COMED

BYRON UNIT 2

COMMERCIAL OPERATION: AUGUST 21, 1987

STEAM GENERATOR EDDY CURRENT INSPECTION REPORT

CYCLE 6 REFUELING OUTAGE (B2R06)

AUGUST - OCTOBER 1996

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1.0 INTRODUCTION

Byron Station Unit 2 operates with four Westinghouse Model D-5 recirculating steam generators in the four loop pressurized water reactor system. The steam generators contain thermally treated Inconel-600 U-tubes that have a nominal outside diameter of 0.750 inches and a nominal thickness of 0.043 inches. See Figure 2 for a diagram of the Model D-5 Steam Generator configuration.

In compliance with Byron Station Technical Specification 3/4.4.5 and ASME Section XI (IWB 2500-1, Exam Category B-Q, item B16.20), 1983 Edition through Summer 1983 Addenda, Steam Generator (SG) eddy current examinations were conducted by Framatome Technologies during the Unit 2 Cycle 6 refueling outage beginning August 8, 1996 through October 5, 1996. The following inspections were performed during this outage:

* 100% Full length Bobbin Inspection in each SG
* 25% top of tubesheet (Hot Leg) - Rotating Pancake Coil Inspection in each SG
* 25% row 1 and 2 U-Bend Plus-Point Inspection in each SG
* 25% Preheater expansion region in SG A - Rotating Pancake Coil Inspection

2.0 SUMMARY

Unit 2 shut down on August 8, 1996 as a result of a primary-to-secondary leak of approximately 120 GPD that was detected in SG A (B2F17). As a result of shutting the unit down early, it was decided to enter the refueling outage early. Consequently, the scheduled refuel eddy current inspection for this unit started earlier than originally planned. The tube that leaked was inspected (with eddy current and video probes). It was determined that a foreign object had caused the leak. The foreign object was removed from the SG and it was analyzed to determine its origin. The foreign object damaged four tubes in SG A, all of which were subsequently plugged.

An additional 26 tubes were repaired as a result of the normal eddy current inspections. Tables 2.1 represents the total number of tubes that were repaired during B2R06 and the reasons why they were repaired.

TABLE 2.1 Tubes Repaired during B2R06

Mode of Degradation	SG A	SG B	SG C	SG D	Total
Anti-Vibration Bar (AVB) Wear	3	8	5	3	**19**
Loose Part Degradation[1]	4	0	0	0	**4**
Preventative	4([2])	2([3])	1([4])	0	**7**
Totals	**11**	**10**	**6**	**3**	**30**

Notes:

[1] All four tubes in SG A were plugged as a result of the damage incurred due to the loose part that shut the unit down for B2F17.

[2] These four tubes were plugged due to indications detected from approximately 2C+2.03" through 2C+5.00", in SG A.

[3] Tube 1-2 in SG B was preventatively plugged due to a geometry change on the inside of the tube that caused the probe to skip over a section of tubing, thus not allowing a complete exam in the U-Bend

region. Tube 20-57 in SG B was plugged as a result of an indication that exhibited a volumetric indication at 2C+0.76".

[4] Tube 22-29 in SG C was plugged as a result of an indication that exhibited a volumetric indication at 1H+0.75".

3.0 CERTIFICATIONS

3.1 Procedures/Examinations/Equipment

3.1.1 The examination and evaluation procedures used during the eddy current inspection were approved by personnel qualified to Level III in accordance with the 1984 Edition of SNT-TC-1A. The procedures were approved in accordance with both Framatome and ComEd Procedures.

3.1.2 The examinations, equipment, and personnel were in compliance with the requirements of the Framatome QA Manual for Inservice Inspection, Byron Station Technical Specification 4.4.5, the 1983 Edition through Summer 1983 Addenda of Section XI of the ASME Boiler and Pressure Vessel Code, and industry standards.

3.1.3 Certification packages for examiners, data analysts, and equipment are available at Byron Station. Table 1 of Section 7.0 lists all those personnel who performed, supervised, or evaluated the data during this inspection.

3.1.4 MIZ-30 equipment was used in the acquisition of the eddy current data and Eddynet 95 software was used in the analysis of the data.

3.2 Personnel

3.2.1 The personnel who performed the eddy current inspections were qualified to Level I and Level II in accordance with the 1984 Edition of SNT-TC-1A. The Level I personnel performed the inspections under the direct supervision of Level II personnel.

3.2.2 The personnel who performed the data analysis were qualified to a minimum of Level II, with special analysis training (IIA) in accordance with the 1984 Edition of SNT-TC-1A, Framatome and ComEd procedures.

3.2.3 All eddy current data analysts analyzing data in accordance with Generic Letter 95-03 were qualified in accordance with EPRI Appendix G for Qualified Data Analysts.

3.2.4 All eddy current analysts were trained and tested in both bobbin eddy current data and Rotating Pancake Coil (RPC)/Plus-Point data. The analysts were required to achieve a score of 80% or greater on this site specific demonstration exam.

3.2.5 The eddy current analysis was subject to two independent analyses. Primary analysis of all data was performed by Framatome Technologies and Rockridge Technologies. An independent company, Zetec, performed the secondary analysis.

Discrepancies between the two parties required Level III concurrence between both parties for the final resolution.

4.0 EXAMINATION TECHNIQUE AND EXAMINATION SCOPE

4.1 Initial Examinations

4.1.1 All inservice tubes were inspected full length utilizing a 0.610" bobbin coil in accordance with Appendix H requirements. For rows 1-3 U-Bend regions, 0.590" probes were utilized to achieve the complete full tube inspection.

4.1.2 Approximately 25% (1143 tubes) of all tubes in each SG were inspected with MRPC 3-coil probe at the secondary tubesheet interface on the hot leg only. These examinations were performed 2" above to 2" below the secondary tubesheet interface. This inspection was performed in response to NRC Generic Letter 95-03. No indications were found as a result of this inspection.

4.1.3 Approximately 25% (34 tubes) of the tubes in the preheater in steam generator A were inspected utilizing a 3 coil RPC probe, consisting of a 0.115" mid range pancake coil, an axial coil and a circumferential coil. This inspection was performed in response to NRC Generic Letter 95-03. No indications were found as a result of this inspection.

4.1.4 Approximately 25% (57 tubes) of all U-Bend rows 1 and 2 in each steam generator were inspected utilizing a standard U-Bend Plus-Point probe. This inspection was performed in response to NRC Generic Letter 95-03. No indications were found as a result of this inspection. However, tube 1-2 in SG B was preventatively due to a geometry change on the inside of the tube that caused the probe to skip over a section of tubing, thus not allowing a complete exam in the U-Bend region.

4.1.5 All examinations were performed in accordance with Framatome procedure (54-ISI-400-01) and ComEd surveillances and eddy current guidelines.

Note: See Figure 1 for tube sheet maps of the inspections performed during B2R06.

4.2 Additional Examinations

4.2.1 Approximately 25% of tubes containing dents greater than 5.0 volts as sized by bobbin inspection were examined with an RPC probe consisting a 0.115" standard pancake coil, an axial coil, and a circumferential coil. This inspection was performed in response to NRC Generic Letter 95-03. No indications were found as a result of this inspection.

4.2.2 All indications in tubes that received an I-code (three letter analysis code that ends with the letter I) as called by bobbin coil analysis were further reviewed utilizing a standard 3-coil RPC probe containing a 0.080" pancake coil, axial coil, and a circumferential coil. I-codes may be indications including Non-Quantifiable Indications (NQI), Free-Span Indications (FSI), Mixed Residual Indications (MRI),

Distorted Tubesheet Indications (DTI), and Distorted Roll Transition Indications (DRI).

4.3 Recording of Examination Data

4.3.1 Results of the eddy current data analysis were recorded on optical disks. The data was then loaded into the FTI's Eddy Current Data Management System (TUBAN II). This system was used to track the proper examination of all tubes and it was also used to generate the final eddy current report summaries.

4.4 Witness and Verification of Examination

4.4.1 Eddy current inspections were witnessed and/or verified by the Authorized Nuclear Inservice Inspectors Mr. J. Hendricks and T. Nuoffer of the Hartford Steam Boiler Inspection and Insurance Company of Hartford Connecticut, Chicago Branch, 2443 Warrenville Road, Suite 500, Lisle, Illinois 60532-9871.

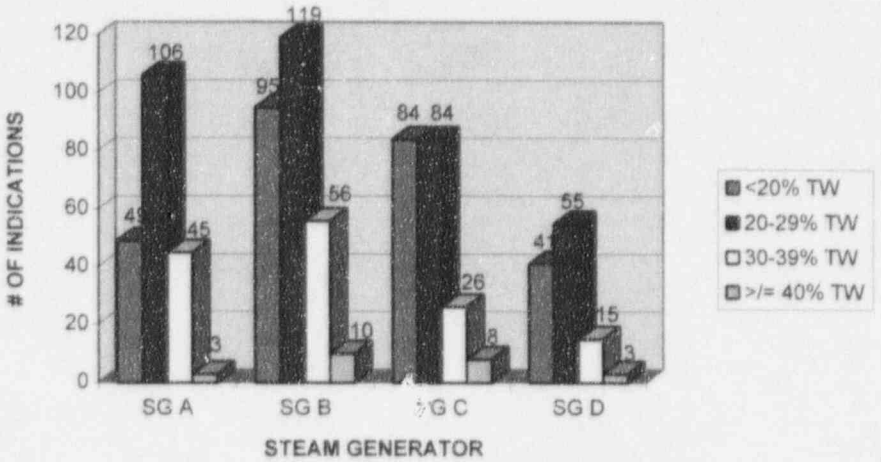
5.0 EXAMINATION RESULTS

The inspection results were found to be similar in each of the four steam generators. Based on all of the inspections identified in Section 4.0 of this report, Byron repaired a total of 30 tubes by using the Inconel-690 mechanical plugs. Summarized below are the modes of degradation found during the B2F17/B2R06 outages.

5.1 Indications Found

5.1.1 Anti-Vibration Bar (AVB) Wear - This mode of degradation represented the highest mode (total number of indications detected) of active degradation found out of all of the types found during this inspection. A total of 799 indications were found that contained AVB wear. As a result, 19 tubes were removed from service based on the Technical Specification criteria of repairing tubes greater than or equal to 40% Through-Wall (TW). See chart below which shows the distribution of AVB wear indications by each SG.

AVB WEAR INDICATIONS IN EACH STEAM GENERATOR



5.1.2 Foreign Object Wear - A total of four tubes were removed from service as a result of the foreign object that caused the leak in SG A. The size of this object was 1.7" x 1.2" x 0.055" and it was triangular shaped. Analysis of this object revealed that it was thermal cutting debris from a 12-18" diameter pipe. One of the four tubes (16-110) had a 100% TW indication, another tube (15-110) contained a 56% TW indication, and the other two tubes (15-109 & 15-111) were plugged as result of non-quantifiable volumetric indications found by RPC.

5.1.3 Other Repairable Tubes - A total of seven additional tubes were repaired due to other reasons not mentioned above. Below is a summary of the additional tubes repaired.

SG A - Four tubes were plugged due to Outer Diameter (OD) originating indications detected from approximately 2C+2.03" through 2C+5.00". During the initial bobbin inspection, these tubes were identified to have possible sludge/object signals. As a result of detecting this signal, these tubes were both RPC inspected and visually inspected to further quantify this signal. Upon further review, it was determined that there were no loose parts in the area, however scale/deposit build up on the four tubes was found. One tube (49-74) was given the freespan Indication (FSI) bobbin code with a corresponding single volumetric indication (SVI) RPC code while the other three tubes (46-67, 47-66, & 48-74) were classified as freespan differential (FSD) indications, generally a non-repairable condition per the ComEd guidelines. However, due to the scale/deposit build up discovered on all four tubes and the FSI-SVI classification of one of the tubes, all tubes were plugged. The three tubes (46-67, 47-66, & 48-74) were preventatively plugged.

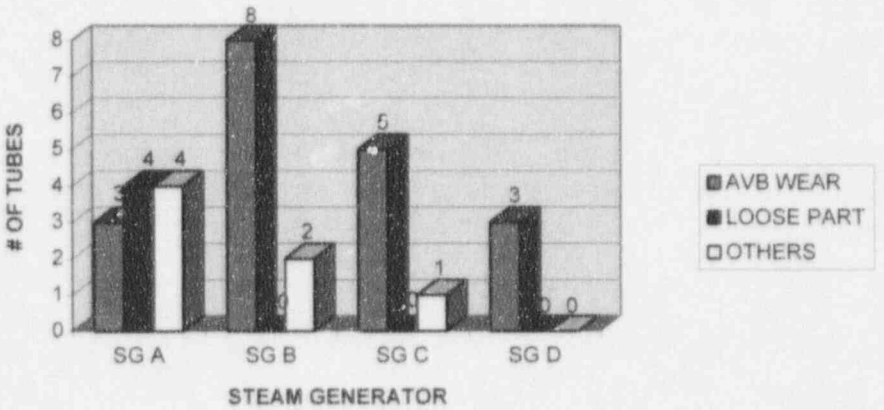
SG B - One of the tubes (1-2) in SG B was preventatively plugged due to a geometry change on the inside of the tube that caused the probe to skip over a section of tubing, thus not allowing a complete exam in the U-Bend region. The other tube (20-57) in SG B was plugged as a result of an indication that exhibited an OD originating volumetric indication at 2C+0.76". During the initial bobbin inspection, this indication could not be quantified and was assigned a Non-

Quantifiable Indication (NQI) code. Bobbin historical review was conducted to determine growth from previous inspections. This review indicated that this indications exhibited minimal growth in both phase and amplitude. RPC was performed in this tube to further characterize this indication. This indication was determined to be non-crack like and dispositioned as a volumetric indication (SVI) per the ComEd guidelines. As a result of both reviews (historical and RPC), it was determined to remove this tube from service.

SG C - The tube (22-29) plugged in SG C was plugged as a result of an indication that exhibited an OD originating volumetric indication at 1H+0.75". During the initial bobbin inspection, this indication could not be quantified and was assigned a Non-Quantifiable Indication (NQI) code. Bobbin historical review was conducted to determine growth from previous inspections. This review indicated that this indications exhibited minimal growth in both phase and amplitude. RPC was performed in this tube to further characterize this indication. This indication was determined to be non-crack like and dispositioned as a volumetric indication (SVI) per the ComEd guidelines. As a result of both reviews (historical and RPC), it was determined to remove this tube from service.

*Note: See chart below for tubes repaired during B2R06 by steam generator.

REPAIRABLE INDICATION TYPES IN EACH STEAM GENERATOR



6.0 REPAIRS

Repairs were conducted in accordance with ASME Section XI, 1983 Edition through Summer 1983 Addenda for plugging. Attachment 2 of this report documents all repairs performed for each steam generator by using the NIS-2s. All repairs were performed using Inconel-690 mechanical plugs. Also, all repairs were done in accordance with Framatome approved procedures. Table 6.1 depicts the repairs conducted during B2R06.

TABLE 6.1

REPAIRS CONDUCTED	SG A	SG B	SG C	SG D	TOTAL
Tubes Plugged	11*	10	6	3	30

* Tube 16-110 had a cable stabilizer installed in the Cold Leg prior to plugging.

Note: Table 3 is a listing of all tubes repaired during B2R06. Figure 5 displays the tubesheet maps of all tubes plugged during B2R06.

7.0 DOCUMENTATION

All original optical disks have been provided to ComEd and are maintained at Byron Station. The final data sheets and pertinent tube sheet plots are contained in the Framatome Byron Unit 2 Final Outage Report, August 1996, and are also maintained at Byron Station.

8.0 FIGURES/TABLES/ATTACHMENTS

8.1 Figure 1A: 2A SG Inspection Scope
Figure 1B: 2B SG Inspection Scope
Figure 1C: 2C SG Inspection Scope
Figure 1D: 2D SG Inspection Scope

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8.3 Figure 3A: 2A AVB Wear Indications
Figure 3B: 2B AVB Wear Indications
Figure 3C: 2C AVB Wear Indications
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Table 2B: 2B SG ASME Form NIS-BB
Table 2C: 2C SG ASME Form NIS-BB
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8.6 Attachment 1: ASME Form NIS-1

8.7 Attachment 2A: 2A SG ASME Form NIS-2
Attachment 2B: 2B SG ASME Form NIS-2
Attachment 2C: 2C SG ASME Form NIS-2
Attachment 2D: 2D SG ASME Form NIS-2

8.8 Table 3: SG Tubes Repaired

8.9 Figure 4A: 2A SG Tubes Plugged During B2R06
Figure 4B: 2B SG Tubes Plugged During B2R06
Figure 4C: 2C SG Tubes Plugged During B2R06
Figure 4D: 2D SG Tubes Plugged During B2R06

8.1 Figure 1A/B/C/D: 1A/B/C/D SG Inspection Scopes (See Attached):

Steam Generator A:

1) Figure 1A.1: 2A SG Bobbin Inspection Scope
2) Figure 1A.2: 2A SG HL RPC TTS Inspection Scope
3) Figure 1A.3: 2A SG U-Bend Plus-Point Inspection Scope
4) Figure 1A.4: 2A SG Pre-Heater Section RPC Inspection Scope

Steam Generator B:

1) Figure 1B.1: 2B SG Bobbin Inspection Scope
2) Figure 1B.2: 2B SG HL RPC TTS Inspection Scope
3) Figure 1B.3: 2B SG U-Bend Plus-Point Inspection Scope

Steam Generator C:

1) Figure 1C.1: 2C SG Bobbin Inspection Scope
2) Figure 1C.2: 2C SG HL RPC TTS Inspection Scope
3) Figure 1C.3: 3C SG U-Bend Plus-Point Inspection Scope

Steam Generator D:

1) Figure 1D.1: 2D Bobbin Inspection Scope
2) Figure 1D.2: 2D SG HL RPC TTS Inspection Scope
3) Figure 1D.3: 2D SG U-Bend Plus-Point Inspection Scope

