

INSERVICE INSPECTION SUMMARY REPORT  
FOR  
REFUELING OUTAGE RF87A  
June 13, 1986 to June 24, 1987

OWNER: Washington Public Power Supply System  
3000 George Washington Way  
Richland, Washington 99352

PLANT: WNP-2, located 11 miles north of Richland, Washington on  
the U. S. Department of Energy Hanford Reservation

COMMERCIAL SERVICE DATE: December 13, 1984

CAPACITY: 1145 MWe

REACTOR PRESSURE VESSEL: Manufacturer: CBIN Serial Number: T-45  
State No.: 29936-84W Nat'l Bd. No.: CBIN-8

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ISI Engineer Date

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Approved by: C. M. P. (S) 9/15/87  
Plant Manager Date

Concurrence: \* J. M. Hoggard 9/15/87  
Authorized Nuclear Inspector (Inservice) Date

\* THE ANI CONCURRENCE SIGNATURE DOES NOT SIGNIFY ANY REVIEW OR CODE  
ACCEPTABILITY FOR SECTION II PLANS WITHOUT COMPLETED NIS-2 FORMS.



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## EXAMINATION RESULTS

This report summarizes the results of inservice inspections (ISI) of ASME Code Class 1, 2 and 3 components and supports performed at Washington Public Power Supply System (Supply System) Nuclear Plant No. 2 (WNP-2) between June 12, 1986 and June 24, 1987. During this period, WNP-2 experienced one major scheduled outage, RF87A, for refueling (Spring 1987).

The ISI examinations are specified in ASME Section XI and required by 10CFR50.55a. Examinations of one reactor pressure vessel (RPV) feedwater nozzle inner radius, pipe break exclusion areas, and intergranular stress corrosion cracking (IGSCC) detection in Code Class 1 stainless steel welds were performed to meet augmented Nuclear Regulatory Commission (Commission) requirements.

The ISI examinations comply with ASME Section XI, 1980 Edition, Winter 1980 Addenda upgraded as follows:

IWA-2300(a)(1) upgraded to 1983W83

C-F upgraded to 1983W83

IWF-3400 upgraded to 1980W81

The number of examinations completed this outage, except for the Class 2 and 3 pressure tests, brought the total in each examination category to the minimum required to be performed during the first inspection period.

Documentation supporting this Summary Report is included in the ISI Program Plan or is located in the WNP-2 Operations Files. Table II lists by code category examinations completed during this period. Appendix B contains a summary of examination results by ISI drawing number. The ISI drawings referenced are located in the ISI Program Plan previously submitted to the Commission.

The examination, tests, replacements and repairs were witnessed or verified by Authorized Nuclear Inspectors-Inservice (ANI-I) J. Brent, D. Hoggarth, C. Roberts and D. Vance. They are employed by Lumberman's Mutual Casualty Co., a subsidiary of Kemper Group, Long Grove, IL, 60049.

### Components Examined

The following components were examined:

<u>Component</u>	<u>Manufacturer</u>	<u>Serial No.</u>	<u>National Board No.</u>
Reactor Pressure Vessel	CBIN Nuclear Co. 2700 Channel Ave. Memphis, TN	T-45	CBIN-8



<u>Component</u>	<u>Manufacturer</u>	<u>Serial No.</u>	<u>National Board No.</u>
RRC-P-1A	Bingham-Willamette Portland, OR	2100991	134
RHR-V-23	Anchor/Darling Valve Co. 701 First Street Williamsport, PA	1N-104	N/A
RHR-V-53B	Anchor/Darling Valve Co. 701 First Street Williamsport, PA	1N-140	N/A
RHR-V-53A	Anchor/Darling Valve Co. 701 First Street Williamsport, PA	1N-141	N/A
LPCS-V-5	Velan Engineering Companies 2125 Ward Avenue Montreal, QUE	0289	N/A
RHR-V-42A	Velan Engineering Companies 2125 Ward Avenue Montreal, QUE	0377	N/A
RHR-V-50B	Velan Engineering Companies 2125 Ward Avenue Montreal, QUE	0414	N/A
RHR-V-111A	Velan Engineering Companies 2125 Ward Avenue Montreal, QUE	0061	N/A
RHR-HX-1A	Delta Southern Co. P. O. Box 3034 Baton Rouge, LA 71821	35009-74-1	3489
MS-RV-5B	Crosby Valve and Gage Company 43 Kendrick Street Wrentham, MA 02093	N63790-00-0061	N/A
MS-RV-4B	Crosby Valve and Gage Company 43 Kendrick Street Wrentham, MA 02093	N63790-00-0057	N/A
MS-RV-3B	Crosby Valve and Gage Company 43 Kendrick Street Wrentham, MA 02093	N63790-00-0053	N/A

