further evaluation of this CR.

MU2A was found to have boric acid residue around the packing follower. There is also surface corrosion around the base of the carbon steel yoke. Some of the rust has migrated to the top of the bonnet and body. This includes the bonnet bolting.

Digital photos were taken to document the inspection. 565-3P-MU2A-1.jpg, 565-3P-MU2A-2.jpg, 565-3P-MU2A Insul-1.jpg.

Identified during a detailed inspection per NG-EN-00324 and further documented as part of the Reactor Head Degradation Extent of condition program. Inspection documented per IP-M-029. Additional evaluation of the affected areas per the Extent of Condition program plan will be needed. No immediate actions are required.

1	02-02332	0	NA	05/30/02	07/29/02				PE	Open	
No	No			1	0	07/29/02	N/A	4	Yes	060-05	
INSPECTION PLAN IP-M-029 AREA CACIV INSPECTION FINDINGS									ERO	3450 0576	3450

This condition report is generated based on inspection performed under Inspection Plan IP-M-029. The requirements of NG-EN-00324 need to be considered in the evaluation of this CR.

Section 6.4 of Inspection Plan IP-M-029 requires a condition report to be generated if an area is not accessible for inspection. The Containment Air Cooler ductwork between the turning vanes on the East and West ends as the ductwork extends from the plenum is not accessible for inspection.

Identified per the Reactor Head Extent of Condition program. Additional evaluation is required per the extent of condition plan will be required.