Figure 1A.1: 2A SG Bobbin Inspection Scope

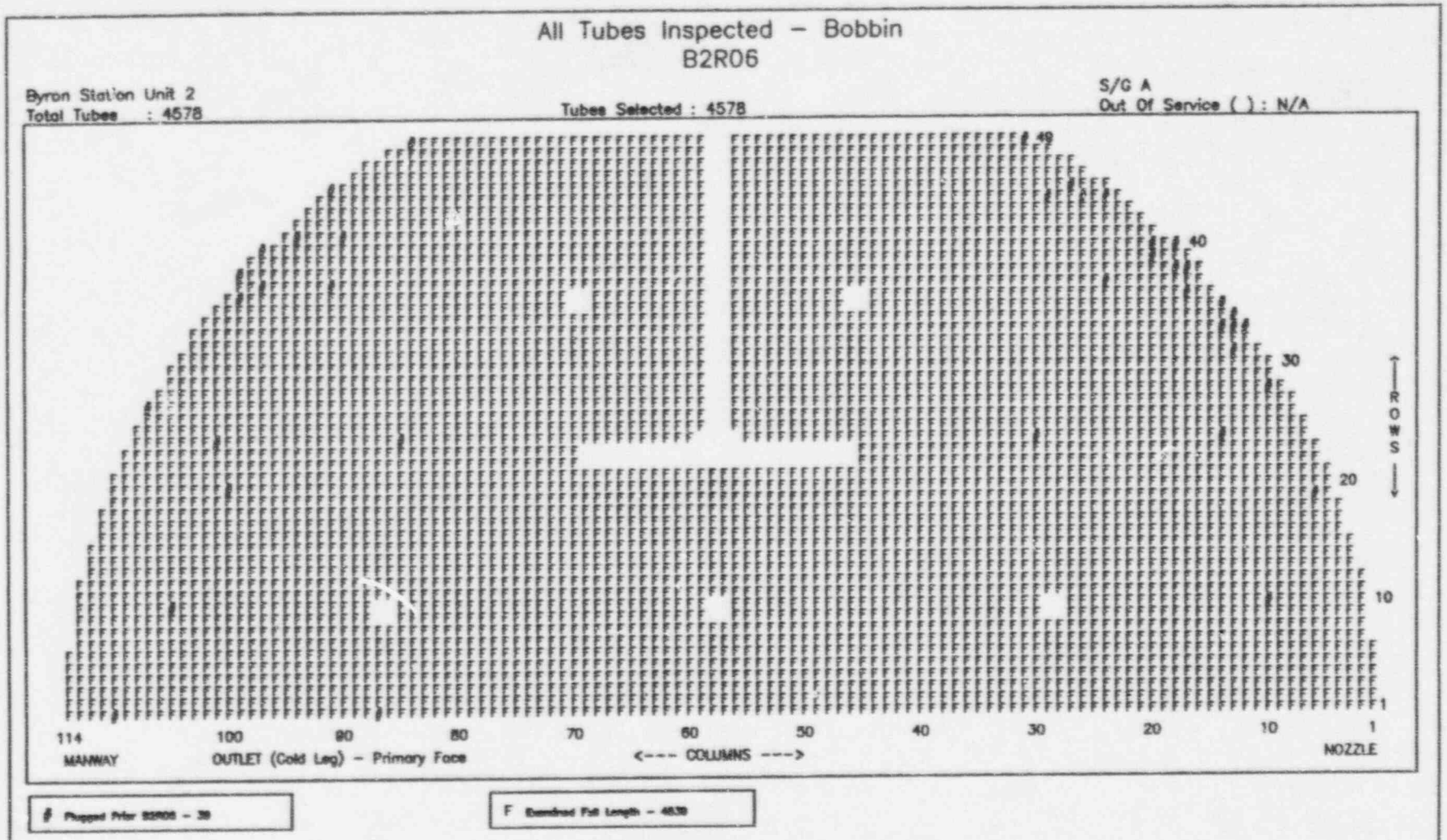


Figure 1A.2: 2A SG HL RPC TTS Inspection Scope

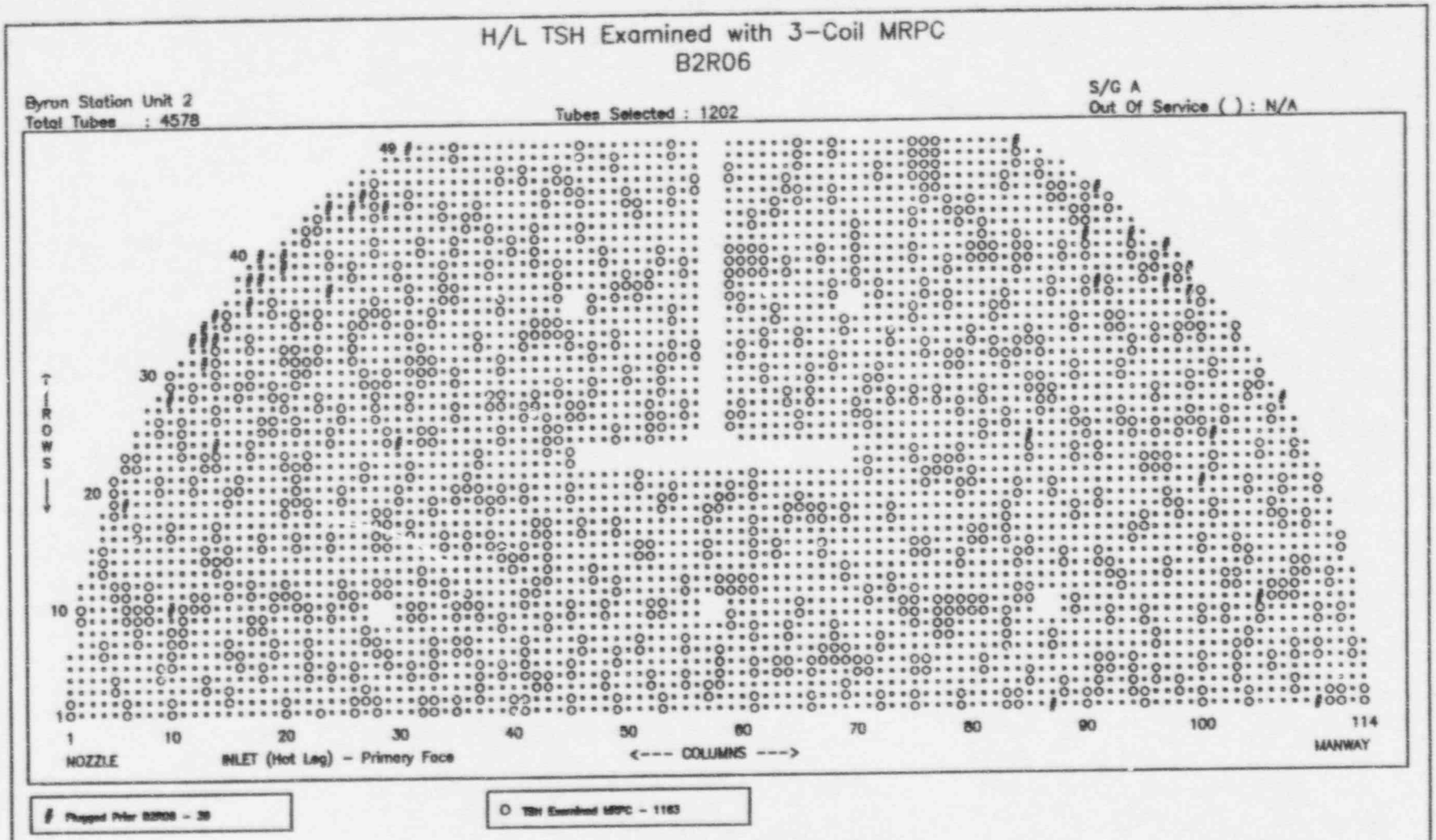


Figure 1A.3: 2A SG U-Bend Plus-Point Inspection Scope

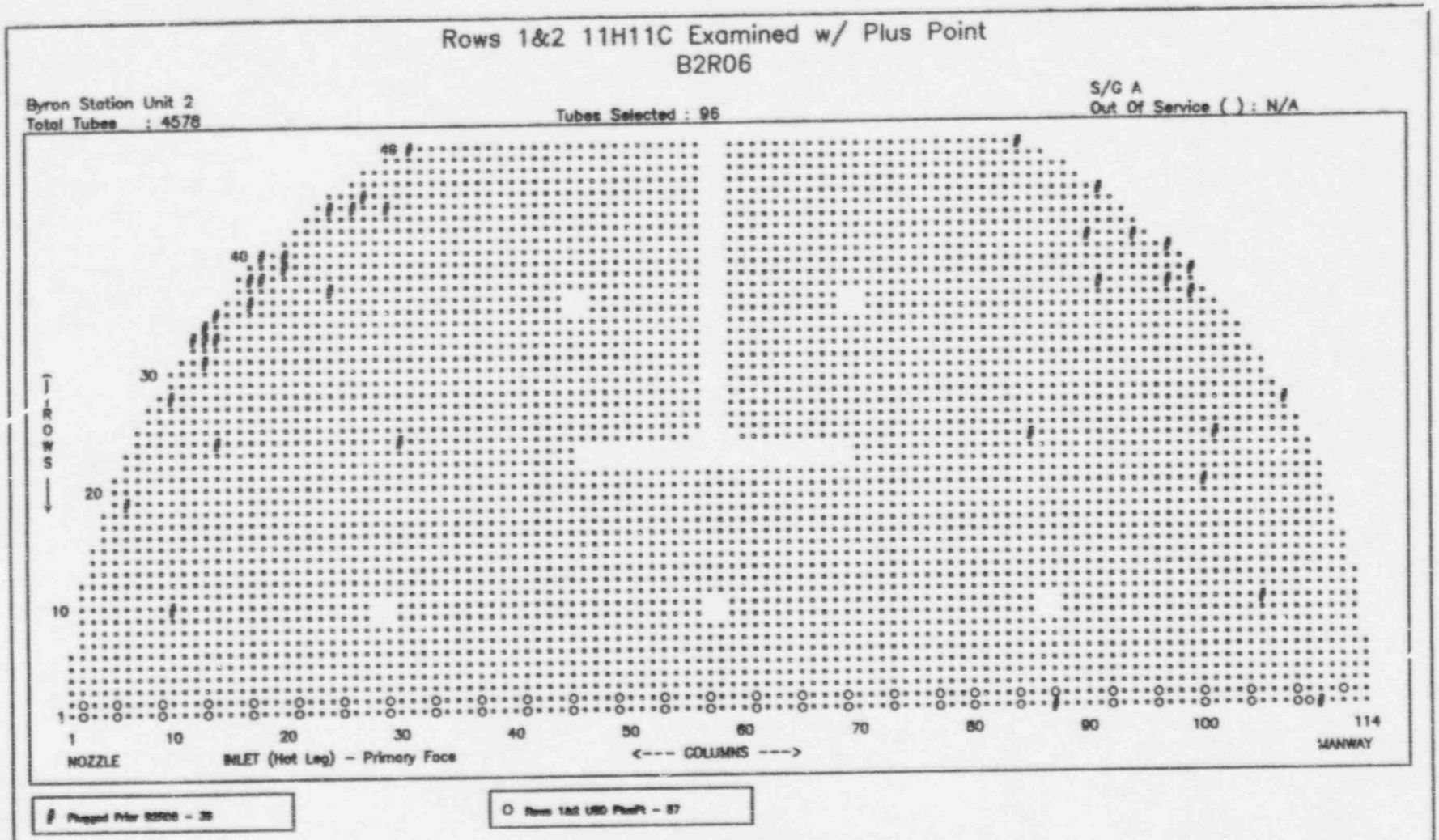


Figure 1A.4: 2A SG Pre-Heater Section RPC Inspection Scope

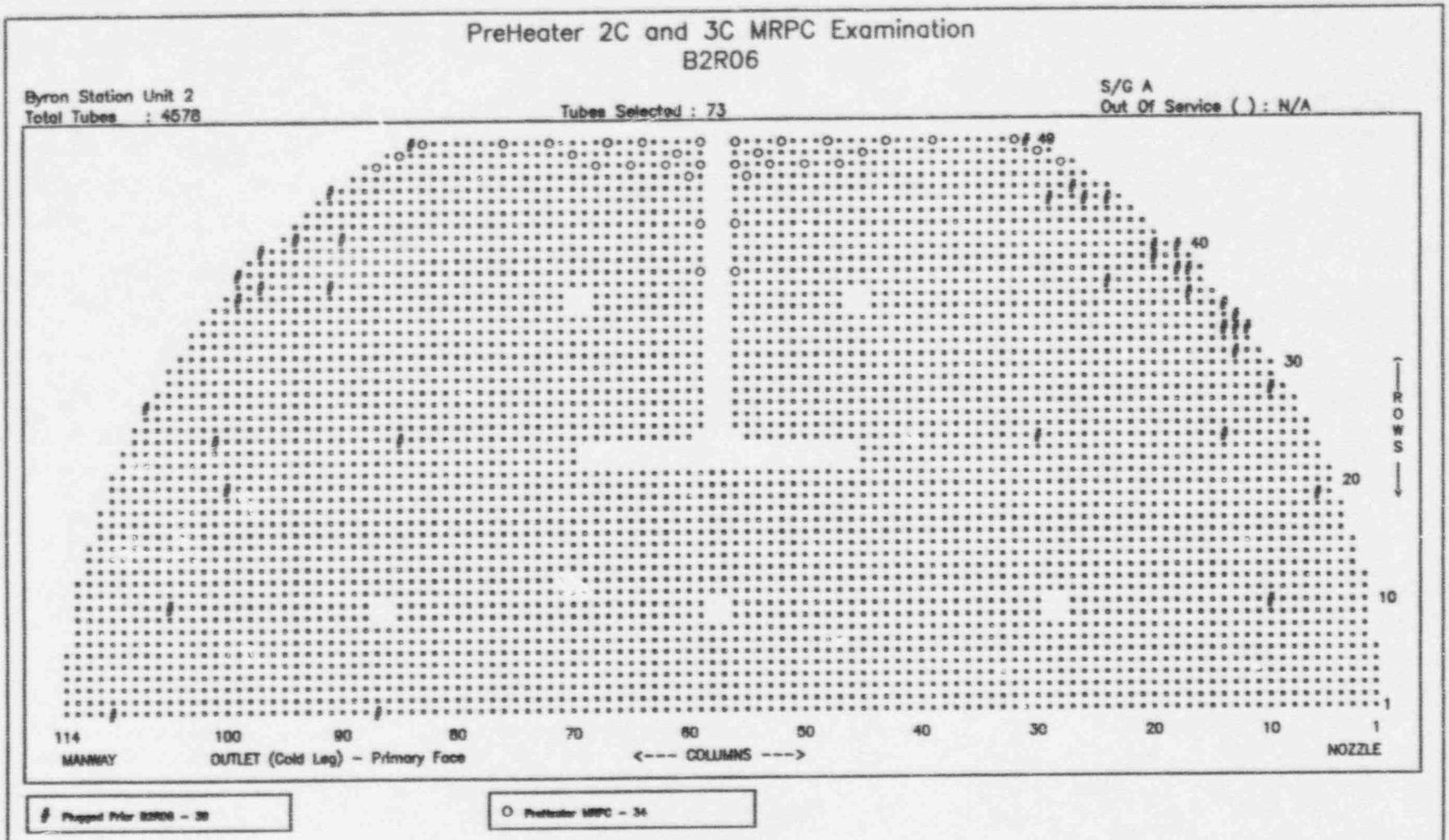