1. Installer's Number



The following number of components were examined during RF87A:

	TYPE OF EXAMINATION PERFORMED			
	<u>UT</u>	<u>PT/MT</u>	<u>VT</u>	<u>TESTING</u>
<u>CODE CLASS 1</u>				
Piping Welds	104*	117*		
Welded Attachments		7		
RPV Nozzles	8			
RPV Welds	2**	1**		
Bolting	13	11	37	
Pump			1	
Valves			4	
Component Supports			46	
<u>CODE CLASS 2</u>				
Piping Welds	13	13		
Welded Attachments		9		
Vessel Welds	2	1		
Component Supports			53	
<u>CODE CLASS 3</u>				
Welded Attachments			53	
Component Supports			63	
<u>TESTING</u>				
Snubbers				206

\* Includes partial examinations

\*\* 50% of weld length



## RPV Examinations

Eight (8) RPV nozzles, 50% of the shell to flange weld from the mating surface and 50% of the top head flange weld were ultrasonically examined. Seven (7) of the nozzles included the inner radius examination. The other nozzle inner radius was completed at RF86A. Six (6) RPV nozzles were examined by Southwest Research Institute (SwRI) using mechanized ultrasonic equipment. The remaining welds and the nozzle inner radii examinations were performed manually by Lambert, MacGill, Thomas, Inc. (LMT) or Supply System personnel.

No unacceptable indications were found. Mid-plate indications were detected in the N2-30 zero degree scan. A comparison of these indications found at RF87A with the ones found in the same area during the Preservice Inspection showed no evidence that the number or size of any indication has noticeably increased. These indications were acceptable to the applicable Code.

The RPV weld examinations were performed to comply with ASME Section XI and the augmented requirements of Regulatory Guide 1.150 Revision 1, Appendix A. The examination meets the requirements of Regulatory Guide 1.150 Sections 1, 2, 3, 4 and 5. The recommendations and requirements of Section 6 and 7 are implemented as described in the following sections.

- o Section 6.0 "Recording and Sizing"

The Supply System complies to Section 6.0 as described below.

- o Mechanized examination procedures and equipment used by SwRI were qualified by performing a calibration on a calibration block of the same material and thickness as the area to be examined. The reflectors in the block comply with ASME Section V, Article 4. The procedure effectiveness was additionally demonstrated by SwRI by comparing the technique to a previously qualified procedure that had detected reactor pressure vessel flaws. The procedures are similar, and therefore the procedure used at WNP-2 is qualified and demonstrated as being capable of detecting flaws.
- o Manual examination procedures and equipment used by LMT and Supply System personnel were qualified by performing a calibration on a calibration block of the same material and thickness as the area to be examined. The technique used to examine the nozzle inner radii was developed using the Supply System full size nozzle mock up. The technique used to examine the RPV flange to shell weld was developed using an actual RPV flange piece. The development method and qualification demonstrated that the procedures and equipment could find the reflectors in the code calibration blocks.

The remaining requirements of Section 6.0 are incorporated in the examination procedures.





o Section 7.0 "Reporting of Results"

The reports of the RPV examinations are maintained at the site and are available for review. The reports contain a description of the equipment used. Full coverage of the examination volume per ASME Section XI could not be obtained on all the RPV welds examined. The limitations on the nozzle examinations were due to the nozzle configuration. The examination of the RPV shell to flange thread area was limited from the mating surface due to the clad strip and stud holes. The unexamined thread area will be examined later in the inspection period using a smaller transducer. The following table details the percentage of examination volume not examined.

<u>Item</u>	<u>% Volume not Examined</u>	
	<u>45°</u>	<u>60°</u>
N2-30 RRC Inlet	17.7%	12.5%
N2-60 RRC Inlet	17.7%	12.5%
N3-72 MS	13.2%	9.5
N4-30 Feedwater	15.5%	11.3%
N4-90 Feedwater	15.5%	11.3%
N5-120 LPCS	13.4%	9.8%
N6-45 LPCI	15.5%	11.3%
RPV Threads	10.5% Using 0°	NA

Significant Indications

Significant indications found during the ISI examinations are summarized in Table I. All significant indications were evaluated and found acceptable or were repaired. Evaluations and/or re-examination data reports are attached to the original data report.

Two indications were found by dye penetrant examination that exceed the Code acceptance standard. One of the indications, on the Code Class 1 RFW system, was not possible to UT since it is a fillet type weld. This indication was ground out, re-examined and found acceptable. The other indication, on the RHR system, was examined by an alternate method (UT) and found acceptable. Both indications were welding induced porosity which was opened up during the weld cleaning process (rust removal). The indications were just below the surface of the weld. The indications were not service induced.