Figure 1B.1: 2B SG Bobbin Inspection Scope

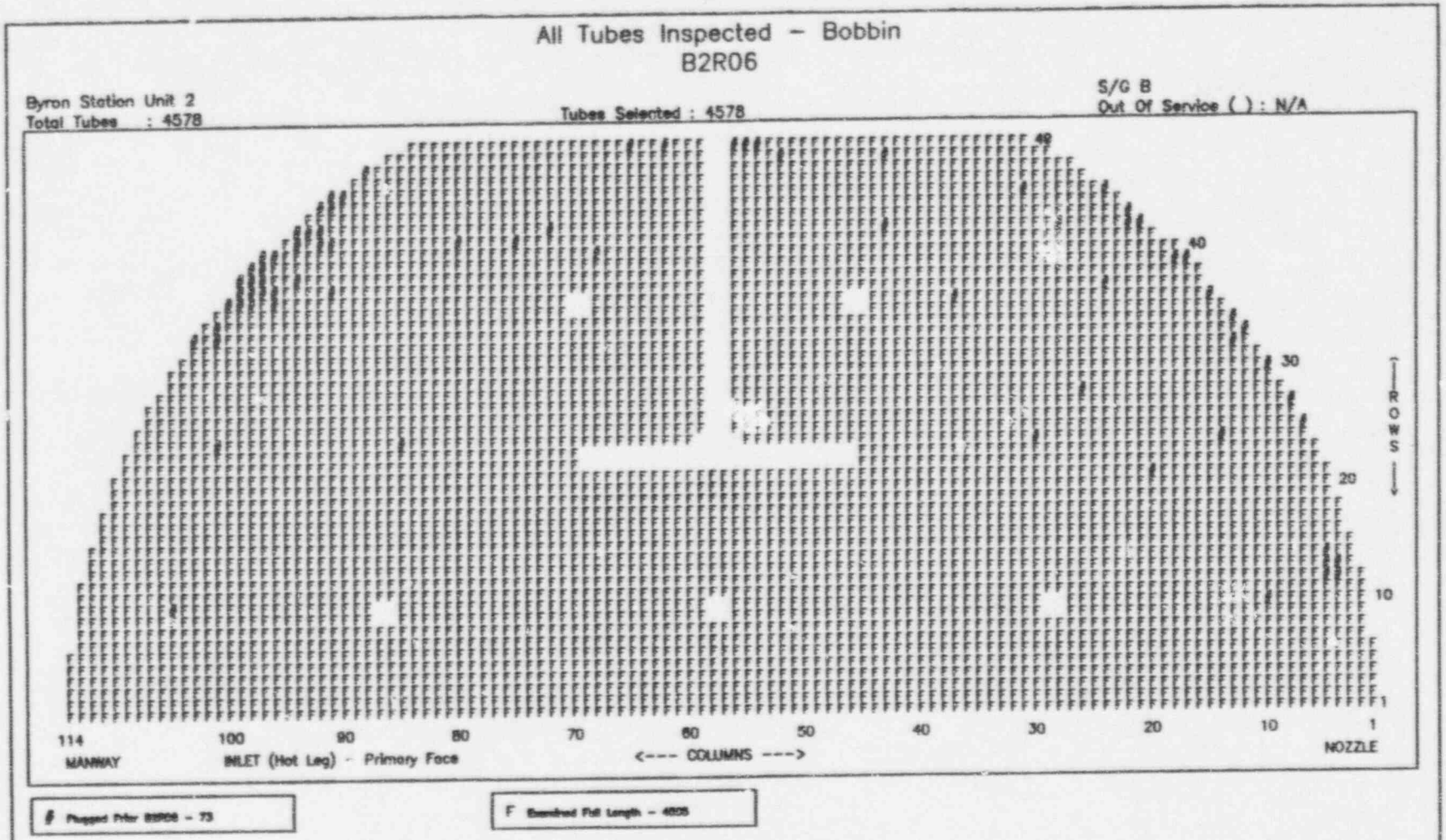


Figure 1B.2: 2B SG HL RPC TTS Inspection Scope

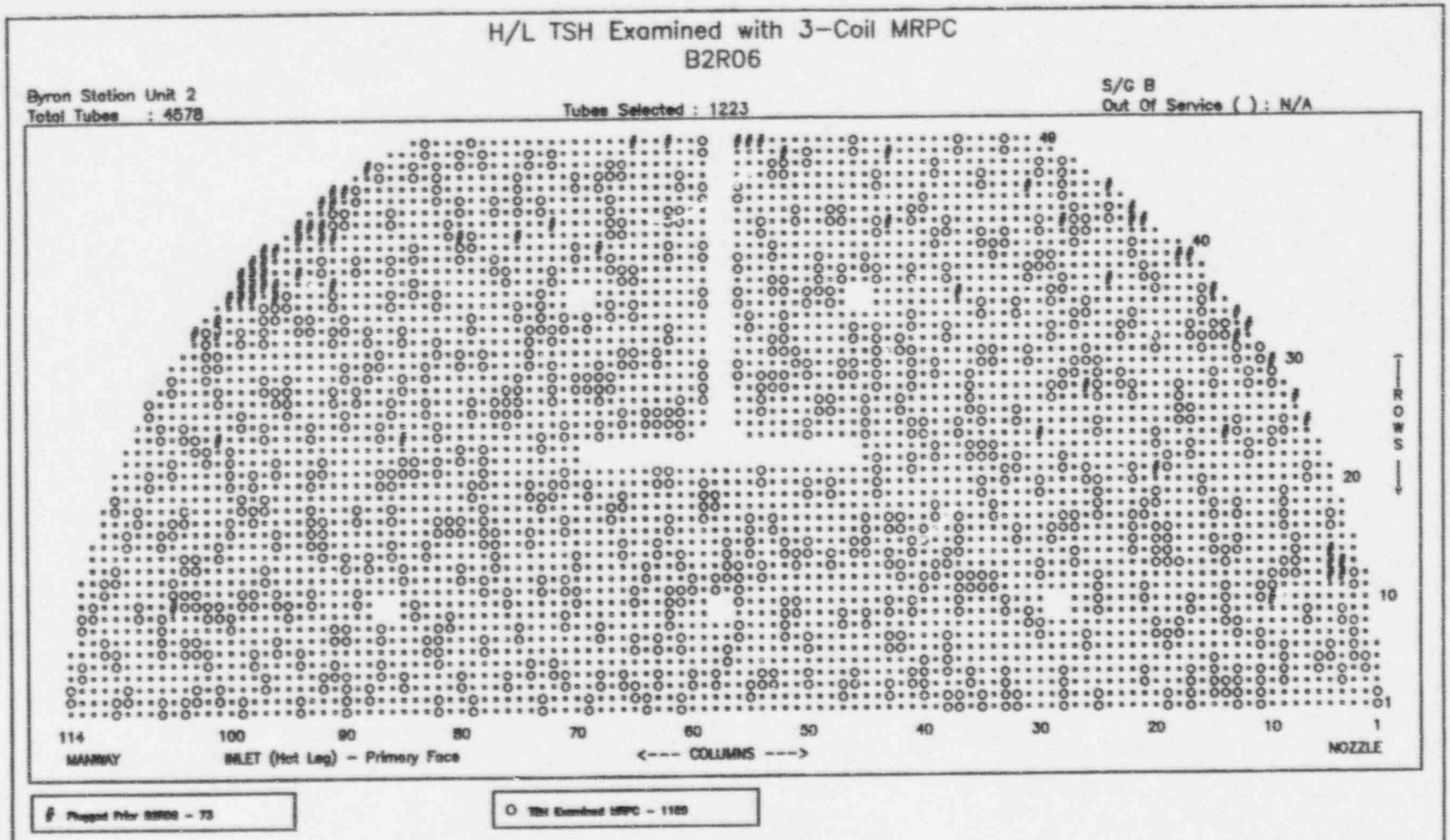


Figure 1B.3: 2B SG U-Bend Plus-Point Inspection Scope

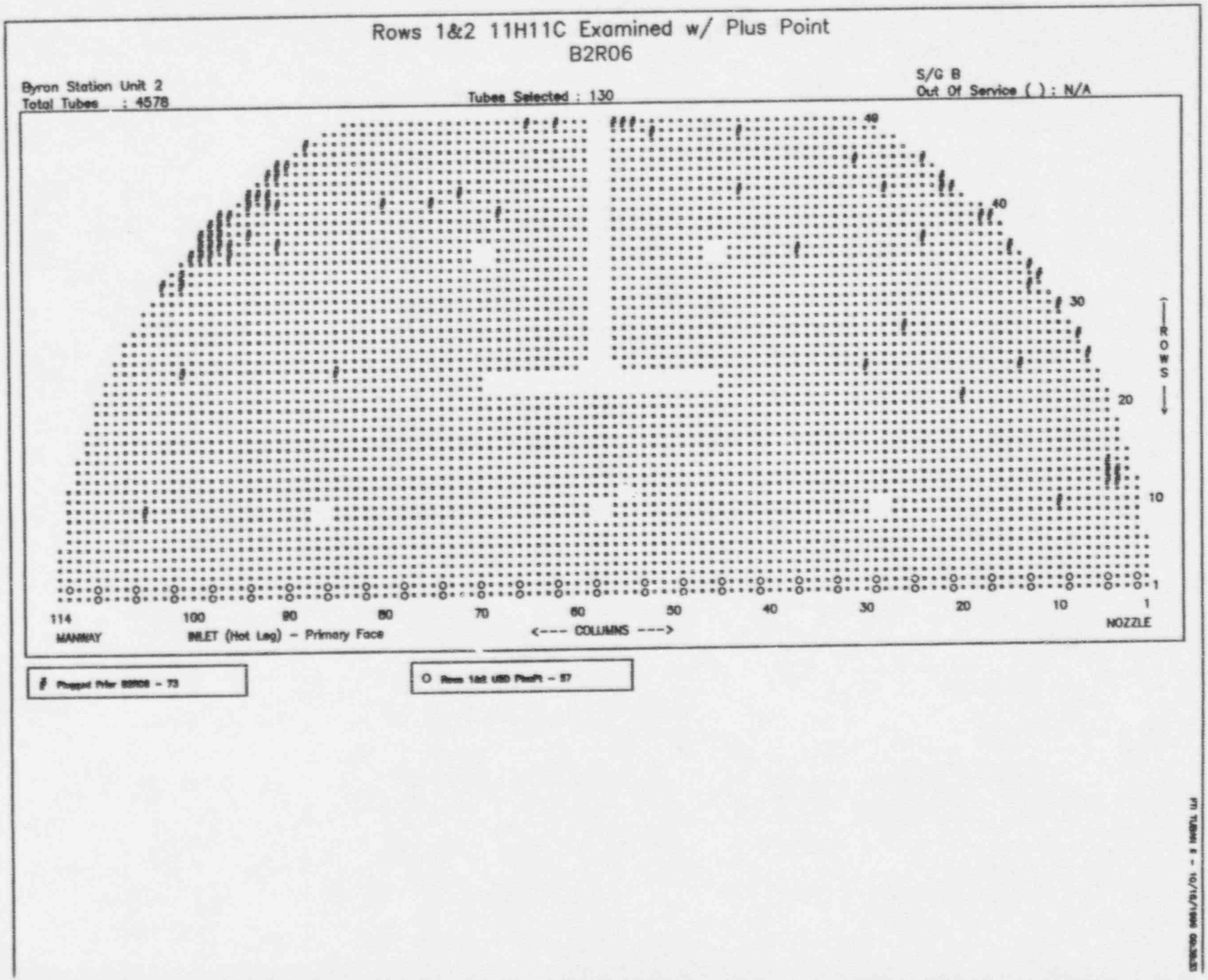


Figure 1C.1: 2C SG Bobbin Inspection Scope

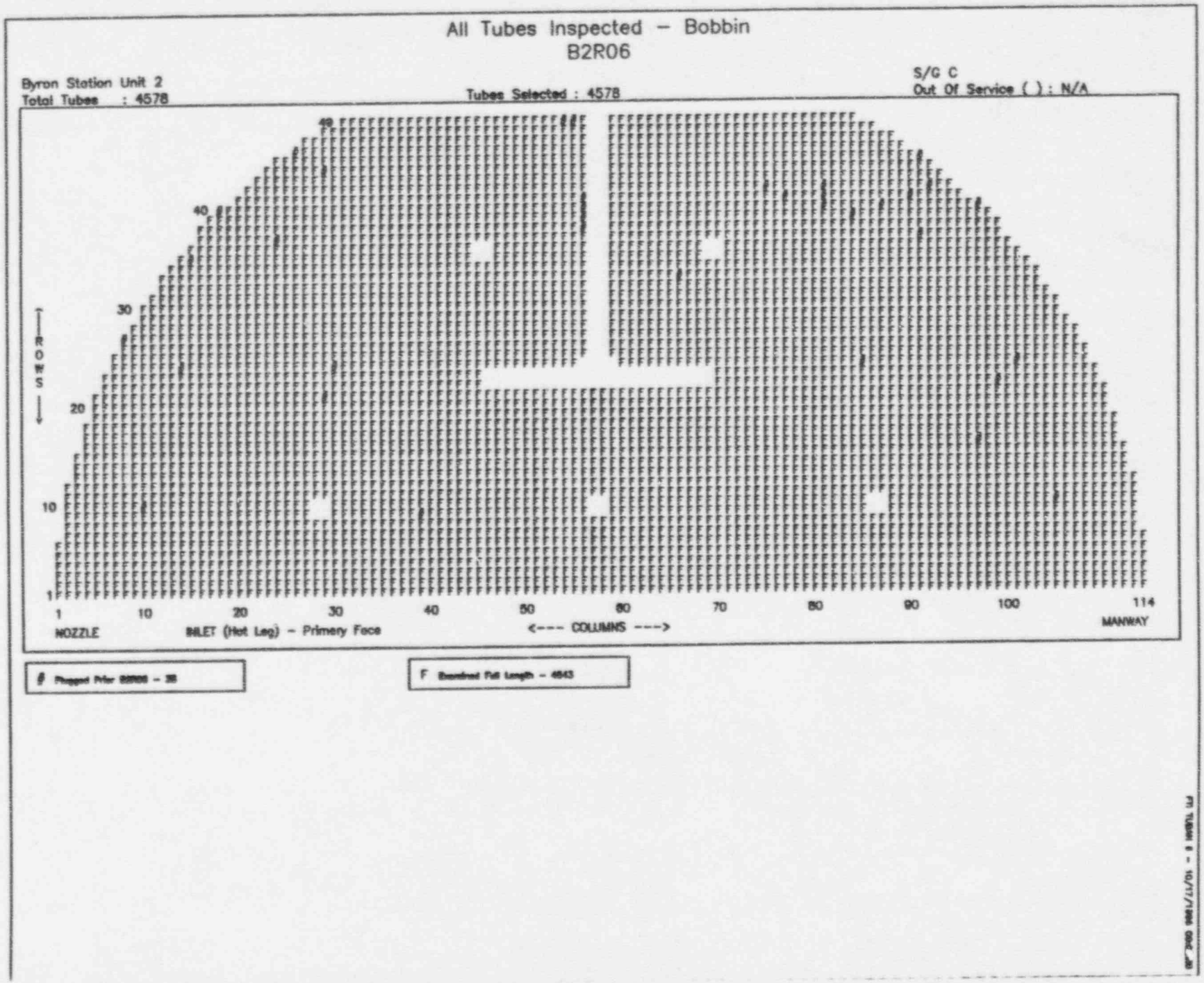