Component support SW-1022N, a rigid strut, had a loose wall plate bolt. The bolting was retorqued. Re-examination was acceptable.

During the Class 1 System Leakage pressure test after refueling, three pressure boundary fitting leaks were found. The leaks were evaluated, repaired and re-examined with acceptable results.

#### Augmented Examinations

The Supply System performed augmented examinations per the ISI Program Plan Section 5.3, "Mandatory Augmented Inservice Inspection". No unacceptable results were found during the examination.

- o High Energy Lines Penetrating Containment

A dye penetrant or ultrasonic examination as specified in the ISI Program Plan was performed on six of sixty-five welds in high energy pipe break exclusion areas not within ASME Section XI examination boundary. No unacceptable results were found.

- o RPV Feedwater Nozzle

The nozzle inner radii, bore and safe end regions were examined on one RPV feedwater nozzle per the requirements of the ISI Program Plan Section 5.3.2, "Reactor Feedwater Nozzle". No unacceptable indications were found.

- o Intergranular Stress Corrosion Cracking (IGSCC)

The two RRC 2-inch drain lines, identified on ISI diagrams RRC-110 and RRC-111, were replaced this outage with 316L type stainless steel as part of WNP-2 IGSCC mitigation program. All new welds received a Preservice Inspection dye penetrant and pressure test before being placed back in service.

All Class 1 austenetic stainless steel welds examined this outage were examined for IGSCC by EPRI qualified examiners and procedures. No additional augmented examinations are required per NUREG 0313 Revision 1. No unacceptable indications were found.

#### Limited Examinations

Full coverage of the examination volume or surface per ASME Section XI could not be performed on a number of piping welds. The following is a summary of the coverage achieved.

##### 24RFW(1)A-5 Report number 1FWU-050

Ultrasonic scan limited to two (2) inches from toe of weld due to pipe whip support PWS-27-14. The limitations were from 240° to 120°. The remaining volume will be examined at a future outage.



20RRC(6)-3LD Report numbers 1RRP-020 and 1RRU-092

Three (3) inches of the required twelve (12) inches of this longitudinal weld were examined by ultrasonic and dye penetrant techniques. The unexamined area was covered by component support RRC-1. The remaining nine inches of weld will be examined at a later outage.

20RRC(6)-4LU Report numbers 1RRP-019 and 1RRU-093

Five (5) inches of the required twelve (12) inches of this longitudinal weld were examined by ultrasonic and dye penetrant technique. The unexamined area was covered by component support RRC-SA-50. The remaining seven inches of the weld will be examined at a later outage.

### Snubber Testing

The Supply System tests ASME Code Class 1, 2 and 3 snubbers per WNP-2 Technical Specification 3/4.7.4 instead of the requirements contained in ASME Section XI. A request for relief (ISI-2-007) for this alternate testing program has been approved by the Commission per letter dated March 27, 1987, Elinor G. Adensam to G. C. Sorensen "Safety Evaluation for 1st Ten-Year Interval Inspection Program and Requests for Relief from Certain Requirements".

An initial sample of fifty-five snubbers was selected from the WNP-2 general population of 815 safety related snubbers. These snubbers were randomly selected by computer sub-routine which is part of the Snubber Test and Examination Program (STEP). The selected snubbers were then reviewed to determine if the sample was representative as required by Technical Specification 4.7.4.e. The first sample was judged to be acceptable. In addition to the above fifty-five snubbers, thirteen snubbers installed at locations of failed snubbers from RF86A and fourteen snubbers whose drag was between 2 and 5% were also tested.

Testing of the small snubbers was mainly performed using portable testing devices, "Validators", supplied by the snubber manufacturer. The larger sizes were tested by a vendor-Paul Munroe.

There was one (1) snubber of these fifty-five which failed. The failure was attributed to improper sloping of the Main Steam Relief Valve discharge line. This allowed condensate to build up and cause water hammer in the line when the main steam relief valves were activated. Two (2) more snubbers were found to be frozen on this line. As a result, it was decided to test all MSRV snubbers. A total of 136\* MSRV snubbers were tested (ten had already been included in the fifty-five plan sample). Testing was discontinued after the remainder of the fifty-five plan sample snubbers were tested without any failures and the remainder of the 136 MSRV snubbers were tested. Two (2) additional snubbers on two other MSRV lines were found to be failed. Of the five (5) snubbers failed on MSRV lines, two (2) were replaced with new snubbers and three (3) were changed to rigid struts.

\*MSRV-5C-4: This snubber was stroked in place. In its current configuration, this snubber cannot be removed for testing. Stroking instead of testing was discussed with and concurred by NRC Resident Inspector.