Figure 1C.2: 2C SG HL RPC TTS Inspection Scope

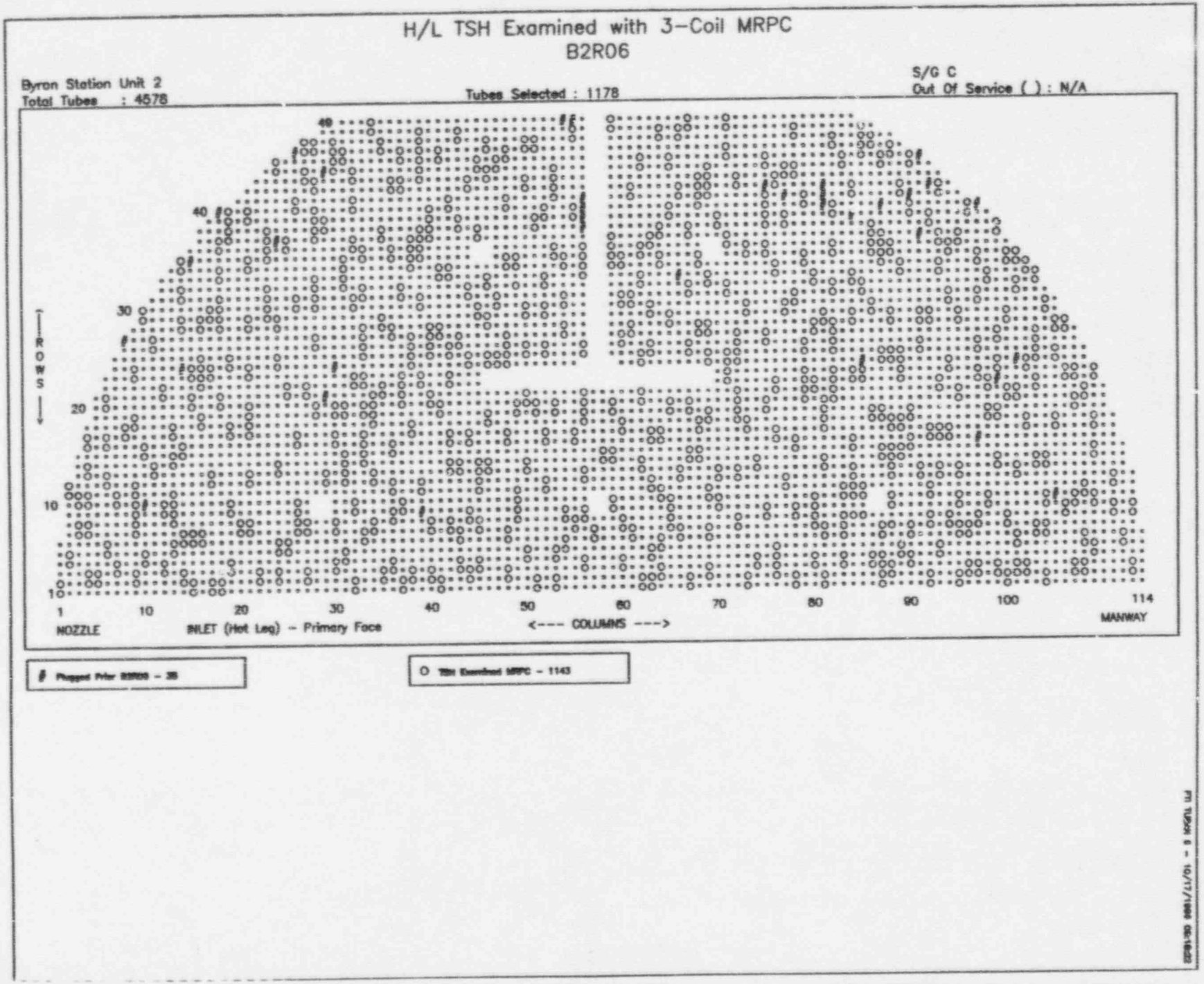


Figure 1C.3: 3C SG U-Bend Plus-Point Inspection Scope

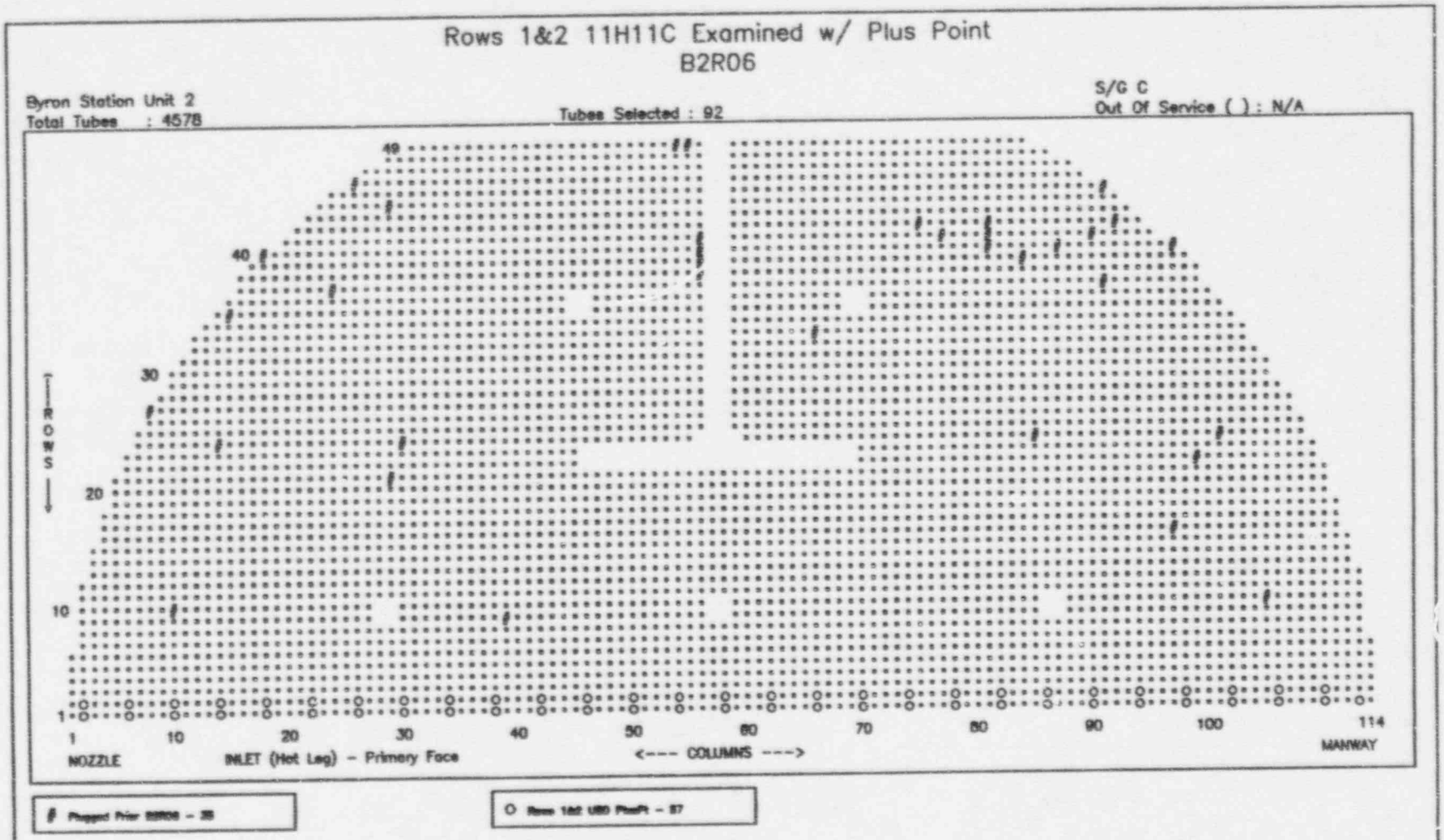


Figure 1D.1: 2D Bobbin Inspection Scope

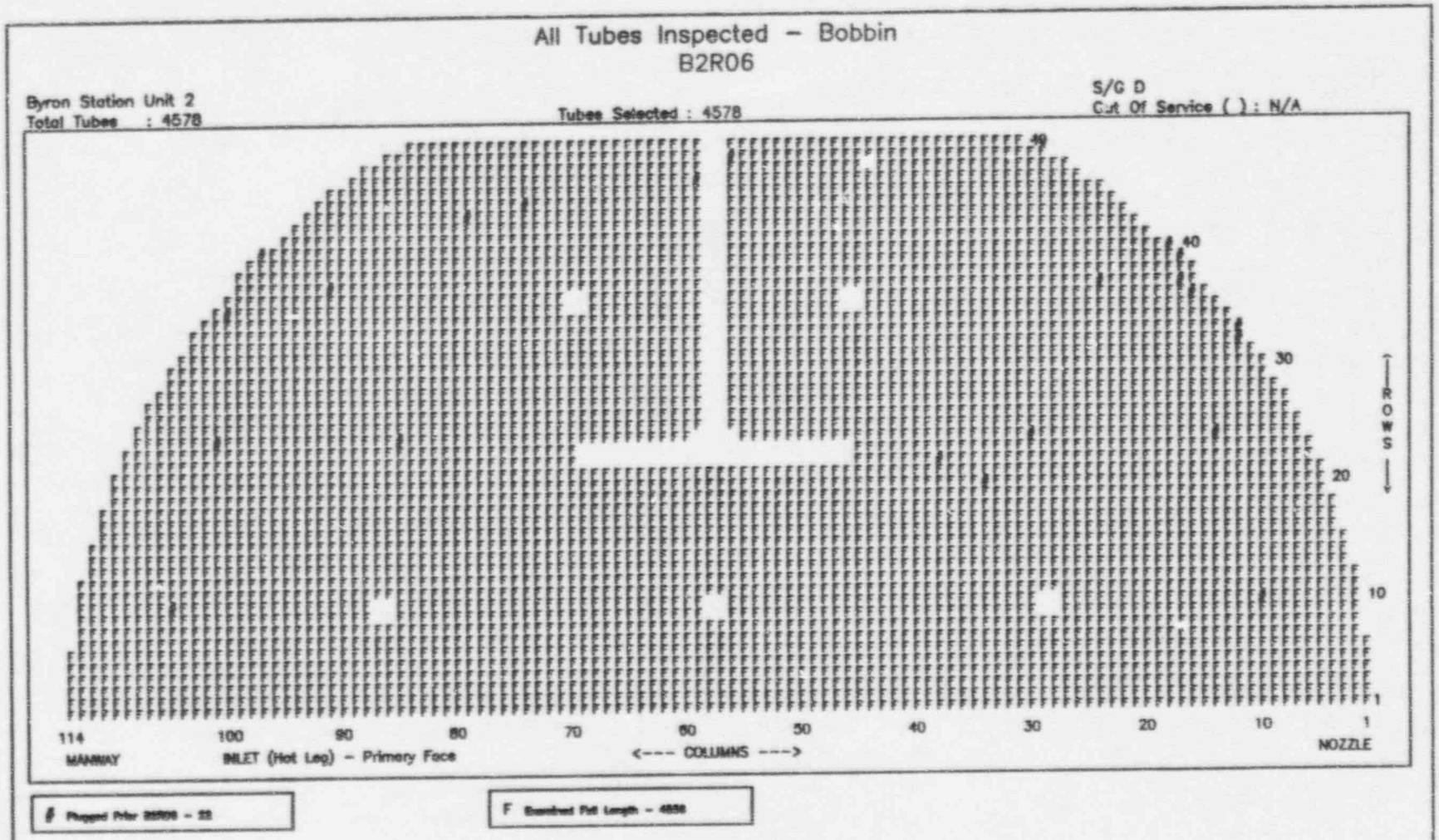


Figure 1D.2: 2D SG HL RPC TTS Inspection Scope

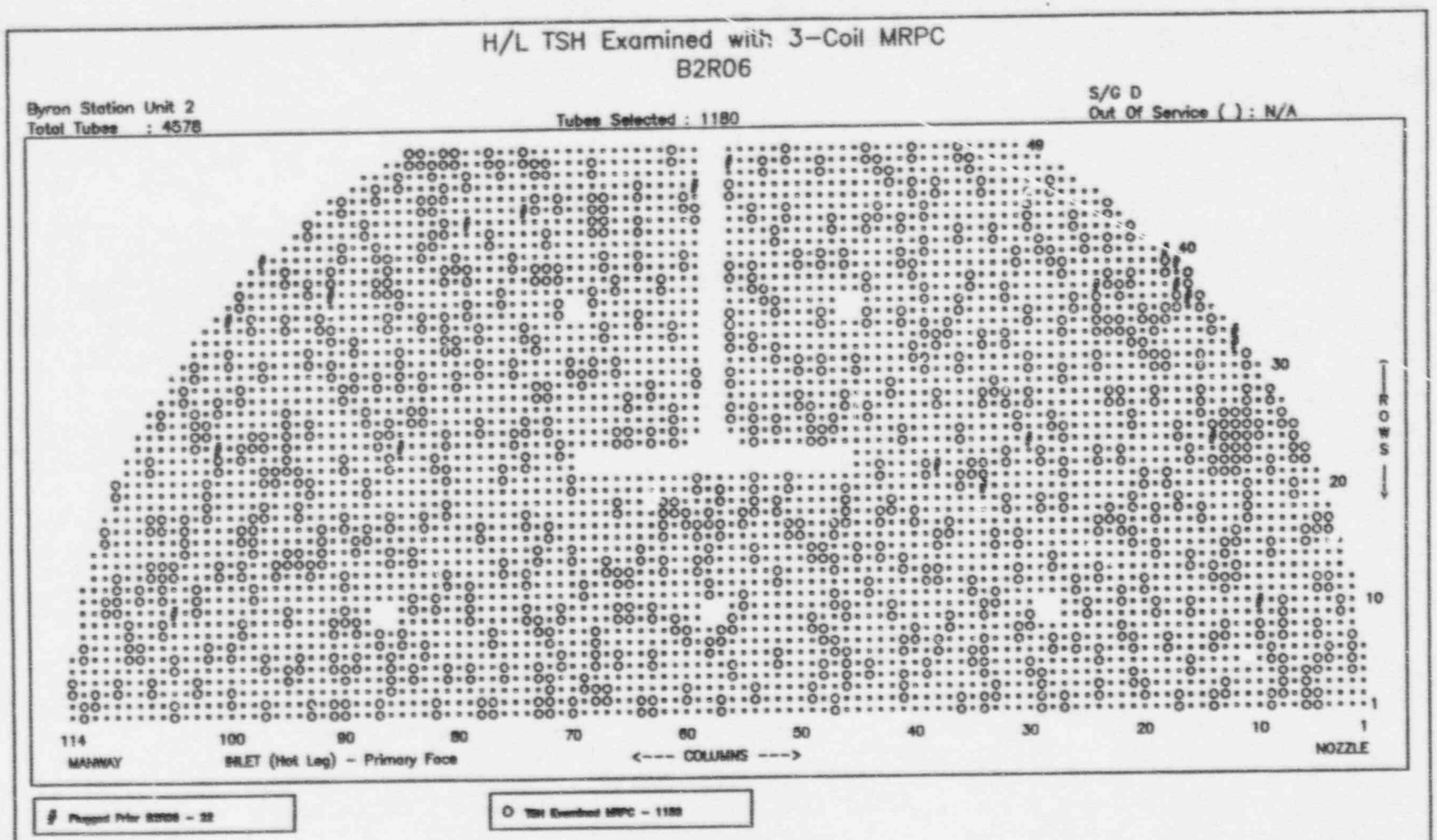
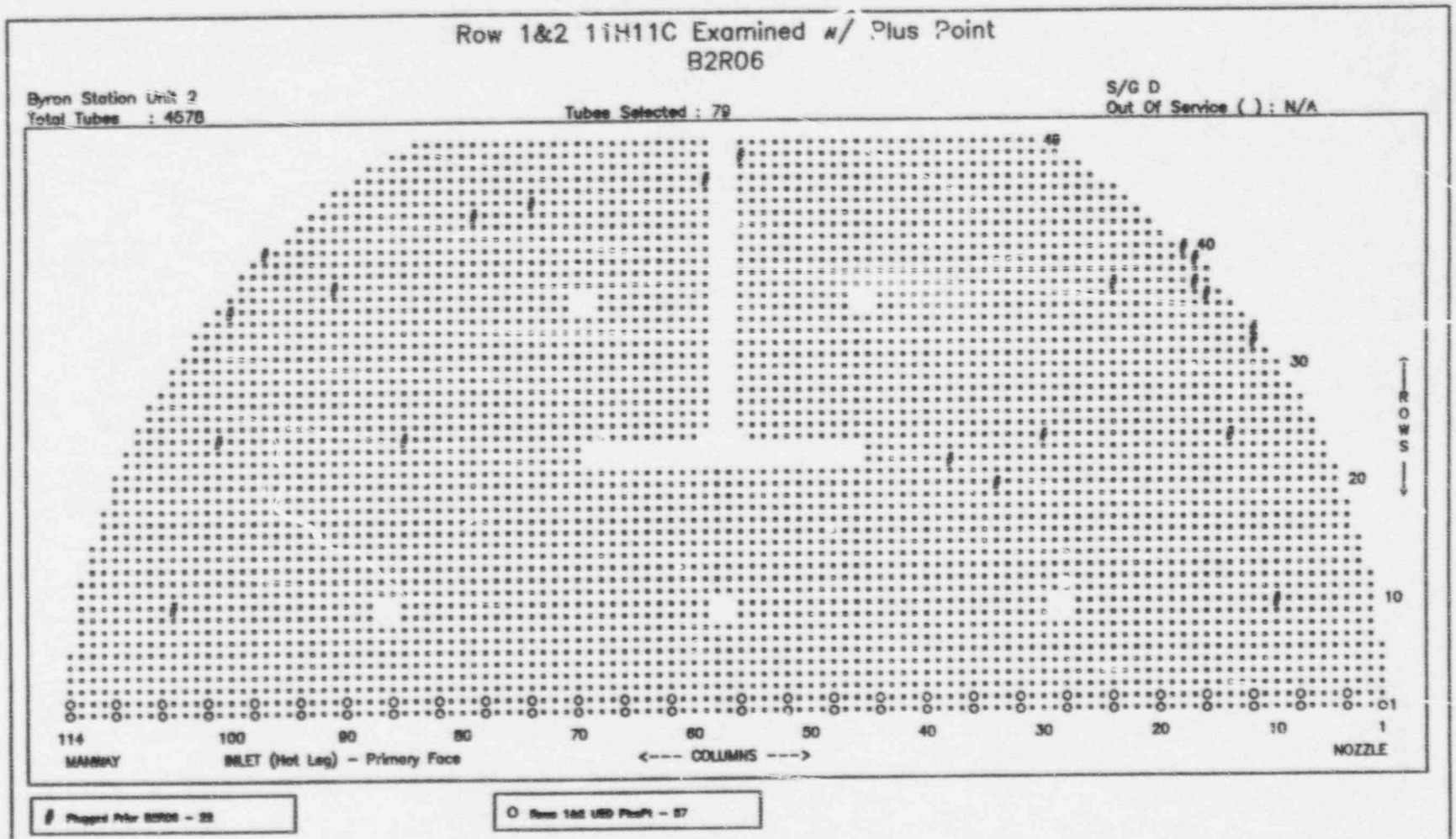