Of the twenty-seven snubbers that required testing as a result of RF86A test results, six snubbers failed again this year. Four (4) of these snubbers were at locations that failed last year. The other two (2) failed snubbers required testing because they exceeded 2% drag during last year's testing. Five (5) of these snubbers have been deleted and one replaced by a rigid strut.

The next snubber testing is required within eighteen months. At that time the two (2) snubbers installed at locations of the failed snubbers will be tested, in addition to sample plan snubbers.

Table III summarizes the snubber testing results.

All testing data sheets have been reviewed and concurred with by the ANI-I.





## REPAIRS/REPLACEMENTS

During the RF87A refueling outage, three (3) major repair/replacement activities were performed: 1) Repair of reactor recirculation pumps RRC-P-1A and RRC-P-1B; 2) Replacement of two 2" reactor recirculation system drain lines, and 3) Rerouting of the Standby Liquid Control from the reactor bottom to the High Pressure Core Spray System. A listing and summary of these and all other repairs/replacements performed between June 12, 1986 and June 14, 1987 are contained in Appendix C.

### RRC Pumps

Recirculation pumps 1A and 1B were disassembled, inspected and rebuilt to reduce excess vibration. ASME pressure boundary stuffing box, mechanical seal and bolting material were replaced for RRC-P-1A. A VT-3 visual examination of the 1A pump casing accessible internal surfaces was performed. Preservice, ultrasonic and VT-1 examinations were performed on the replacement bolting before installation. VT-1, VT-3 and UT examination results were acceptable. ASME pressure boundary stuffing box and mechanical seal was replaced for RRC-P-1B.

After completion of the work on both RRC pumps, a pressure test was performed with acceptable VT-2 examination results.

### Intergranular Stress Corrosion Cracking (IGSCC)

Reactor recirculation (RRC) loop A and B 2 inch drain lines with type 304 stainless steel piping material and valves were replaced with type 316 L stainless steel as part of the IGSCC mitigation program. A PSI dye penetrant examination was performed on the welds in addition to the required radiograph. A pressure test with accompanying VT-2 examination was performed on the replacement welds. All examination results were acceptable.

### Standby Liquid Control (SLC)

The SLC line was rerouted from the bottom of the Reactor Pressure Vessel to the High Pressure Core Spray system. Performed PT examination on final socket welds and PT and RT examination on final circumferential butt welds. PT and RT examination results were acceptable. A number of snubbers were replaced by struts. The welds were pressure tested with acceptable VT-2 examination results.

### ISI Indications

One indication found during ISI examinations required repair. A dye penetrant examination found a 1/4 inch rounded indication in a 5-inch reactor feedwater line. The indication was ground out, followed by an acceptable PT. The other weld of this type was examined with acceptable results. The weld size was checked and found to be acceptable. For summary of indications found during snubber testing see section "Snubber Testing" on page 7.



TABLE 1  
SIGNIFICANT INDICATIONS

<u>Report No.</u>	<u>Identification No.</u>	<u>Description</u>	<u>Remarks</u>
1RPU-009	N7	RPV head spare nozzle	160% DAC due to nozzle geometry
1LPU-009	10LPCS(1)-4	Safe end to nozzle	180% DAC beam redirection due to grain structure
1RHP-044	18RHR(1)A-14	Pipe to elbow	Two rounded 3/16" indications PT rejectable. Indications were UT'd with acceptable results. Therefore, indications acceptable [IWB-3514.2(b)]
1FWU-043	24RFW(1)A-6	Pipe to Elbow	120% DAC Mode conversion
1FWP-024	5RFW(11)B-1	Sleeve to Sleeve	0.25 rounded indication PT rejectable. Indication ground out. Re-exam acceptable.
1FWU-033	4RFW(11)A-2	Pipe to Elbow	135% DAC I.D. geometry
1VT2-87	RRC-V-23A	Valve	Leak at bonnet to body flange. Repaired. Re-exam acceptable.
1HV-0052	SW-1022N	Rigid Hanger	Wall plate bolt loose--bolting retorqued. Re-exam acceptable. This was a PSI exam.
1VT2-87	RCIC-V-620	Vent Line	Cap leaked. Repaired. Re-exam acceptable.
1VT2-87	RFW-V-120	Cap Drain Line	Cap leaked. Repaired. Re-exam showed slight leak with less than 1 drop/minute. Evaluated as acceptable.



TABLE VI  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M/D)
AUGMT	2MS(2G)C-1	SOL TO PIPE	MS-203	SUR	19870424
	2MS(2G)C-2	PIPE TO EL	MS-203	SUR	19870424
	2MS(2G)C-3	EL TO PIPE	MS-203	SUR	19870424
	6RWCU(3)-29	PIPE TO ELL	RWCU-301	VOL	19870511
	6RWCU(3)-30	ELL TO PIPE	RWCU-301	VOL	19870511
	6RWCU(3)-31	PIPE TO ELL	RWCU-301	VOL	19870511

COUNT = 6

B-A	AE	#4 SC-FL CRC WD	RPV-101	VOL	19870418
	AG	TOP HD-FLG WELD	RPV-102	VOL	19870425
	AG	TOP HD-FLG WELD	RPV-102	SUR	19870424

COUNT = 3

B-D	N2-30	RRC NZ-V @ 30	RPV-101	VOL	19870525
	N2-30-IR	RRC NZ-IR @ 30	RPV-101	VOL	19870513
	N2-60	RRC NZ-V @ 60	RPV-101	VOL	19870525
	N2-60-IR	RRC NZ-IR @ 60	RPV-101	VOL	19870513
	N3-72	MS NZ-V @ 72	RPV-101	VOL	19870512
	N3-72-IR	MS NZ-IR @ 72	RPV-101	VOL	19870513
	N4-30	FW NZ-V @ 30	RPV-101	VOL	19870523
	N4-90	FW NZ-V @ 90	RPV-101	VOL	19870523
	N4-90-IR	FW NZ-IR @ 90	RPV-101	VOL	19870422
	N4-90-NB	FW NZ BORE @ 90	RPV-101	VOL	19870422
	N5-120	LPCS NZ-V @ 120	RPV-101	VOL	19870524
	N5-120-IR	LPCS NZ-IR @ 120	RPV-101	VOL	19870513
	N6-45	LPCI NZ-V @ 45	RPV-101	VOL	19870524
	N6-45-IR	LPCI NZ-IR @ 45	RPV-101	VOL	19870513
	N7	HD SP NZ-HD TOP	RPV-102	VOL	19870429
	N7-IR	HD SP NZ-HD IR	RPV-102	VOL	19870501

COUNT = 16

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M/D)
B-F	10LPCS(1)-3	SE EXT TO SE	LPCS-101	VOL	19870514
	10LPCS(1)-3	SE EXT TO SE	LPCS-101	SUR	19870513
	10LPCS(1)-4	SE TO NOZZLE	LPCS-101	VOL	19870514
	10LPCS(1)-4	SE TO NOZZLE	LPCS-101	SUR	19870513
	12LPCI(1)A-5	SE EXT TO SE	RHR-101	VOL	19870516
	12LPCI(1)A-5	SE EXT TO SE	RHR-101	SUR	19870516
	12LPCI(1)A-6	SE TO NOZZLE	RHR-101	VOL	19870516
	12LPCI(1)A-6	SE TO NOZZLE	RHR-101	SUR	19870516
	12RFW(1)AB-9	SE EXT-SE STUB	RFW-101	VOL	19870514
	12RFW(1)AB-9	SE EXT-SE STUB	RFW-101	SUR	19870513
	12RFW(1)AB-10	SE STUB TO SE	RFW-101	VOL	19870514
	12RFW(1)AB-10	SE STUB TO SE	RFW-101	SUR	19870513
	12RFW(1)AB-11	SE TO N4	RFW-101	VOL	19870514
	12RFW(1)AB-11	SE TO N4	RFW-101	SUR	19870513

COUNT = 14

B-G-1	RPV STUD 35-1-2A	RPV STUD	RPV-101	VOL	19870427
	RPV STUD 35-1-2A	RPV STUD	RPV-101	SUR	19870430
	RPV STUD 35-1-8A	RPV STUD	RPV-101	VOL	19870427
	RPV STUD 35-1-8A	RPV STUD	RPV-101	SUR	19870430
	RPV STUD 35-1-15A	RPV STUD	RPV-101	VOL	19870427
	RPV STUD 35-1-15A	RPV STUD	RPV-101	SUR	19870430
	RPV STUD 35-1-22A	RPV STUD	RPV-101	VOL	19870427
	RPV STUD 35-1-22A	RPV STUD	RPV-101	SUR	19870430
	RPV STUD 35-1-29A	RPV STUD	RPV-101	VOL	19870427
	RPV STUD 35-1-29A	RPV STUD	RPV-101	SUR	19870430
	RPV STUD 35-1-36A	RPV STUD	RPV-101	VOL	19870427
	RPV STUD 35-1-36A	RPV STUD	RPV-101	SUR	19870430
	RPV STUD 35-1-43A	RPV STUD	RPV-101	VOL	19870427
	RPV STUD 35-1-43A	RPV STUD	RPV-101	SUR	19870430
	RPV STUD 35-1-51A	RPV STUD	RPV-101	VOL	19870427
	RPV STUD 35-1-51A	RPV STUD	RPV-101	SUR	19870428
	RPV STUD 35-1-57A	RPV STUD	RPV-101	VOL	19870427