Figure 1D.3: 2D SG U-Bend Plus-Point Inspection Scope



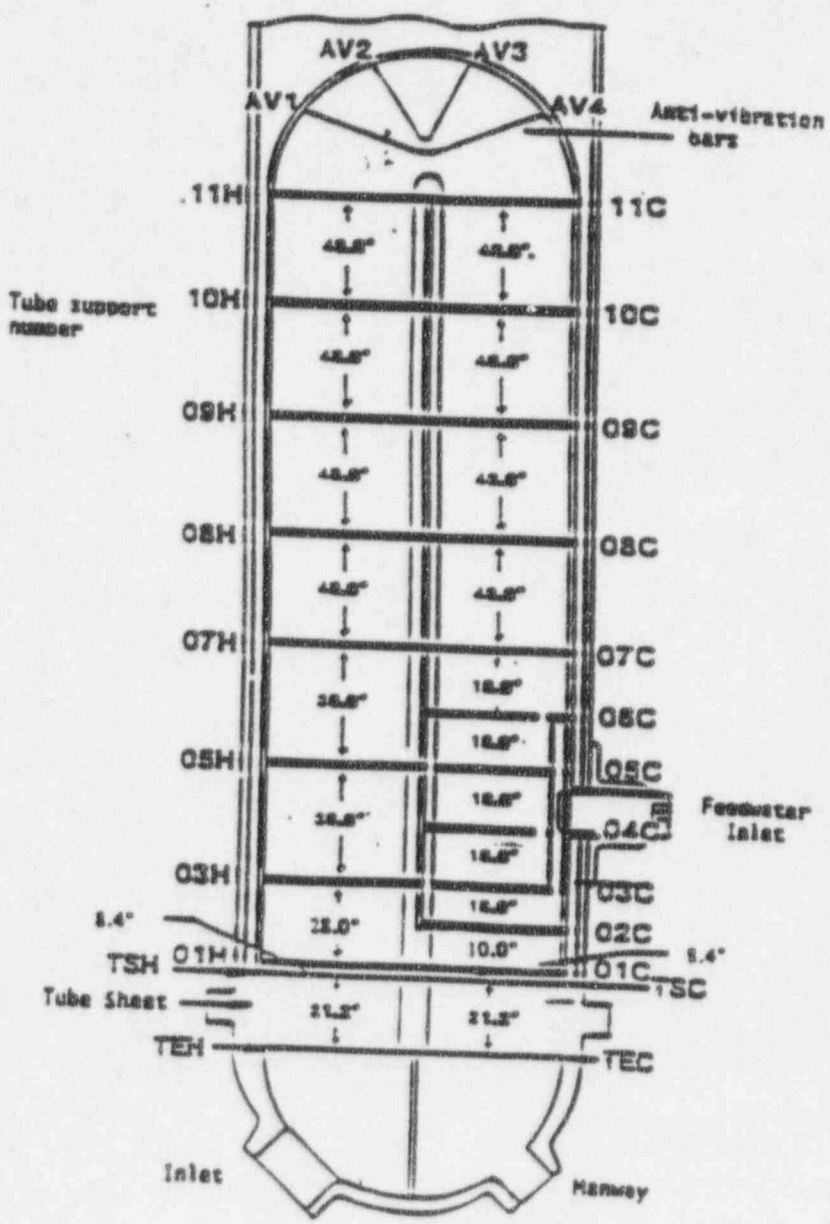


Figure 2: Model D-5 Support Configuration

Figure 3A: 2A AVB Wear Indications

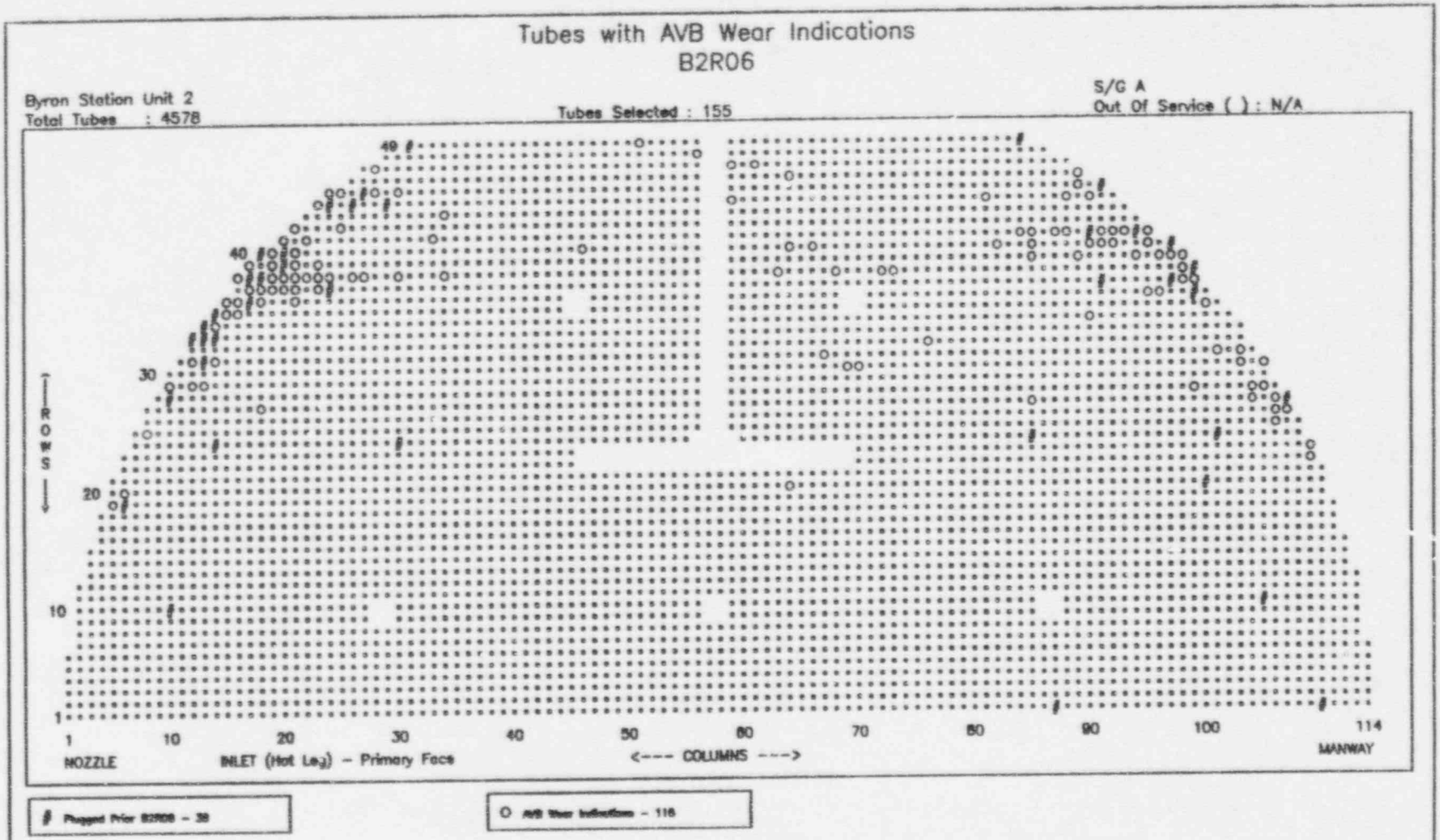


Figure 3B: 2B AVB Wear Indications

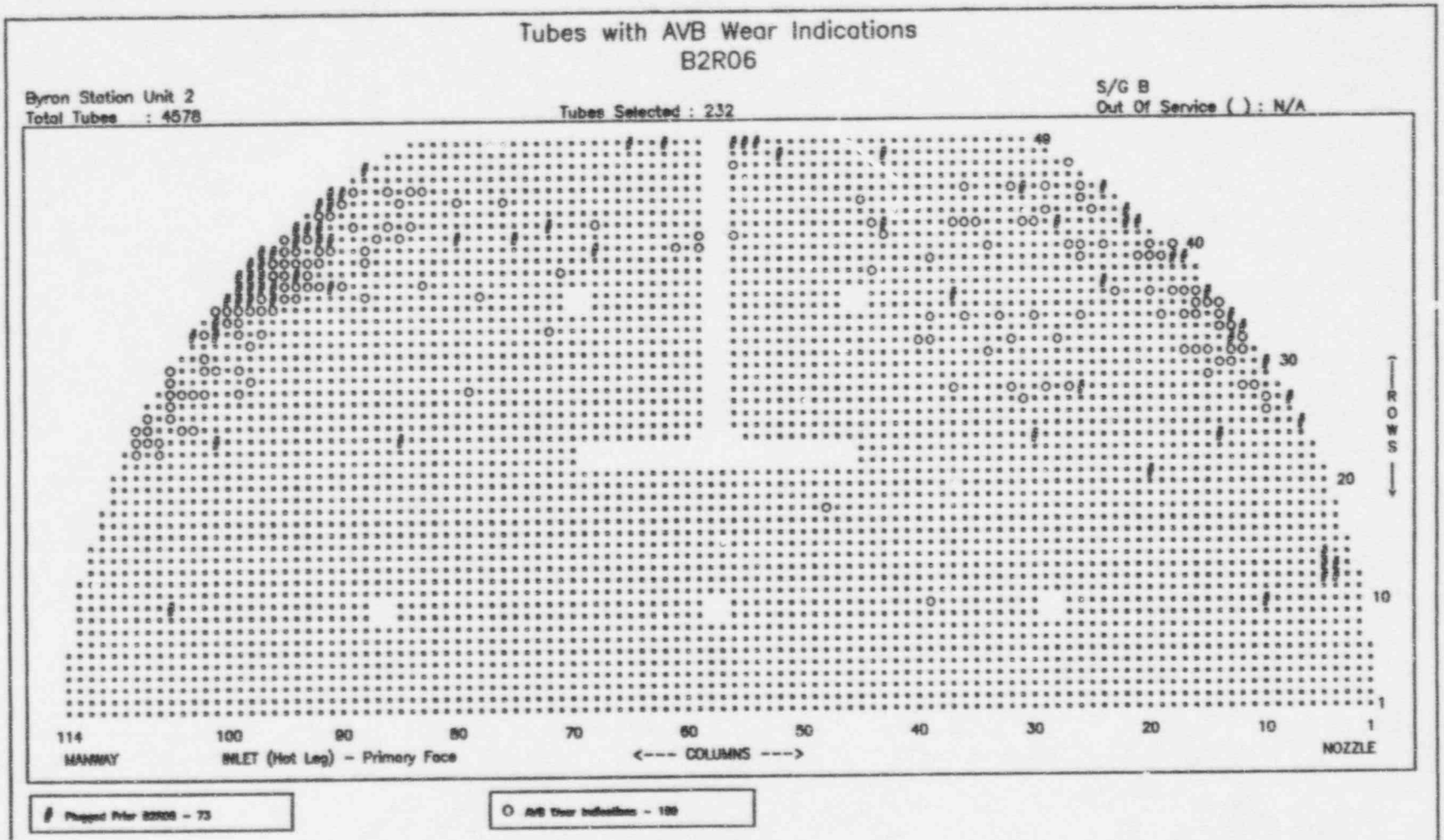


Figure 3C: 2C AVB Wear Indications

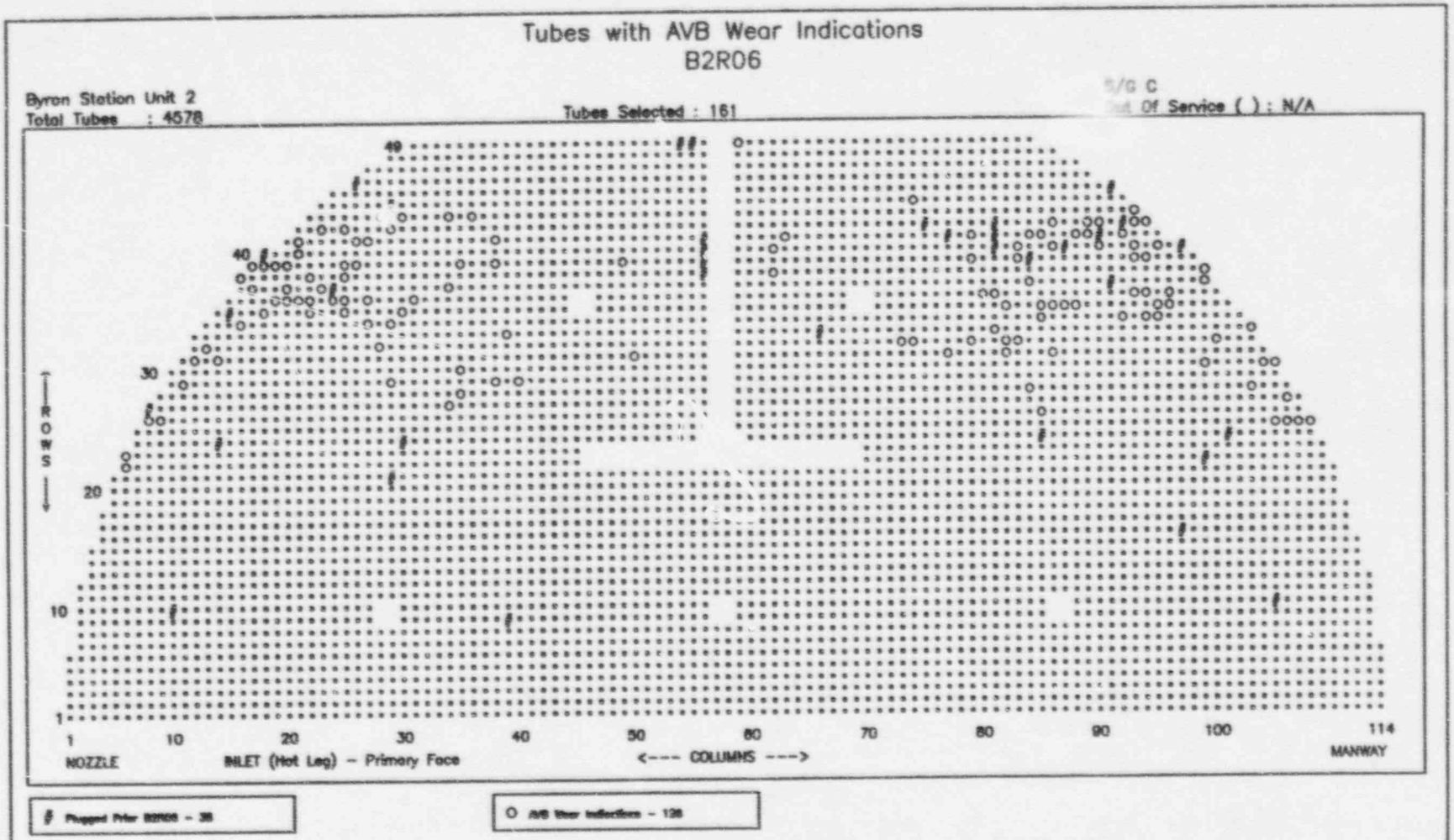


Figure 3D: 2D AVB Wear Indications

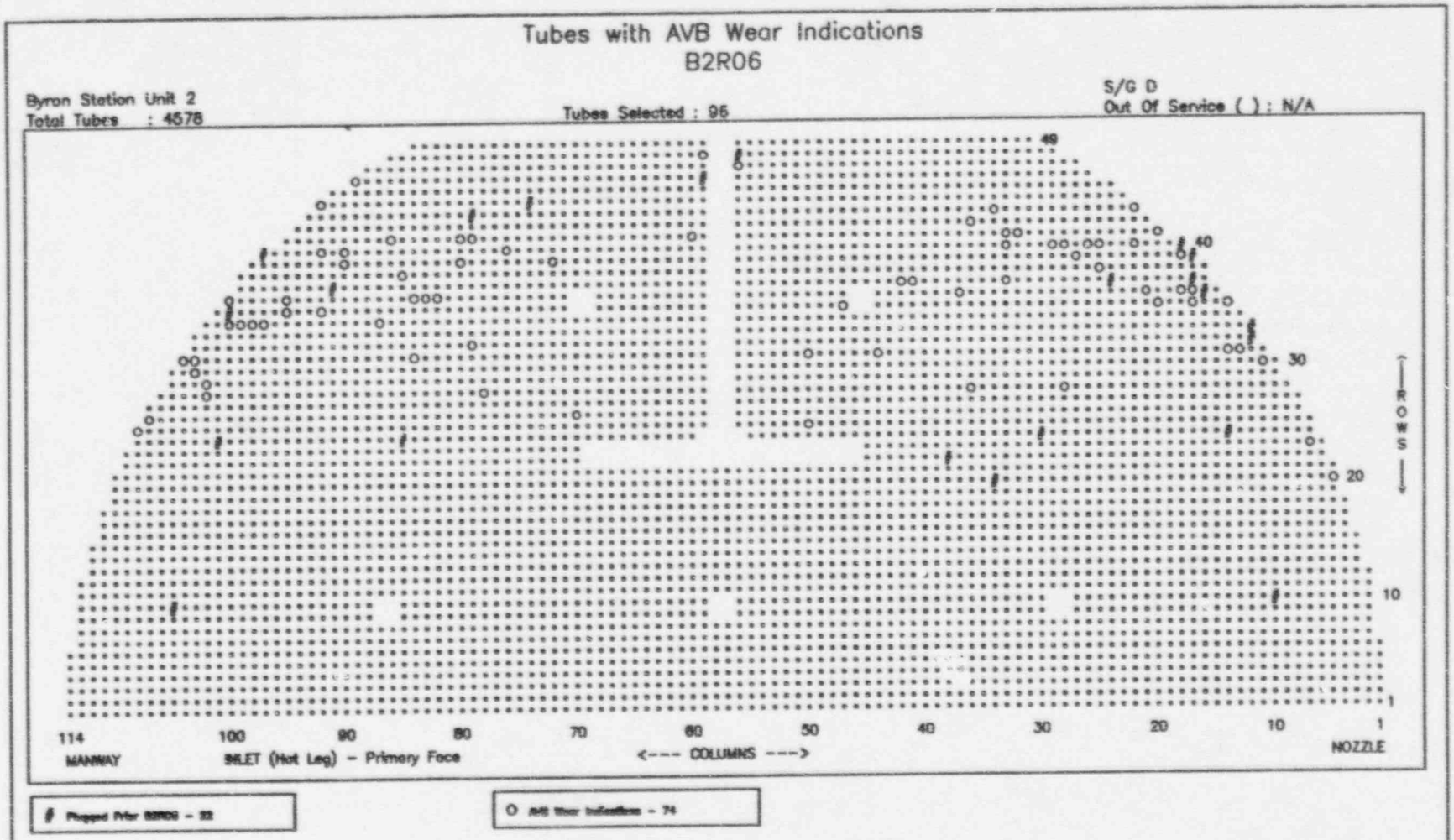


Table 1: Personnel Certifications

NO.	NAME	COMPANY	AN/AQ	LEVEL	QDA (Y/N)	EXPIRATION DATE		
						CERT	VISION	ANII
1	Barnes, Robert	Framatome	AN	III	Y	8/8/98	11/26/96	Y
2	Bridgforth, W.D. (*)	Framatome	AN	IIA	Y	3/14/97	2/19/97	Y
3	Cooper, Lawrence	Framatome	AN	IIA	Y	3/6/97	2/15/97	Y
4	Johnson, K. L. (*)	Framatome	AN	IIA	Y	2/24/97	11/6/96	Y
5	Korkowski, Edward	Framatome	AN	IIA	Y	1/20/99	10/30/96	Y
6	Kovalesky, Thomas	Framatome	AN	IIA	Y	11/10/97	1/10/97	Y
7	Loer, M. S.	Framatome	AN	IIA	Y	4/3/97	2/15/97	Y
8	Martin, Alfred	Framatome	AN	IIA	Y	2/8/97	1/10/97	Y
9	Oliver, John	Framatome	AN	IIA	Y	3/15/97	8/14/97	Y
10	Parrish, John	Framatome	AN	IIA	Y	12/17/96	8/14/97	Y
11	Porter, Michael	Framatome	AN	IIA	Y	2/21/97	3/7/97	Y
12	Ribarc, Thomas	Framatome	AN	IIA	Y	3/15/97	2/18/97	Y
13	Schlicht, Wayne	Framatome	AN	IIA	Y	3/3/97	2/20/97	Y
14	Schwenn, J. S.	Framatome	AN	IIA	Y	1/6/97	6/5/97	Y
15	Washburn, Teresea	Framatome	AN	IIA	Y	9/8/96	6/13/97	Y
16	Bowen, Edward	Rockridge	AN	IIA	Y	12/17/96	9/24/96	Y
17	Caperello, Matthew	Rockridge	AN	IIA	Y	7/12/98	6/19/97	Y
18	Defilippis, Nick	Rockridge	AN	IIA	Y	2/9/99	6/9/97	Y
19	Dugas, Kenneth	Rockridge	AN	IIA	Y	7/29/97	1/22/97	Y
20	Fuller, Curtis	Rockridge	AN	IIA	Y	8/20/99	6/16/97	Y
21	Gortemiller, Cheryl	Rockridge	AN	III	Y	1/11/97	8/18/97	Y
22	Hall, Kerry	Rockridge	AN	IIA	Y	5/11/98	6/14/97	Y
23	Herrara, Gerald	Rockridge	AN	IIA	Y	2/7/98	6/13/97	Y
24	Holden, Thomas	Rockridge	AN	III	Y	9/17/97	8/14/97	Y
25	Janet, Jerome	Rockridge	AN	IIA	Y	2/8/98	3/18/97	Y
26	Jones, Mark	Rockridge	AN	IIA	Y	11/23/97	1/8/97	Y
27	Kerson, Chuck	Rockridge	AN	IIA	Y	12/17/96	12/10/96	Y
28	Lofgren, Robert	Rockridge	AN	IIA	Y	12/8/96	11/9/96	Y
29	Merriam, Richard	Rockridge	AN	III	Y	11/7/97	8/12/97	Y
30	Mui, Anthony	Rockridge	AN	IIA	Y	1/24/98	9/24/96	Y
31	Nethercott, James	Rockridge	AN	IIA	Y	2/9/98	6/16/97	Y
32	Rayburn, Donald	Rockridge	AN	IIA	Y	8/4/98	6/9/97	Y
33	Shibley, David	Rockridge	AN	IIA	Y	7/13/98	12/4/96	Y
34	Alspaugh, Kenneth (*)	Zetec	AN	IIA	Y	12/11/98	12/26/96	Y
35	Darrah, Jerry	Zetec	AN	III	Y	1/21/94	11/28/96	Y
36	Driessen, Nathan	Zetec	AN	IIA	Y	1/20/98	11/20/96	Y
37	Farenbaugh, Neil	Zetec	AN	III	Y	7/22/97	2/12/97	Y
38	Ferdinand, Michael	Zetec	AN	IIA	Y	6/23/98	2/19/97	Y
39	Ginther, Charles	Zetec	AN	III	Y	11/2/98	5/6/97	Y
40	Gray, Wayne	Zetec	AN	III	Y	1/25/99	3/11/97	Y
41	Isakson, Michael	Zetec	AN	IIA	Y	12/17/96	3/18/97	Y
42	Lucier, Lewis	Zetec	AN	III	Y	11/22/98	7/26/96	Y

Table 1: Personnel Certifications

NO.	NAME	COMPANY	AN/AQ	LEVEL	QDA (Y/N)	EXPIRATION DATE		ANII
						CERT	VISION	
43	Mayer, Daniel	Zetec	AN	IIA	Y	8/18/97	1/4/97	Y
44	Nelson, David	Zetec	AN	III	Y	12/15/98	6/3/97	Y
45	Nissely, Raymond	Zetec	AN	III	Y	4/29/97	12/7/96	Y
46	Notch, Paul	Zetec	AN	IIA	Y	12/17/96	2/26/97	Y
47	O'Laughlin, Michael	Zetec	AN	IIA	Y	1/21/97	3/13/97	Y
48	Rachiatore, Jeffrey	Zetec	AN	III	Y	9/2/98	5/2/97	Y
49	Schmitz, Kenneth	Zetec	AN	IIA	Y	1/20/98	2/1/97	Y
50	Tanner, Douglas	Zetec	AN	III	Y	5/20/99	6/30/97	Y
51	Almond, David (*)	Framatome	AQ	IT	N	1/29/99	1/29/97	Y
52	Colado, Lawrence	Framatome	AQ	IIA	Y	2/8/97	8/27/96	Y
53	Conner, Michael	Framatome	AQ	II	N	7/24/99	2/19/97	Y
54	Farrar, Curtis (*)	Framatome	AQ	IT	N	1/29/99	1/29/97	Y
55	Jett, Richard	Framatome	AQ	It	N	2/24/99	1/23/97	Y
56	Johnson, Albert	Framatome	AQ	It	N	1/24/99	1/23/97	Y
57	Keyes, Les	Framatome	AQ	I	N	3/7/99	7/7/97	Y
58	Pendergrass, Robert	Framatome	AQ	IIA	N	3/14/97	1/28/97	Y
59	Perkins, Ray	Framatome	AQ	IIA	N	9/17/98	8/7/97	Y
60	Phelps, Michael	Framatome	AQ	IT	N	1/12/98	1/21/97	Y
61	Taylor, Steven	Framatome	AQ	I	N	11/17/97	8/1/97	Y
62	Womack, J. (*)	Framatome	AQ	I	N	1/24/99	1/23/97	Y
63	Ashford, Gary (*)	Rockridge	AQ	II	N	11/24/96	12/7/96	Y
64	Bautisita, Mark	Rockridge	AQ	I	N	6/22/98	6/7/97	Y
65	Bolanos, Juan	Rockridge	AQ	I	N	2/16/99	2/1/97	Y
66	Boreliz, Michael	Rockridge	AQ	II	N	12/15/98	8/7/97	Y
67	Davis, Grant	Rockridge	AQ	I	N	2/3/98	12/6/96	Y
68	Johnson, Larry	Rockridge	AQ	II	N	8/14/99	8/12/97	Y
69	Klenfeld, Stephen	Rockridge	AQ	II	N	7/26/98	7/28/97	Y
70	Largey, Charles	Rockridge	AQ	II	N	6/27/97	6/8/97	Y
71	Norton, Nicholas (*)	Rockridge	AQ	I	N	3/1/99	12/3/96	Y
72	Ready, Sean	Rockridge	AQ	II	N	6/27/97	6/23/97	Y
73	Simopoulos, Nicholas	Rockridge	AQ	I	N	6/15/98	3/22/97	Y
74	Vaughn, James (*)	Rockridge	AQ	I	N	2/16/99	1/18/97	Y
75	Vouyioukas, Kosta	Rockridge	AQ	I	N	2/3/98	12/5/96	Y
76	Vouyioukas, Kosta	Rockridge	AQ	II	N	8/1/99	12/5/96	Y
77	Webb, Micahel	Rockridge	AQ	I	N	3/1/99	12/3/96	Y
78	Wright, Jason	Rockridge	AQ	I	N	3/1/99	11/30/96	Y
79	Wright, Kevin (*)	Rockridge	AQ	IIA	N	1/24/98	11/5/96	Y
80	Christoe, Joel	Zetec	AQ	II	N	1/24/98	1/4/97	Y
81	Huff, Walter	Zetec	AQ	II	N	6/16/98	6/5/97	Y
82	Leuenberg, Anthony	Zetec	AQ	I	N	1/12/99	12/4/96	Y

* See reviewed personnel certifications from the B1R07 Refueling Outage (April-June 1996)

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BA

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
15	110	56	ODI	TSC+1.09
19	5	18	ODI	AV4
20	6	17	ODI	AV4
20	64	19	ODI	AV1
22	109	20	ODI	AV4
23	109	20	ODI	AV4
25	8	15	ODI	AV4
25	8	28	ODI	AV3
25	106	19	ODI	AV1
26	106	15	ODI	AV1
26	107	19	ODI	AV2
26	107	26	ODI	AV3
27	18	23	ODI	AV1
27	85	31	ODI	AV2
27	104	21	ODI	AV2
27	106	31	ODI	AV1
27	106	34	ODI	AV3
27	106	27	ODI	AV2
28	99	18	ODI	AV1
28	104	18	ODI	AV4
28	105	20	ODI	AV3
28	105	24	ODI	AV4
29	10	35	ODI	AV3
29	12	20	ODI	AV3
29	12	21	ODI	AV2
29	13	26	ODI	AV3
30	69	23	ODI	AV2
30	70	15	ODI	AV2
30	103	27	ODI	AV2
30	105	25	ODI	AV2
31	12	22	ODI	AV4
31	12	24	ODI	AV3
31	14	22	ODI	AV4
31	14	23	ODI	AV3
31	67	18	ODI	AV4
31	101	30	ODI	AV2
31	101	33	ODI	AV3
31	103	30	ODI	AV3
31	103	27	ODI	AV2
32	76	16	ODI	AV3
34	14	23	ODI	AV2
34	14	16	ODI	AV3
34	90	26	ODI	AV3
35	15	19	ODI	AV4

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BA

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
35	15	23	ODI	AV3
35	16	27	ODI	AV3
35	16	29	ODI	AV2
35	100	21	ODI	AV3
36	15	20	ODI	AV3
36	15	26	ODI	AV4
36	16	39	ODI	AV2
36	18	24	ODI	AV2
36	18	24	ODI	AV3
36	21	16	ODI	AV4
36	21	22	ODI	AV3
36	95	15	ODI	AV3
36	96	23	ODI	AV2
37	17	31	ODI	AV3
37	18	19	ODI	AV4
37	18	22	ODI	AV2
37	19	19	ODI	AV4
37	19	21	ODI	AV1
37	19	23	ODI	AV3
37	20	24	ODI	AV3
37	20	17	ODI	AV2
37	21	18	ODI	AV3
37	23	30	ODI	AV3
37	23	31	ODI	AV2
37	23	19	ODI	AV4
37	98	36	ODI	AV3
37	98	37	ODI	AV2
37	99	22	ODI	AV3
38	16	23	ODI	AV4
38	16	28	ODI	AV3
38	19	25	ODI	AV3
38	19	25	ODI	AV4
38	20	16	ODI	AV3
38	20	31	ODI	AV2
38	20	25	ODI	AV4
38	20	26	ODI	AV1
38	21	22	ODI	AV3
38	21	24	ODI	AV1
38	22	24	ODI	AV2
38	23	26	ODI	AV1
38	23	30	ODI	AV4
38	23	34	ODI	AV3
38	24	23	ODI	AV3
38	24	29	ODI	AV2

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BA

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
38	26	23	ODI	AV2
38	27	20	ODI	AV3
38	30	27	ODI	AV3
38	30	17	ODI	AV2
38	30	17	ODI	AV4
38	34	15	ODI	AV3
38	63	15	ODI	AV4
38	68	15	ODI	AV3
38	68	18	ODI	AV1
38	68	37	ODI	AV2
38	72	27	ODI	AV3
38	73	27	ODI	AV3
38	98	24	ODI	AV1
38	98	15	ODI	AV3
38	98	34	ODI	AV2
39	17	22	ODI	AV3
39	19	36	ODI	AV3
39	19	38	ODI	AV4
39	19	40	ODI	AV2
39	21	23	ODI	AV4
39	21	34	ODI	AV3
39	23	17	ODI	AV2
39	23	18	ODI	AV1
39	23	30	ODI	AV3
39	85	18	ODI	AV2
39	89	28	ODI	AV3
39	89	32	ODI	AV2
39	89	24	ODI	AV4
39	94	20	ODI	AV1
39	94	34	ODI	AV3
39	94	15	ODI	AV2
39	96	15	ODI	AV4
39	96	17	ODI	AV3
39	97	16	ODI	AV4
39	98	36	ODI	AV4
39	98	42	ODI	AV3
40	19	23	ODI	AV2
40	19	29	ODI	AV4
40	21	32	ODI	AV3
40	21	39	ODI	AV2
40	21	25	ODI	AV4
40	46	21	ODI	AV3
40	46	18	ODI	AV1
40	64	16	ODI	AV1

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BA

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
40	66	21	ODI	AV1
40	82	18	ODI	AV3
40	82	29	ODI	AV2
40	85	21	ODI	AV3
40	90	17	ODI	AV4
40	90	26	ODI	AV3
40	90	27	ODI	AV2
40	91	27	ODI	AV3
40	92	20	ODI	AV3
40	92	20	ODI	AV2
40	95	25	ODI	AV2
40	95	30	ODI	AV3
40	95	33	ODI	AV4
40	95	23	ODI	AV1
41	20	20	ODI	AV2
41	20	29	ODI	AV4
41	20	34	ODI	AV3
41	22	36	ODI	AV2
41	33	17	ODI	AV2
41	33	24	ODI	AV3
41	84	23	ODI	AV3
41	85	22	ODI	AV3
41	87	21	ODI	AV4
41	87	25	ODI	AV3
41	87	29	ODI	AV2
41	88	21	ODI	AV2
41	91	20	ODI	AV2
41	91	25	ODI	AV3
41	92	15	ODI	AV3
41	92	26	ODI	AV2
41	92	28	ODI	AV4
41	93	38	ODI	AV2
41	93	20	ODI	AV1
41	93	24	ODI	AV4
41	93	31	ODI	AV3
41	95	32	ODI	AV4
41	95	17	ODI	AV2
41	95	28	ODI	AV3
42	21	20	ODI	AV4
42	25	18	ODI	AV2
42	25	26	ODI	AV4
42	25	34	ODI	AV3
43	34	24	ODI	AV2
43	34	29	ODI	AV3

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BA

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
43	34	34	ODI	AV4
44	23	18	ODI	AV4
44	59	17	ODI	AV3
44	81	31	ODI	AV2
44	81	22	ODI	AV3
44	88	20	ODI	AV4
44	88	31	ODI	AV3
44	90	26	ODI	AV2
44	90	34	ODI	AV3
45	24	25	ODI	AV3
45	24	30	ODI	AV4
45	25	20	ODI	AV3
45	25	22	ODI	AV4
45	28	32	ODI	AV4
45	28	34	ODI	AV3
45	30	27	ODI	AV4
45	30	34	ODI	AV3
45	30	40	ODI	AV2
45	89	24	ODI	AV4
46	64	31	ODI	AV3
46	64	32	ODI	AV4
46	89	23	ODI	AV4
47	28	19	ODI	AV4
47	59	20	ODI	AV1
47	61	20	ODI	AV3
48	56	15	ODI	AV4
48	56	28	ODI	AV3
49	51	16	ODI	AV4

*Note: This is a computer generated form.

TABLE 2B: 2B ASME Form NIS-BB

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 — Steam Generator: 2RC01BB

Test Frequency: 20, 130, 300, 500 kHz — Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
10	39	19	ODI	AV4
18	48	34	ODI	AV1
23	106	15	ODI	AV2
23	108	34	ODI	AV2
24	106	15	ODI	AV2
24	107	18	ODI	AV3
24	107	18	ODI	AV2
24	108	26	ODI	AV4
25	103	26	ODI	AV2
25	104	26	ODI	AV2
25	107	23	ODI	AV2
25	107	24	ODI	AV3
25	108	29	ODI	AV4
26	10	15	ODI	AV2
26	10	17	ODI	AV3
26	105	31	ODI	AV3
26	107	16	ODI	AV2
27	10	15	ODI	AV2
27	31	18	ODI	AV4
27	105	30	ODI	AV2
27	105	17	ODI	AV4
27	105	16	ODI	AV1
27	105	15	ODI	AV3
28	11	19	ODI	AV4
28	11	23	ODI	AV2
28	11	37	ODI	AV3
28	12	20	ODI	AV2
28	27	15	ODI	AV2
28	27	18	ODI	AV3
28	29	15	ODI	AV2
28	29	16	ODI	AV3
28	32	15	ODI	AV2
28	37	23	ODI	AV3
28	79	16	ODI	AV3
28	99	18	ODI	AV2
28	102	23	ODI	AV3
28	103	15	ODI	AV2
28	103	25	ODI	AV3
28	104	24	ODI	AV2
28	104	21	ODI	AV3
28	105	28	ODI	AV2
28	105	40	ODI	AV1
29	15	15	ODI	AV2
29	15	16	ODI	AV4

*Note: This is a computer generated form.

Form NIS-BB
SECTION ? DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BB

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/03

Row	Column	% Tube Wall Penetration	Origin	Location
29	98	15	ODI	AV4
29	98	20	ODI	AV2
29	105	24	ODI	AV2
29	105	26	ODI	AV4
30	13	24	ODI	AV3
30	14	16	ODI	AV3
30	99	17	ODI	AV3
30	101	15	ODI	AV1
30	102	21	ODI	AV3
30	102	32	ODI	AV2
30	105	33	ODI	AV4
31	12	25	ODI	AV4
31	12	19	ODI	AV1
31	12	23	ODI	AV3
31	13	19	ODI	AV1
31	13	22	ODI	AV4
31	15	29	ODI	AV2
31	16	17	ODI	AV3
31	17	18	ODI	AV3
31	17	21	ODI	AV2
31	34	18	ODI	AV3
31	102	22	ODI	AV3
32	12	27	ODI	AV2
32	28	21	ODI	AV3
32	28	30	ODI	AV2
32	32	33	ODI	AV3
32	39	16	ODI	AV4
32	40	23	ODI	AV3
32	40	15	ODI	AV4
32	40	20	ODI	AV2
32	98	15	ODI	AV3
33	13	23	ODI	AV1
33	14	12	ODI	AV3
33	14	18	ODI	AV4
33	14	34	ODI	AV2
33	14	37	ODI	AV1
33	72	21	ODI	AV3
33	97	35	ODI	AV3
33	99	29	ODI	AV2
33	99	25	ODI	AV3
33	99	19	ODI	AV4
33	99	21	ODI	AV1
33	102	19	ODI	AV1
33	102	41	ODI	AV4

*Note: This is a computer generated form.

Form NIS-BB
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FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS
Site: Byron Station, Unit 2 Steam Generator: 2RC01BB
Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
34	14	19	ODI	AV3
34	16	17	ODI	AV3
34	16	19	ODI	AV4
34	17	22	ODI	AV3
34	19	20	ODI	AV3
34	26	24	ODI	AV3
34	30	19	ODI	AV3
34	33	24	ODI	AV2
34	36	15	ODI	AV3
34	36	23	ODI	AV2
34	39	21	ODI	AV2
34	99	15	ODI	AV3
34	100	15	ODI	AV3
35	14	19	ODI	AV3
35	15	33	ODI	AV2
35	16	28	ODI	AV3
35	96	24	ODI	AV3
35	97	36	ODI	AV3
35	98	15	ODI	AV1
35	98	24	ODI	AV4
35	98	19	ODI	AV3
35	99	17	ODI	AV3
35	99	24	ODI	AV4
35	100	19	ODI	AV3
35	100	22	ODI	AV4
35	100	25	ODI	AV2
35	101	37	ODI	AV3
35	101	33	ODI	AV4
36	16	34	ODI	AV3
36	16	18	ODI	AV4
36	16	26	ODI	AV2
36	17	15	ODI	AV3
36	17	24	ODI	AV2
36	18	21	ODI	AV3
36	18	23	ODI	AV2
36	20	25	ODI	AV2
36	23	23	ODI	AV2
36	78	22	ODI	AV3
36	88	17	ODI	AV3
36	94	14	ODI	AV4
36	94	23	ODI	AV2
36	95	19	ODI	AV1
36	95	40	ODI	AV3
36	97	41	ODI	AV2

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BB

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
36	97	43	ODI	AV1
36	97	38	ODI	AV4
36	97	44	ODI	AV3
37	83	20	ODI	AV2
37	90	17	ODI	AV2
37	92	33	ODI	AV2
37	93	17	ODI	AV2
37	93	28	ODI	AV3
37	94	17	ODI	AV2
37	95	22	ODI	AV3
37	95	16	ODI	AV4
38	44	22	ODI	AV1
38	44	33	ODI	AV2
38	44	33	ODI	AV3
38	44	37	ODI	AV4
38	71	35	ODI	AV3
38	71	16	ODI	AV1
38	71	22	ODI	AV2
38	93	19	ODI	AV3
38	93	16	ODI	AV4
38	93	18	ODI	AV2
38	95	28	ODI	AV2
38	95	31	ODI	AV3
38	95	31	ODI	AV1
38	95	32	ODI	AV4
38	96	33	ODI	AV4
38	96	28	ODI	AV2
38	96	26	ODI	AV1
38	96	18	ODI	AV3
39	19	35	ODI	AV3
39	19	36	ODI	AV2
39	19	18	ODI	AV4
39	20	19	ODI	AV2
39	21	19	ODI	AV2
39	21	22	ODI	AV3
39	26	23	ODI	AV2
39	26	15	ODI	AV3
39	39	22	ODI	AV2
39	88	18	ODI	AV2
39	92	23	ODI	AV4
39	93	19	ODI	AV4
39	93	23	ODI	AV3
39	94	32	ODI	AV3
39	94	20	ODI	AV2

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS
Site: Byron Station, Unit 2 Steam Generator: 2RC01BB
Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
39	94	20	ODI	AV4
39	95	25	ODI	AV2
39	95	25	ODI	AV3
39	95	21	ODI	AV4
39	96	16	ODI	AV4
39	96	18	ODI	AV1
39	96	35	ODI	AV2
40	18	22	ODI	AV1
40	18	36	ODI	AV2
40	18	36	ODI	AV3
40	20	28	ODI	AV2
40	20	31	ODI	AV3
40	20	22	ODI	AV4
40	24	21	ODI	AV2
40	26	18	ODI	AV2
40	27	20	ODI	AV3
40	34	25	ODI	AV2
40	59	15	ODI	AV4
40	59	18	ODI	AV3
40	61	25	ODI	AV2
40	61	38	ODI	AV3
40	61	26	ODI	AV4
40	88	21	ODI	AV2
40	91	23	ODI	AV2
40	92	32	ODI	AV3
40	94	34	ODI	AV2
40	95	15	ODI	AV3
40	95	19	ODI	AV4
41	43	23	ODI	AV1
41	43	23	ODI	AV2
41	43	33	ODI	AV3
41	56	19	ODI	AV1
41	56	32	ODI	AV3
41	56	39	ODI	AV2
41	59	42	ODI	AV3
41	59	20	ODI	AV2
41	85	16	ODI	AV2
41	87	20	ODI	AV3
41	87	24	ODI	AV2
41	93	24	ODI	AV4
41	93	25	ODI	AV2
41	93	28	ODI	AV3
41	95	20	ODI	AV1
41	95	30	ODI	AV3

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS
Site: Byron Station, Unit 2 Steam Generator: 2RC01BB
Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
41	95	36	ODI	AV2
42	30	19	ODI	AV1
42	30	35	ODI	AV3
42	31	19	ODI	AV2
42	31	18	ODI	AV3
42	35	33	ODI	AV4
42	35	38	ODI	AV3
42	35	42	ODI	AV2
42	36	15	ODI	AV2
42	37	32	ODI	AV3
42	37	27	ODI	AV2
42	44	30	ODI	AV3
42	68	19	ODI	AV2
42	68	19	ODI	AV3
42	84	16	ODI	AV2
42	84	17	ODI	AV3
42	86	19	ODI	AV2
42	89	33	ODI	AV1
42	89	27	ODI	AV2
42	89	28	ODI	AV3
43	25	23	ODI	AV2
43	25	15	ODI	AV4
43	25	18	ODI	AV3
43	29	21	ODI	AV1
43	29	38	ODI	AV2
43	91	23	ODI	AV3
43	92	21	ODI	AV3
44	26	33	ODI	AV2
44	45	24	ODI	AV3
44	76	16	ODI	AV3
44	76	18	ODI	AV2
44	80	23	ODI	AV4
44	80	32	ODI	AV2
44	80	44	ODI	AV3
44	85	24	ODI	AV2
44	85	29	ODI	AV4
44	85	33	ODI	AV3
44	90	21	ODI	AV4
44	90	35	ODI	AV3
45	26	31	ODI	AV2
45	26	38	ODI	AV3
45	26	25	ODI	AV4
45	29	15	ODI	AV4
45	32	20	ODI	AV2

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BB

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
45	32	26	ODI	AV3
45	36	21	ODI	AV3
45	36	25	ODI	AV4
45	83	20	ODI	AV3
45	83	21	ODI	AV4
45	83	26	ODI	AV2
45	84	20	ODI	AV3
45	84	42	ODI	AV2
45	86	23	ODI	AV3
45	86	25	ODI	AV2
45	89	23	ODI	AV3
45	89	28	ODI	AV2
47	27	24	ODI	AV3
47	27	34	ODI	AV4
47	27	24	ODI	AV2
47	56	22	ODI	AV2
47	76	15	ODI	02C+0.46
49	51	15	ODI	07C

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS
Site: Byron Station, Unit 2 Steam Generator: 2RC01BC
Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
22	6	18	ODI	AV1
22	6	18	ODI	AV4
23	6	29	ODI	AV4
25	105	18	ODI	AV2
25	106	21	ODI	AV1
25	107	26	ODI	AV4
25	108	19	ODI	AV1
25	108	23	ODI	AV2
25	108	24	ODI	AV3
26	8	19	ODI	AV2
26	9	15	ODI	AV2
26	9	19	ODI	AV3
26	9	28	ODI	AV4
26	85	21	ODI	AV2
27	34	17	ODI	AV3
27	106	34	ODI	AV3
27	106	23	ODI	AV2
28	35	19	ODI	AV4
28	35	22	ODI	AV3
28	84	27	ODI	AV3
28	103	32	ODI	AV3
29	11	21	ODI	AV1
29	29	20	ODI	AV3
29	29	26	ODI	AV2
29	38	16	ODI	AV3
29	40	19	ODI	AV3
29	40	19	ODI	AV2
30	35	25	ODI	AV3
30	99	15	ODI	AV2
30	104	15	ODI	AV3
30	105	18	ODI	AV4
31	12	27	ODI	AV3
31	14	30	ODI	AV1
31	14	35	ODI	AV3
31	50	18	ODI	AV1
31	77	15	ODI	AV2
31	82	21	ODI	AV3
31	86	16	ODI	AV3
32	13	25	ODI	AV3
32	13	18	ODI	AV2
32	28	15	ODI	AV2
32	28	19	ODI	AV3
32	73	17	ODI	AV3
32	74	20	ODI	AV3

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BC

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
32	79	17	ODI	AV2
32	79	22	ODI	AV3
32	82	28	ODI	AV2
32	83	17	ODI	AV1
32	83	24	ODI	AV3
32	100	18	ODI	AV3
33	39	17	ODI	AV2
33	39	15	ODI	AV3
33	81	21	ODI	AV3
33	81	15	ODI	AV4
33	103	16	ODI	AV4
34	16	16	ODI	AV3
34	27	28	ODI	AV2
34	29	19	ODI	AV3
34	29	20	ODI	AV2
34	85	16	ODI	AV2
34	92	16	ODI	AV3
34	92	22	ODI	AV2
34	94	20	ODI	AV2
34	95	16	ODI	AV2
35	18	21	ODI	AV2
35	22	22	ODI	AV1
35	22	25	ODI	AV3
35	25	28	ODI	AV2
35	25	25	ODI	AV3
35	30	23	ODI	AV2
35	82	24	ODI	AV3
35	85	15	ODI	AV1
35	85	24	ODI	AV2
35	85	34	ODI	AV3
35	86	16	ODI	AV1
35	86	35	ODI	AV2
35	87	16	ODI	AV3
35	88	19	ODI	AV3
35	95	26	ODI	AV2
35	96	15	ODI	AV4
35	96	19	ODI	AV2
36	19	16	ODI	AV2
36	19	29	ODI	AV3
36	20	18	ODI	AV2
36	20	23	ODI	AV3
36	21	33	ODI	AV3
36	22	18	ODI	AV2
36	22	25	ODI	AV3

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS
Site: Byron Station, Unit 2 Steam Generator: 2RC01BC
Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
36	24	15	ODI	AV1
36	24	30	ODI	AV3
36	25	22	ODI	AV2
36	27	21	ODI	AV3
36	31	40	ODI	AV3
36	31	19	ODI	AV2
36	80	22	ODI	AV3
36	81	15	ODI	AV3
36	93	17	ODI	AV2
36	94	17	ODI	AV2
36	96	26	ODI	AV2
37	17	23	ODI	AV1
37	20	18	ODI	AV2
37	23	17	ODI	AV2
37	34	18	ODI	AV3
37	84	18	ODI	AV3
37	99	16	ODI	AV4
37	99	28	ODI	AV3
37	99	37	ODI	AV2
38	16		ODI	AV2
38	16	26	ODI	AV1
38	22	20	ODI	AV3
38	22	21	ODI	AV2
38	22	27	ODI	AV1
38	25	15	ODI	AV3
38	25	17	ODI	AV1
38	25	27	ODI	AV2
38	62	20	ODI	AV2
38	62	21	ODI	AV3
38	99	20	ODI	AV2
39	17	16	ODI	AV3
39	18	18	ODI	AV2
39	18	23	ODI	AV4
39	18	41	ODI	AV3
39	19	25	ODI	AV3
39	20	28	ODI	AV2
39	25	19	ODI	AV1
39	26	19	ODI	AV3
39	35	31	ODI	AV2
39	35	32	ODI	AV3
39	38	20	ODI	AV3
39	49	24	ODI	AV2
39	79	18	ODI	AV1
39	79	23	ODI	AV4

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS
Site: Byron Station, Unit 2 Steam Generator: 2RC01BC
Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
39	79	40	ODI	AV2
39	79	41	ODI	AV3
39	83	25	ODI	AV2
39	93	22	ODI	AV4
39	94	17	ODI	AV3
39	94	21	ODI	AV2
40	21	19	ODI	AV3
40	21	36	ODI	AV2
40	62	39	ODI	AV1
40	62	42	ODI	AV3
40	62	32	ODI	AV4
40	62	46	ODI	AV2
40	83	26	ODI	AV3
40	83	29	ODI	AV2
40	86	16	ODI	AV2
40	90	17	ODI	AV2
40	90	18	ODI	AV3
40	93	15	ODI	AV2
40	93	17	ODI	AV1
40	93	30	ODI	AV3
40	95	32	ODI	AV3
40	95	23	ODI	AV1
41	21	38	ODI	AV2
41	21	20	ODI	AV3
41	26	19	ODI	AV2
41	26	19	ODI	AV3
41	27	16	ODI	AV2
41	38	21	ODI	AV1
41	38	41	ODI	AV2
41	38	41	ODI	AV3
41	63	29	ODI	AV2
41	79	22	ODI	AV3
41	84	17	ODI	AV3
41	85	17	ODI	AV3
41	88	21	ODI	AV2
41	88	20	ODI	AV3
41	89	34	ODI	AV3
41	89	28	ODI	AV4
41	89	23	ODI	AV2
41	89	27	ODI	AV1
41	92	17	ODI	AV4
41	92	34	ODI	AV3
42	23	15	ODI	AV3
42	25	20	ODI	AV3

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BC

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
42	29	18	ODI	AV2
42	29	26	ODI	AV3
42	86	28	ODI	AV3
42	86	30	ODI	AV2
42	86	20	ODI	AV1
42	89	35	ODI	AV3
42	90	15	ODI	AV4
42	90	32	ODI	AV3
42	93	19	ODI	AV4
42	93	21	ODI	AV2
42	93	33	ODI	AV1
42	93	35	ODI	AV3
42	94	25	ODI	AV4
42	94	35	ODI	AV3
43	30	16	ODI	AV3
43	34	17	ODI	AV3
43	36	15	ODI	AV4
43	36	24	ODI	AV3
43	93	28	ODI	AV1
43	93	30	ODI	AV2
43	93	25	ODI	AV3
44	74	18	ODI	AV4
44	74	25	ODI	AV3
44	74	29	ODI	AV2
48	35	6	ODI	02C+0.4
48	36	18	ODI	02C+0.47
49	59	14	ODI	AV2
49	59	15	ODI	AV3
49	73	7	ODI	07C

*Note: This is a computer generated form.