TA II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/Y/)
RPV	STUD	35-1-57A	RPV STUD	RPV-101	SUR	19871439
RPV	STUD	35-1-64A	RPV STUD	RPV-101	VOL	19870427
RPV	STUD	35-1-64A	RPV STUD	RPV-101	SUR	19870428
RPV	STUD	35-1-71A	RPV STUD	RPV-101	VOL	19871427
RPV	STUD	35-1-71A	RPV STUD	RPV-101	SUR	19870428
RPV	NUT	36-1-2A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-2A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-8A	RPV NUT	RPV-101	VOL	19871425
RPV	NUT	36-1-8A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-15A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-15A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-22A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-22A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-29A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-29A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-36A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-36A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-43A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-43A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-51A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-51A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-57A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-57A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-64A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-64A	RPV NUT	RPV-101	SUR	19870501
RPV	NUT	36-1-71A	RPV NUT	RPV-101	VOL	19870504
RPV	NUT	36-1-71A	RPV NUT	RPV-101	SUR	19870501
RPV	WASHERS*		RPV WASHER-76EA	RPV-101	VT-1	19870504
RPV	THREADS		THREADS-RPV FLG	RPV-101	VOL	19870418
RRC	P-1A-BLT		PUMP BOLTING	RRC-103	VOL	19870402
RRC	P-1A-BLT		PUMP BOLTING	RRC-103	VT-1	19870524
RRC	P-1A-DLT		PUMP BOLTING	RRC-103	VT-1	19870403

COUNT = 49

\*The following RPV washers were examined: 36-1-2A, 36-1-8A, 36-1-15A, 36-1-22A, 36-1-29A, 36-1-36A, 36-1-43A, 36-1-51A, 36-1-57A, 36-1-64A, 36-1-71A.

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M/D)
B-G-2	CRD HOUSING BLT*	CRD HOUSING BLT	RPV-102	VT-1	19870506
	6RCIC(1)-41ABD	FLANGE BOLTING	RCIC-102	VT-1	19870514
	6RCIC(1)-44BD	FLANGE BOLTING	RCIC-102	VT-1	19870514
	LPCS-V-5-BLT	VALVE BOLTING	LPCS-101	VT-1	19870512
	RHR-V-42A-BLT	VALVE BOLTING	RHR-101	VT-1	19870513
	RHR-V-111A-BLT	VALVE BOLTING	RHR-101	VT-1	19870513
	RHR-V-50A-BLT	VALVE BOLTING	RHR-105	VT-1	19870512
	RHR-V-50B-BLT	VALVE BOLTING	RHR-106	VT-1	19870520
	8MSR-5B-2BD	FLANGE BOLTING	MS-102	VT-1	19870423
	MS-RV-5B-BLT	VALVE BOLTING	MS-102	VT-1	19870423
	8MSR-4B-2BD	FLANGE BOLTING	MS-102	VT-1	19870423
	MS-RV-4B-BLT	VALVE BOLTING	MS-102	VT-1	19870423
	8MSR-3B-2BD	FLANGE BOLTING	MS-102	VT-1	19870423
	MS-RV-3B-BLT	VALVE BOLTING	MS-102	VT-1	19870423
COUNT =		14			
B-J	6RCIC(1)-41A	PIPE TO FLANGE	RCIC-102	VOL	19870506
	6RCIC(1)-41A	PIPE TO FLANGE	RCIC-102	SUR	19870506
	6RCIC(1)-42	FLANGE TO EL	RCIC-102	VOL	19870506
	6RCIC(1)-42	FLANGE TO EL	RCIC-102	SUR	19870504
	6RCIC(1)-43	EL TO PIPE	RCIC-102	VOL	19870506
	6RCIC(1)-43	EL TO PIPE	RCIC-102	SUR	19870504
	6RCIC(1)-45	FLG TO NOZZLE	RCIC-102	VOL	19870501
	6RCIC(1)-45	FLG TO NOZZLE	RCIC-102	SUR	19870424
	12LPCS(1)-15	PIPE TO EL	LPCS-101	VOL	19870509
	12LPCS(1)-15	PIPE TO EL	LPCS-101	SUR	19870509
	12LPCS(1)-16	EL TO PIPE	LPCS-101	VOL	19870509
	12LPCS(1)-16	EL TO PIPE	LPCS-101	SUR	19870509
	12LPCS(1)-18	EL TO PIPE	LPCS-101	VOL	19870509
	12LPCS(1)-18	EL TO PIPE	LPCS-101	SUR	19870509
	10LPCS(1)-1	EL TO PIPE	LPCS-101	VOL	19870514
	10LPCS(1)-1	EL TO PIPE	LPCS-101	SUR	19870513
	10LPCS(1)-2	PIPE TO SE EXT	LPCS-101	VOL	19870514

\*Bolting from the following CRD housings was examined: 02-23, 06-23, 10-15, 14-07, 14-55, 22-03, 22-31, 36-27, 26-55, 26-59, 30-11, 30-55, 30-59, 34-27, 34-59, 38-35, 42-47, 50-35, 50-55, 58-39.



TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RFB7A

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M)
		10LPCS(1)-2	PIPE TO SE EXT	LPCS-101	SUR	19870513
		14LPCI(1)A-9	PIPE TO EL	RHR-101	VOL	19870422
		14LPCI(1)A-9	PIPE TO EL	RHR-101	SUR	19870422
		14LPCI(1)A-10	EL TO PIPE	RHR-101	VOL	19870422
		14LPCI(1)A-10	EL TO PIPE	RHR-101	SUR	19870422
		12LPCI(1)A-1	REDUCER TO PIPE	RHR-101	VOL	19870423
		12LPCI(1)A-1	REDUCER TO PIPE	RHR-101	SUR	19870423
		12LPCI(1)A-2	PIPE TO EL	RHR-101	VOL	19870423
		12LPCI(1)A-2	PIPE TO EL	RHR-101	SUR	19870423
		12LPCI(1)A-3	EL TO PIPE	RHR-101	VOL	19870423
		12LPCI(1)A-3	EL TO PIPE	RHR-101	SUR	19870423
		12LPCI(1)A-4	PIPE TO SE	RHR-101	VOL	19870518
		12LPCI(1)A-4	PIPE TO SE	RHR-101	SUR	19870516
		20RHR(2)-8	PIPE TO EL	RHR-104	VOL	19870421
		20RHR(2)-8	PIPE TO EL	RHR-104	SUR	19870421
		20RHR(2)-9	EL TO PIPE	RHR-104	VOL	19870421
		20RHR(2)-9	EL TO PIPE	RHR-104	SUR	19870421
		20RHR(2)-10	PIPE TO EL	RHR-104	VOL	19870421
		20RHR(2)-10	PIPE TO EL	RHR-104	SUR	19870421
		12RHR(1)A-16LU	PIPE SEAM	RHR-105	VOL	19870429
		12RHR(1)A-16LU	PIPE SEAM	RHR-105	SUR	19870429
		12RHR(1)A-16	PIPE TO EL	RHR-105	VOL	19870429
		12RHR(1)A-16	PIPE TO EL	RHR-105	SUR	19870429
		12RHR(1)A-16LDI	EL SEAM	RHR-105	VOL	19870429
		12RHR(1)A-16LDI	EL SEAM	RHR-105	SUR	19870429
		12RHR(1)A-16LDO	EL SEAM	RHR-105	VOL	19870429
		12RHR(1)A-16LDO	EL SEAM	RHR-105	SUR	19870429
		12RHR(1)A-17LUI	EL SEAM	RHR-105	VOL	19870429
		12RHR(1)A-17LUI	EL SEAM	RHR-105	SUR	19870429
		12RHR(1)A-17LUO	EL SEAM	RHR-105	VOL	19870429
		12RHR(1)A-17LUO	EL SEAM	RHR-105	SUR	19870429
		12RHR(1)A-17	EL TO PIPE	RHR-105	VOL	19870429
		12RHR(1)A-17	EL TO PIPE	RHR-105	SUR	19870429
		12RHR(1)A-17LO	PIPE SEAM	RHR-105	VOL	19870429