TABLE 2D: 2D ASME Form NIS-BB

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 — Steam Generator: 2RC01BD

Test Frequency: 20, 130, 300, 500 kHz — Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
20	5	15	ODI	AV4
23	7	16	ODI	AV3
25	50	28	ODI	AV2
25	108	18	ODI	AV1
25	108	23	ODI	AV4
26	70	17	ODI	AV3
26	70	25	ODI	AV2
26	107	21	ODI	AV3
28	28	25	ODI	AV4
28	36	20	ODI	AV2
28	78	20	ODI	AV3
28	102	18	ODI	AV3
29	102	15	ODI	AV3
30	11	37	ODI	AV3
30	11	17	ODI	AV4
30	103	24	ODI	AV2
31	13	20	ODI	AV3
31	13	15	ODI	AV1
31	14	15	ODI	AV4
31	44	21	ODI	AV3
31	44	34	ODI	AV2
31	50	23	ODI	AV3
31	84	25	ODI	AV2
31	103	20	ODI	AV2
31	103	21	ODI	AV3
31	104	20	ODI	AV3
32	79	15	ODI	AV3
34	87	21	ODI	AV3
34	97	16	ODI	AV3
34	97	27	ODI	AV2
34	98	23	ODI	AV3
34	99	17	ODI	AV3
34	99	37	ODI	AV4
34	100	16	ODI	AV3
35	14	20	ODI	AV4
35	14	23	ODI	AV3
35	17	26	ODI	AV2
35	20	26	ODI	AV2
35	47	15	ODI	AV4
35	92	21	ODI	AV2
35	95	32	ODI	AV2
36	17	22	ODI	AV2
36	18	15	ODI	AV2
36	21	15	ODI	AV1

*Note: This is a computer generated form.

TABLE 2D: 2D ASME Form NIS-BB

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 — Steam Generator: 2RC01BD

Test Frequency: 20, 130, 300, 500 kHz — Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
36	21	21	ODI	AV2
36	37	22	ODI	AV3
36	37	30	ODI	AV2
36	82	21	ODI	AV3
36	82	21	ODI	AV4
36	82	30	ODI	AV2
36	83	25	ODI	AV2
36	84	19	ODI	AV2
36	95	17	ODI	AV3
36	100	16	ODI	AV4
37	33	25	ODI	AV3
37	33	26	ODI	AV2
37	41	20	ODI	AV3
37	41	40	ODI	AV2
37	41	23	ODI	AV4
37	42	15	ODI	AV3
37	42	35	ODI	AV2
38	25	15	ODI	AV2
38	25	23	ODI	AV3
38	85	27	ODI	AV3
38	85	41	ODI	AV2
38	85	22	ODI	AV4
39	18	25	ODI	AV3
39	27	15	ODI	AV3
39	72	21	ODI	AV2
39	72	25	ODI	AV3
39	80	20	ODI	AV3
39	90	30	ODI	AV4
40	22	17	ODI	AV4
40	22	17	ODI	AV3
40	25	17	ODI	AV3
40	26	15	ODI	AV3
40	28	18	ODI	AV3
40	29	15	ODI	AV4
40	29	21	ODI	AV3
40	29	31	ODI	AV2
40	33	18	ODI	AV2
40	33	22	ODI	AV3
40	76	25	ODI	AV2
40	90	20	ODI	AV4
40	92	16	ODI	AV3
41	20	20	ODI	AV1
41	20	29	ODI	AV2
41	32	17	ODI	AV3

*Note: This is a computer generated form.

Form NIS-BB
SECTION XI - DIVISION 1

FORM NIS-BB TUBE EXAMINATION REPORT

EDDY CURRENT EXAMINATION RESULTS

Site: Byron Station, Unit 2 Steam Generator: 2RC01BD

Test Frequency: 20, 130, 300, 500 kHz Date: 12/5/96

Row	Column	% Tube Wall Penetration	Origin	Location
41	33	17	ODI	AV3
41	33	25	ODI	AV2
41	60	15	ODI	AV1
41	60	16	ODI	AV2
41	79	15	ODI	AV1
41	79	26	ODI	AV4
41	79	37	ODI	AV2
41	79	45	ODI	AV3
41	80	26	ODI	AV1
41	86	18	ODI	AV2
41	86	31	ODI	AV3
42	36	32	ODI	AV2
42	36	24	ODI	AV3
43	22	18	ODI	AV1
43	22	22	ODI	AV2
43	34	25	ODI	AV1
43	34	28	ODI	AV4
43	34	33	ODI	AV2
43	34	39	ODI	AV3
44	92	15	ODI	AV1
44	92	24	ODI	AV2
46	89	16	ODI	AV4
47	56	19	ODI	AV3
47	56	30	ODI	AV4
48	59	24	ODI	AV3
48	59	19	ODI	AV4

*Note: This is a computer generated form.

ATTACHMENT 1
FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As Required by the Provisions of the ASME Code Rules

1. Owner: Commonwealth Edison Company Chicago, Illinois
(Name and Address of Owner)

2. Plant: Byron Nuclear Power Station Byron, Illionois
(Name and Address of Plant)

3. Plant Unit: Two (2)

4. Owner Certificate of Authorization (if required): N/A

5. Commercial Service Date: 08/21/87

6. National Board Number for Unit: N-200

7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
2RC01BA	Westinghouse	2095	U-201435	15
2RC01BB	Westinghouse	2096	U-201436	16
2RC01BC	Westinghouse	2097	U-201437	17
2RC01BD	Westinghouse	2098	U-201438	18

Note: This is a computer generated form

FORM NIS-1 (Back)

8. Examination Dates 8/8/96 to 9/5/96 9. Inspection Interval from 8/21/87 to 8/21/97

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval.

Refer to the Attached Eddy Current Report

11. Abstract of Conditions Noted

Refer to the Attached Eddy Current Report

12. Abstract of Corrective Measures Recommended and Taken

Refer to the Attached Eddy Current Report

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) Not Applicable Expiration Date Not Applicable

Date 12/18 19 96 Signed For ComEd Owner By David B. Wozniak

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Illinois and employed by HSB I+I Co. of Hartford Connecticut have inspected the components described in this Owner's Report during the period 8/8/96 to 9/5/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Greg L. Dendinckx Commissions IL-1354

Inspector's Signature National Board, State, Province, and Endorsements

Date 12/20, 19 96

Note: This is a computer generated form

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Attachment 2A: 2A SG ASME Form NIS-2

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

As Required by the Provisions of the ASME Code Section XI 10/3/96

1. Owner Commonwealth Edison Company (Name)
   One First National Plaza, Chicago, IL 60690 (Address)
   Date 9/4/96
   Sheet 1 of 2
2. Plant Byron Nuclear Power Station (Name)
   4450 N. German Church Rd., Byron, IL 61010 (Address)
   Unit 2
   NWR # 960008775-03 (Repair Organization P.O. No., Job No., etc.)
3. Work Performed by Framatome Technologies (Name)
   155 Mill Ridge Rd., Lynchburg, VA 24502 (Address)
   Type Code Symbol Stamp Not applicable
   Authorization No. Not applicable
   Expiration Date Not Applicable
4. Identification of System RC (Reactor Coolant)
5. (a) Applicable Construction Code ASME Sect. III 19 71 Edition, S'72, W'74* Addenda, 1355, 1493-1 Code Case 1484, 1528
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 '83, S'83
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
2A STEAM GENERATOR	WESTING-HOUSE	2095	15	2RC01BA	1980	REPAIRED	YES

7. Description of Work PLUGGED TUBES AS LISTED ON SUPPLEMENTAL SHEET
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
   Other ☐ Pressure _____ psi Test Temp. _____ °F
   N/A - PER IWA 4400(a)(1)(D) JL 11/21/96

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*W '74 Applicable for NB-2331(D), NB-2332 (A)(2), NB-4334.1, 4334.2, NB-4335.1, 4335.2, 4335.3

FORM NIS-2 (Back) WR# 96008 TS-03

9. Remarks _____
Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPAIR conforms to the rules of the repair or replacement ASME Code, Section XI.

Type Code Symbol Stamp NOT APPLICABLE

Certificate of Authorization No. NOT APPLICABLE Expiration Date NOT APPLICABLE

Signed [signature] SEC. OWNER Date 12/27 19 96
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Connecticut and employed by Hartford Steam Boiler Insp. & Ins. Co. of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/8/96 to 12/3/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

J. Denbleyker Commissions 12L 1754
Inspector's Signature National Board, State, Province, and Endorsements

Date December 3, 19 96

(12/82)

Attachment 2D: FORM NIS-2 SUPPLEMENTAL SHEET

1. Owner: ComEd
One First National Plaza
Chicago, IL 60690

Date 9/4/96
Unit 2

2. Plant: Byron Nuclear Power Station
4450 North German Church Road
Byron, IL 61010

NWR: 960008775-03
P.O. No., WR No., etc.

3. Work Performed By: Framatome Technologies, Inc
155 Mill Ridge Rd.
Lynchburg, VA 24502

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

4. Identification of System: RC (Reactor Coolant)

5. (a) Applicable Construction Code: ASME Sect. III, 1971 Ed., S'72, *W'74 Addenda 1484, 1528, 1355, 1493-1 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1983/S83

6. Identification of Components Repaired or Replaced and Replacement Components:

Count	SG	Row	Col	Leg	Ser #	Mfgr	Comments
1	A	16	110	Hot	9518-3-870	Framatome	
2	A	16	110	Cold	9518-3-875	Framatome	
3	A	15	109	Hot	9518-3-898	Framatome	
4	A	15	109	Cold	9518-3-890	Framatome	
5	A	15	110	Hot	9518-3-850	Framatome	
6	A	15	110	Cold	9518-3-800	Framatome	
7	A	15	111	Hot	9518-3-814	Framatome	
8	A	15	111	Cold	9518-3-813	Framatome	
9	A	39	19	Hot	9518-3-848	Framatome	
10	A	39	19	Cold	9518-3-862	Framatome	
11	A	39	98	Hot	9518-3-885	Framatome	
12	A	39	98	Cold	9518-3-829	Framatome	
13	A	45	30	Hot	9518-3-825	Framatome	
14	A	45	30	Cold	9518-3-812	Framatome	
15	A	49	74	Hot	9518-3-830	Framatome	
16	A	49	74	Cold	9518-3-893	Framatome	
17	A	48	74	Hot	9518-3-899	Framatome	
18	A	48	74	Cold	9518-3-840	Framatome	
19	A	47	66	Hot	9518-3-886	Framatome	
20	A	47	66	Cold	9518-3-803	Framatome	
21	A	46	67	Hot	9518-3-839	Framatome	
22	A	46	67	Cold	9518-3-896	Framatome	

* W'74 applicable to unit for NB-2331 (D), NB-2332 (A)(2), NB-4332, NB-4334.1, NB-4334.2, 4335.1, 4335.2, 4335.3

DOCUMENT #09 R/C

Attachment 2B: 2B SG ASME Form NIS-2

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Commonwealth Edison Company (Name)
One First National Plaza, Chicago, IL 60690 (Address)

Date 9/6/96 SP 12/3/96

Sheet 1 of 2

2. Plant Byron Nuclear Power Station (Name)
4450 N. German Church Rd., Byron, IL 61010 (Address)

Unit 2

NWR 960008787-03
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Framatome Technologies (Name)
155 Mill Ridge Rd., Lynchburg, VA 24502 (Address)

Type Code Symbol Stamp Not applicable
Authorization No. Not applicable
Expiration Date Not Applicable

4. Identification of System RC (Reactor Coolant)

5. (a) Applicable Construction Code ASME Sect. III 19 71 Edition, S'72, W'74* Addenda, 1355, 1493-1 Code Case 1484, 1528
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 '83, S'83
~~A94443~~ SP 12/3/96

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
2B STEAM GENERATOR	WESTING-HOUSE	2096	16	2RC01BB	1980	REPAIRED	YES

7. Description of Work PLUGGED TUBES AS LISTED ON FOLLOWING PAGE.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

N/A - PER IWA 4400(b)

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*W '74 Applicable for NB-2331(D), NB-2332 (A)(2), NB-4334.1, 4334.2, NB-4335.1, 4335.2, 4335.3

FORM NIS-2 (Back)

9. Remarks WR # 9600087 87-03

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPAIR conforms to the rules of the repair or replacement ASME Code, Section XI.

Type Code Symbol Stamp NOT APPLICABLE

Certificate of Authorization No. NOT APPLICABLE Expiration Date NOT APPLICABLE

Signed [signature] SR ENGR Date Dec 2 19 96
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Illinois and employed by Hartford Stm. Blr. Insp. & Ins. Co. of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/8/96 to 12/3/96 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

J. Dandreta Commissions 11-1254
Inspector's Signature National Board, State, Province, and Endorsements

Date December 3, 1996

(12/82)

1. Owner: ComEd
One First National Plaza
Chicago, IL 60690

Date 9/6/96
Unit 1

2. Plant: Byron Nuclear Power Station
4450 North German Church Road
Byron, IL 61010

NWR: 960008787-03
P.O. No., WR No., etc.

3. Work Performed By: Framatome Technologies, Inc
155 Mill Ridge Rd.
Lynchburg, VA 24502

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

4. Identification of System: RC (Reactor Coolant)

5. (a) Applicable Construction Code: ASME Sect. III, 1971 Ed., S'72, *W'74 Addenda 1484, 1528, 1355, 1493-1, ~~N-20~~ Code Case 90/2/3/86
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983/S83

6. Identification of Components Repaired or Replaced and Replacement Components

Count	SG	Row	Col	Leg	Ser #	Mfgr	Comments
1	B	1	2	Hot	EA64-3-1013	Framatome	
2	B	1	2	Cold	EA64-3-1060	Framatome	
3	B	20	57	Hot	EA64-3-1019	Framatome	
4	B	20	57	Cold	EA64-3-1004	Framatome	
5	B	28	105	Hot	EA64-3-1077	Framatome	
6	B	28	105	Cold	EA64-3-1011	Framatome	
7	B	33	102	Hot	EA64-3-1018	Framatome	
8	B	33	102	Cold	EA64-3-1006	Framatome	
9	B	36	95	Hot	EA64-3-1079	Framatome	
10	B	36	95	Cold	EA64-3-1010	Framatome	
11	B	36	97	Hot	EA64-3-1020	Framatome	
12	B	36	97	Cold	EA64-3-1012	Framatome	
13	B	41	59	Hot	EA64-3-1015	Framatome	
14	B	41	59	Cold	EA64-3-1003	Framatome	
15	B	42	35	Hot	EA64-3-1016	Framatome	
16	B	42	35	Cold	EA64-3-1005	Framatome	
17	B	44	80	Hot	EA64-3-1014	Framatome	
18	B	44	80	Cold	EA64-3-1009	Framatome	
19	B	45	84	Hot	EA64-3-1017	Framatome	
20	B	45	84	Cold	EA64-3-1008	Framatome	

* W'74 applicable to unit for NB-2331 (D), NB-2332 (A)(2), NB-4332, NB-4334.1, NB-4334.2, 4335.1, 4335.2, 4335.3

DOC #9 R16

Attachment 2C: 2C SG ASME Form NIS-2

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Commonwealth Edison Company (Name)
One First National Plaza, Chicago, IL 60690 (Address)

Date 9/17/96 QD 12/3/96
Sheet 1 of 2

2. Plant Byron Nuclear Power Station (Name)
4450 N. German Church Rd., Byron, IL 61010 (Address)

Unit 2
NWR 960008799-03 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Framatome Technologies (Name)
155 Mill Ridge Rd., Lynchburg, VA 24502 (Address)

Type Code Symbol Stamp Not applicable
Authorization No. Not applicable
Expiration Date Not Applicable

4. Identification of System RC (Reactor Coolant)

5. (a) Applicable Construction Code ASME Sect. III 19 71 Edition, S'72, W'74* Addenda, 1355, 1493-1 Code Case 1484, 1528
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 '83, S'83
~~NOBU6442~~ ~~NB4462~~ QD 12/3/96

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
2C STEAM GENERATOR	WESTING-HOUSE	2097	17	2RC01BC	1980	REPAIRED	YES

7. Description of Work PLUGGED TUBES AS LISTED ON FOLLOWING PAGE.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

N/A - Per IWA 4400(b)

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*W '74 Applicable for NB-2331(D), NB-2332 (A)(2), NB-4334.1, 4334.2, NB-4335.1, 4335.2, 4335.3

FORM NIS-2 (Back)

9. Remarks WR #960008799-03

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPAIR conforms to the rules of the repair or replacement ASME Code, Section XI.

Type Code Symbol Stamp NOT APPLICABLE

Certificate of Authorization No. NOT APPLICABLE Expiration Date NOT APPLICABLE

Signed [signature] SEC ENGR Date 12-2 19 96

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Illinois and employed by Hartford Steam Boiler Insp. & Ins. Co. of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/8/95 to 12/3/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

J. Dendrich Commissions ILL-1754

Inspector's Signature National Board, State, Province, and Endorsements

Date December 3, 1996

(12/82)

Attachment 2D: FORM NIS-2 SUPPLEMENTAL SHEET

1. Owner: ComEd
One First National Plaza
Chicago, IL 60690

Date 9/6/96
Unit 1

2. Plant: Byron Nuclear Power Station
4450 North German Church Road
Byron, IL 61010

NWR: 960008799-03
P.O. No., WR No., etc.

3. Work Performed By: Framatome Technologies, Inc
155 Mill Ridge Rd.
Lynchburg, VA 24502

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

4. Identification of System: RC (Reactor Coolant)

5. (a) Applicable Construction Code: ASME Sect. III, 1971 Ed., S'72, *W'74 Addenda 1484, 1528, 1355, 1493-1 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983/S83

6. Identification of Components Repaired or Replaced and Replacement Components

Count	SG	Row	Col	Leg	Ser #	Mfgr	Comments
1	C	22	29	Hot	EA64-3-1073	Framatome	
2	C	22	29	Cold	EA64-3-1075	Framatome	
3	C	36	31	Hot	EA64-3-1076	Framatome	
4	C	36	31	Cold	EA64-3-1071	Framatome	
5	C	39	18	Hot	EA64-3-1078	Framatome	
6	C	39	18	Cold	EA64-3-1074	Framatome	
7	C	39	79	Hot	EA64-3-1085	Framatome	
8	C	39	79	Cold	EA64-3-1072	Framatome	
9	C	40	62	Hot	EA64-3-1089	Framatome	
10	C	40	62	Cold	EA64-3-1073	Framatome	
11	C	41	38	Hot	EA64-3-1080	Framatome	
12	C	41	38	Cold	EA64-3-1081	Framatome	

* W'74 applicable to unit for NB-2331 (D), NB-2332 (A)(2), NB-4332, NB-4334.1, NB-4334.2, 4335.1, 4335.2, 4335.3

DOC. ? R10

Attachment 2D: 2D SG ASME Form NIS-2

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Commonwealth Edison Company (Name) — Date 9/6/96
   One First National Plaza, Chicago, IL 60690 (Address) — Sheet 1 of 2
2. Plant Byron Nuclear Power Station (Name) — Unit 2
   4450 N. German Church Rd., Byron, IL 61010 (Address) — NWR 9600088605-03 (Repair Organization P.O. No., Job No., etc.)
3. Work Performed by Framatome Technologies (Name) — Type Code Symbol Stamp Not applicable
   155 Mill Ridge Rd., Lynchburg, VA 24502 (Address) — Authorization No. Not applicable
   Expiration Date Not Applicable
4. Identification of System RC (Reactor Coolant)
5. (a) Applicable Construction Code ASME Sect. III 19 71 Edition, S'72, W'74* Addenda, 1355, 1493-1 Code Case
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 '83, S'83 1484, 1528

Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
STEAM GENERATOR 2D	WESTING-HOUSE	2098	18	2RC01ED	1980	REPAIRED	YES

7. Description of Work PLUGGED TUBES AS LISTED ON FOLLOWING PAGE.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
   Other ☐ Pressure _____ psi Test Temp. _____ °F

N/A per IWA-4400(b)

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*W '74 Applicable for NB-2331(D), NB-2332 (A)(2), NB-4334.1, 4334.2, NB-4335.1, 4335.2, 4335.3

FORM NIS-2 (Back)

9. Remarks WR# 960088505-03

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the repair or replacement ASME Code, Section XI.

Type Code Symbol Stamp NOT APPLICABLE

Certificate of Authorization No. NOT APPLICABLE Expiration Date NOT APPLICABLE

Signed [signature] Owner or Owner's Designee, Title Date Dec 2 19 96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Illinois and employed by Hartford Steam Boiler Insp. & Ins. Co. of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/8/96 to 12/3/96 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

J. Dankenbring Commissions 126-1254
Inspector's Signature National Board, State, Province, and Endorsements

Date December 3, 19 96

(12/82)

Attachment 2D: FORM NIS-2 SUPPLEMENTAL SHEET

1. Owner: ComEd
One First National Plaza
Chicago, IL 60690

Date 9/6/96
Unit 1

2. Plant: Byron Nuclear Power Station
4450 North German Church Road
Byron, IL 61010

NWR: 960006805-03
P.O. No., WR No., etc.

3. Work Performed By: Framatome Technologies, Inc
155 Mill Ridge Rd.
Lynchburg, VA 24502

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

4. Identification of System: RC (Reactor Coolant)

5. (a) Applicable Construction Code: ASME Sect. III, 1971 Ed., S'72, *W'74 Addenda 1484, 1528, 1355, 1493-1 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1983/S83

6. Identification of Components Repaired or Replaced and Replacement Components

Count	SG	Row	Col	Leg	Ser #	Mfgr	Comments
1	D	37	41	Hot	EA64-3-1000	Framatome	
2	D	37	41	Cold	EA64-3-998	Framatome	
3	D	38	85	Hot	9518-3-808	Framatome	
4	D	38	85	Cold	EA64-3-999	Framatome	
5	D	41	79	Hot	EA64-3-996	Framatome	
6	D	41	79	Cold	EA64-3-997	Framatome	

* W'74 applicable to unit for NB-2331 (D), NB-2332 (A)(2), NB-4332, NB-4334.1, NB-4334.2, 4335.1, 4335.2, 4335.3

Table 3: SG Tubes Repaired

Steam Generator A

NO.	S/G	ROW	COL	IND	Location	Comments
1	A	15	109	DTI-SVI	TSC+0.00	B2F17 (Foreign Object)
2	A	15	110	56%	TSC+1.09	B2F17 (Foreign Object)
3	A	15	111	SVI	TSC+0.11	B2F17 (Foreign Object)
4	A	16	110	NQI-SVI	TSC+1.17	B2F17 (Foreign Object) - Leaking Tube
5	A	39	19	42%	AV2+0.00	AVB Wear
6	A	39	98	42%	AV3+0.00	AVB Wear
7	A	45	30	40%	AV2+0.00	AVB Wear
8	A	46	67	Preventative	02C+3.39	Preventative - Sludge Build up
9	A	47	66	Preventative	02C+3.43	Preventative - Sludge Build up
10	A	48	74	Preventative	02C+2.06	Preventative - Sludge Build up
11	A	49	74	FSI-SVI	02C+5.19	FSI-SVI - Sludge Build up

Steam Generator B

NO.	S/G	ROW	COL	IND	Location	Comments
1	B	1	2	Preventative	11C-0.76	Preventative - Geometry Change
2	B	20	57	NQI-SVI	02C+0.76	NQI-SVI
3	B	28	105	40%	AV1+0.00	AVB Wear
4	B	33	102	41%	AV4+0.00	AVB Wear
5	B	36	95	40%	AV3+0.00	AVB Wear
6	B	36	97	43%	AV1+0.00	AVB Wear
				41%	AV2+0.00	AVB Wear
				44%	AV3+0.00	AVB Wear
7	B	41	59	42%	AV3+0.00	AVB Wear
8	B	42	35	42%	AV2+0.00	AVB Wear
9	B	44	80	44%	AV3+0.00	AVB Wear
10	B	45	84	42%	AV2+0.00	AVB Wear

Steam Generator C

NO.	S/G	ROW	COL	IND	Location	Comments
1	C	22	29	NQI-SVI	01H+0.75	NQI-SVI
2	C	36	31	40%	AV3+0.00	AVB Wear
3	C	39	18	41%	AV3+0.00	AVB Wear
4	C	39	79	40%	AV2+0.00	AVB Wear
				41%	AV3+0.00	AVB Wear
5	C	40	62	42%	AV3+0.00	AVB Wear
				46%	AV2+0.00	AVB Wear
6	C	41	38	41%	AV2+0.00	AVB Wear
				41%	AV3+0.00	AVB Wear

Steam Generator D

NO.	S/G	ROW	COL	IND	Location	Comments
1	D	37	41	40%	AV2+0.00	AVB Wear
2	D	38	85	41%	AV2+0.00	AVB Wear
3	D	41	79	45%	AV3+0.00	AVB Wear

Figure 4A: 2A SG Tubes Plugged During B2R06

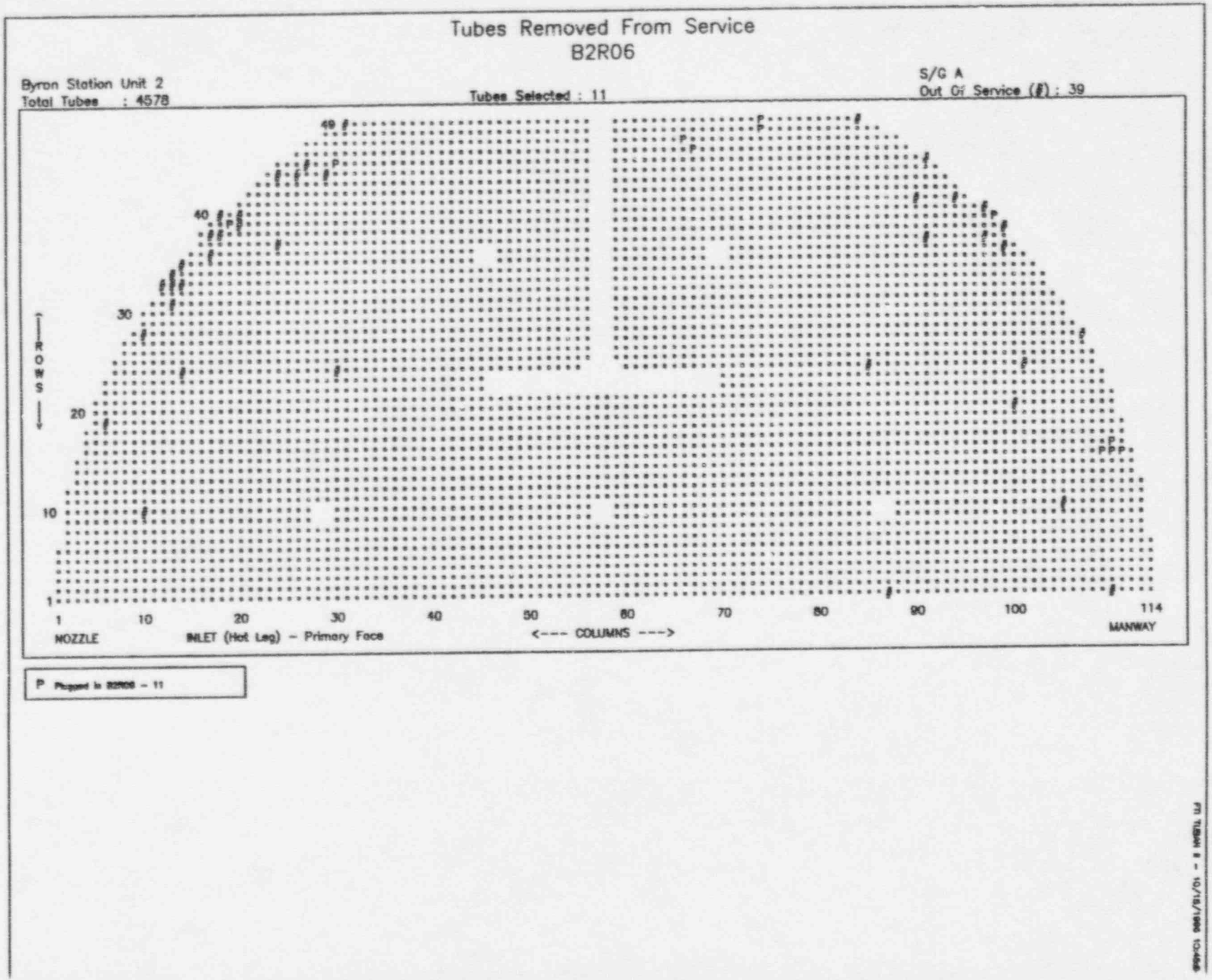

Figure 4B: 2B SG Tubes Plugged During B2R06

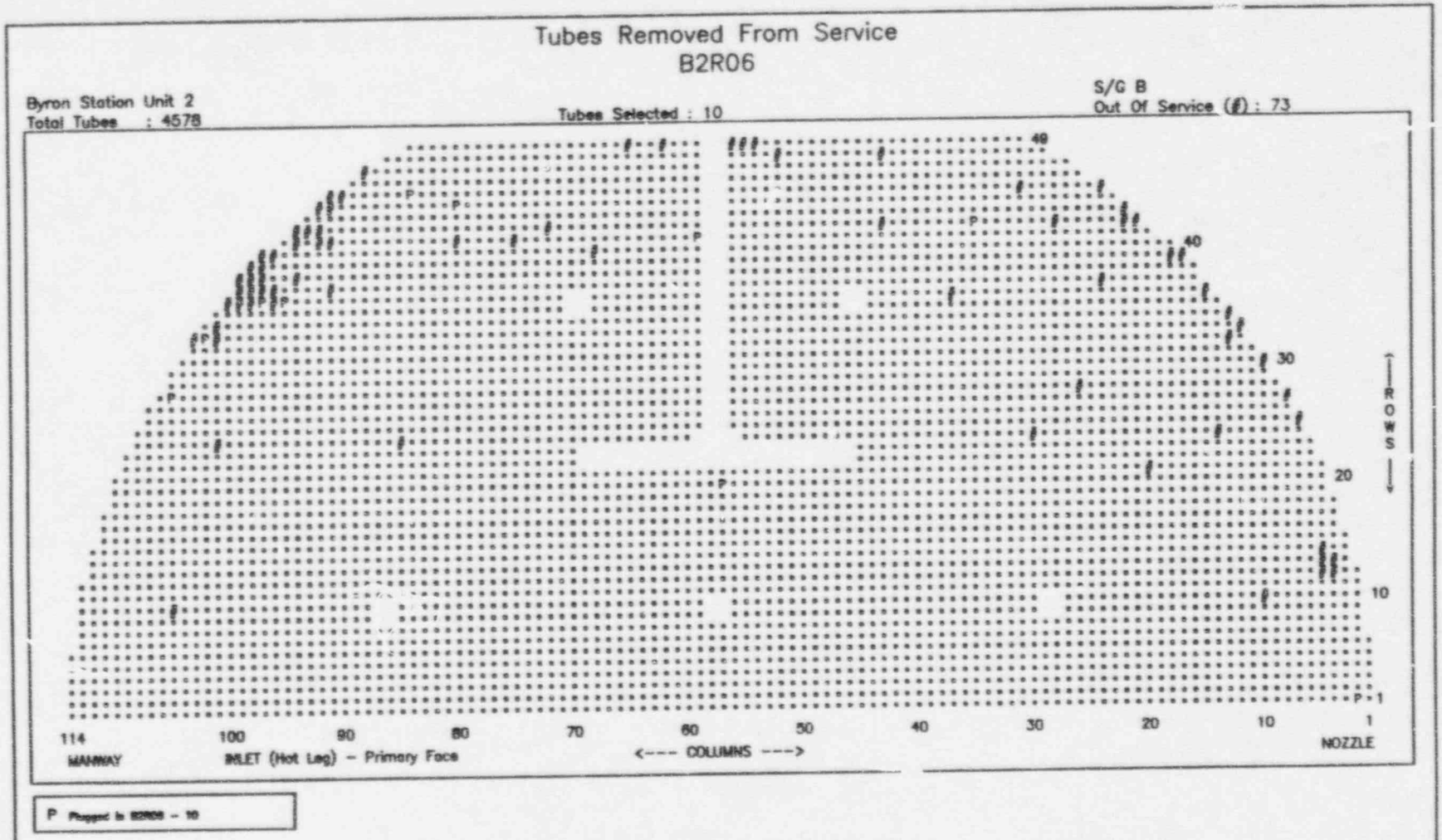

Figure 4C: 2C SG Tubes Plugged During B2R06

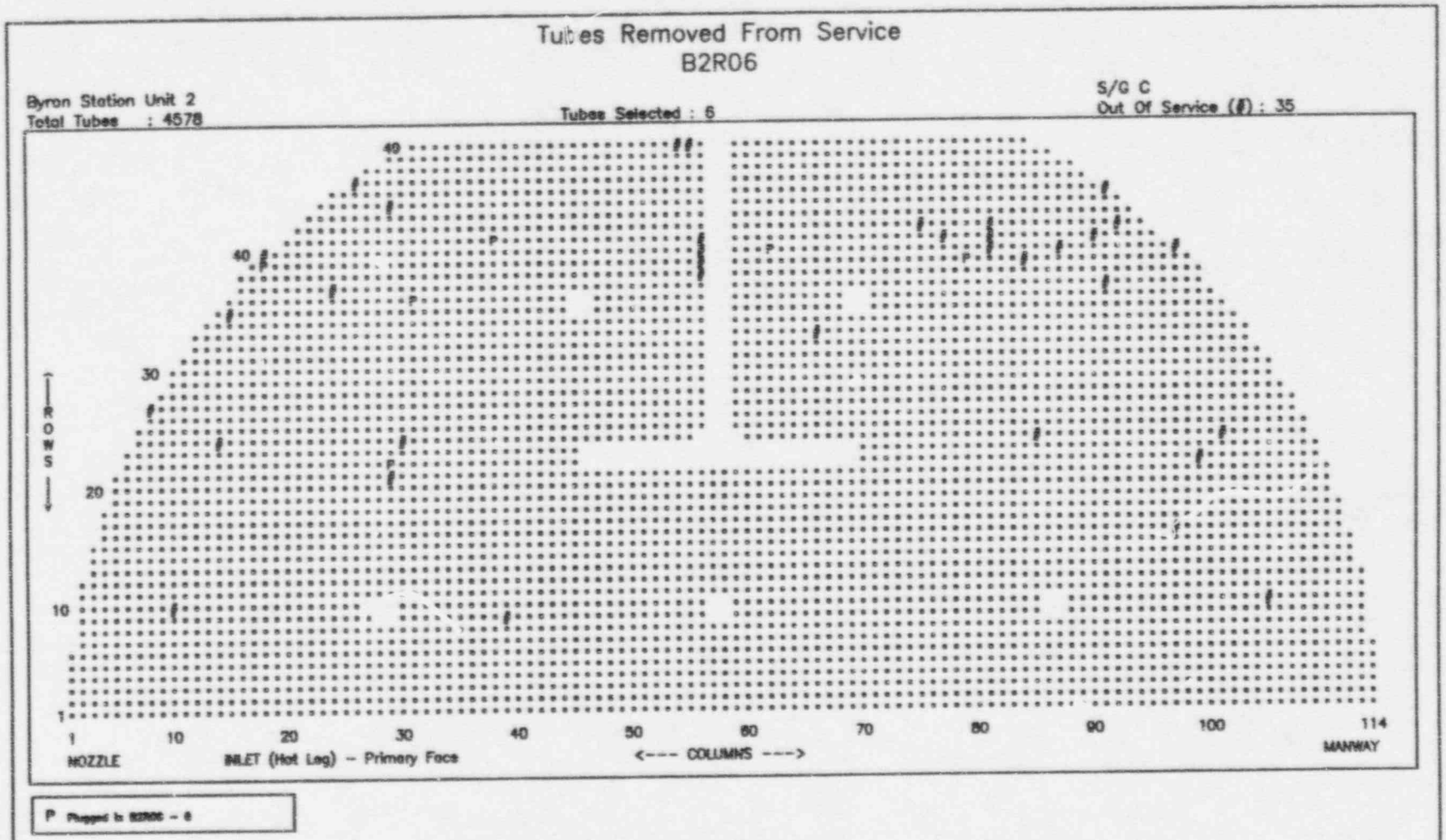

Figure 4D: 2D SG Tubes Plugged During B2R06