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M/D)
	12RHR(1)A-17LD	PIPE SEAM	RHR-105	SUR	19870429
	12RHR(1)A-18LU	PIPE SEAM	RHR-105	VOL	19870429
	12RHR(1)A-18LU	PIPE SEAM	RHR-105	SUR	19870429
	12RHR(1)A-18	PIPE TO VLV	RHR-105	VOL	19870430
	12RHR(1)A-18	PIPE TO VLV	RHR-105	SUR	19870429
	12RHR(1)B-2	PEN TO PIPE	RHR-106	VOL	19870423
	12RHR(1)B-2	PEN TO PIPE	RHR-106	SUR	19870423
	12RHR(1)B-5	PIPE TO EL	RHR-106	VOL	19870423
	12RHR(1)B-5	PIPE TO EL	RHR-106	SUR	19870423
	12RHR(1)B-6	EL TO PIPE	RHR-106	VOL	19870423
	12RHR(1)B-6	EL TO PIPE	RHR-106	SUR	19870423
	26MS(1)B-9/8MSR-5B	PIPE TO SWL	MS-102	VOL	19870424
	26MS(1)B-9/8MSR-5B	PIPE TO SWL	MS-102	SUR	19870424
	8MSR-5B1	SWL TO PIPE	MS-102	VOL	19870427
	8MSR-5B1	SWL TO PIPE	MS-102	SUR	19870424
	26MS(1)B-9/8MSR-3B	PIPE TO SWL	MS-102	VOL	19870424
	26MS(1)B-9/8MSR-3B	PIPE TO SWL	MS-102	SUR	19870424
	5RFW(11)A-1	SLEEVE-SLEEVE	RFW-101	SUR	19870429
	24RFW(1)A-2	PIPE TO VALVE	RFW-101	VOL	19870425
	24RFW(1)A-2	PIPE TO VALVE	RFW-101	SUR	19870425
	24RFW(1)A-3	VALVE TO PENE	RFW-101	VOL	19870425
	24RFW(1)A-3	VALVE TO PENE	RFW-101	SUR	19870424
	24RFW(1)A-4	PENE TO VALVE	RFW-101	VOL	19870502
	24RFW(1)A-4	PENE TO VALVE	RFW-101	SUR	19870501
	24RFW(1)A-5	VALVE TO PIPE	RFW-101	VOL	19870502
	24RFW(1)A-5	VALVE TO PIPE	RFW-101	SUR	19870501
	24RFW(1)A-6	PIPE TO EL	RFW-101	VOL	19870502
	24RFW(1)A-6	PIPE TO EL	RFW-101	SUR	19870501
	24RFW(1)A-6LDO	EL SEAM	RFW-101	VOL	19870502
	24RFW(1)A-6LDO	EL SEAM	RFW-101	SUR	19870501
	24RFW(1)A-6LDI	EL SEAM	RFW-101	VOL	19870502
	24RFW(1)A-6LDI	EL SEAM	RFW-101	SUR	19870501
	24RFW(1)A-7LUI	EL SEAM	RFW-101	VOL	19870502
	24RFW(1)A-7LUI	EL SEAM	RFW-101	SUR	19870501

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M)
	24RFW(1)A-7LU0	EL SEAM	RFW-101	VOL	19870502
	24RFW(1)A-7LU0	EL SEAM	RFW-101	SUR	19870501
	24RFW(1)A-7	EL TO PIPE	RFW-101	VOL	19870502
	24RFW(1)A-7	EL TO PIPE	RFW-101	SUR	19870501
	12RFW(1)AB-4	PIPE TO EL	RFW-101	VOL	19870422
	12RFW(1)AB-4	PIPE TO EL	RFW-101	SUR	19870422
	12RFW(1)AB-5	EL TO PIPE	RFW-101	VOL	19870422
	12RFW(1)AB-5	EL TO PIPE	RFW-101	SUR	19870422
	12RFW(1)AB-6	PIPE TO EL	RFW-101	VOL	19870422
	12RFW(1)AB-6	PIPE TO EL	RFW-101	SUR	19870422
	12RFW(1)AB-7	EL TO PIPE	RFW-101	VOL	19870422
	12RFW(1)AB-7	EL TO PIPE	RFW-101	SUR	19870422
	12RFW(1)AB-8	PIPE-SE EXT	RFW-101	VOL	19870514
	12RFW(1)AB-8	PIPE-SE EXT	RFW-101	SUR	19870513
	24RFW(1)B-1	VALVE TO PIPE	RFW-102	VOL	19870425
	24RFW(1)B-1	VALVE TO PIPE	RFW-102	SUR	19870424
	24RFW(1)B-1/5RFW(11)-4	PIPE TO WOL	RFW-102	VOL	19870425
	24RFW(1)B-1/5RFW(11)-4	PIPE TO WOL	RFW-102	SUR	19870424
	5RFW(11)B-2	SLEEVE TO WOL	RFW-102	VOL	19870425
	5RFW(11)B-2	SLEEVE TO WOL	RFW-102	SUR	19870424
	5RFW(11)B-1	SLEEVE-SLEEVE	RFW-102	SUR	19870424
	24RFW(1)B-2	PIPE TO VALVE	RFW-102	VOL	19870425
	24RFW(1)B-2	PIPE TO VALVE	RFW-102	SUR	19870424
	24RFW(1)B-3	VALVE TO PENE	RFW-102	VOL	19870425
	24RFW(1)B-3	VALVE TO PENE	RFW-102	SUR	19870424
	4RFW(11)A-1	TEE TO PIPE	RFW-103	VOL	19870424
	4RFW(11)A-1	TEE TO PIPE	RFW-103	SUR	19870424
	4RFW(11)A-2	PIPE TO EL	RFW-103	VOL	19870424
	4RFW(11)A-2	PIPE TO EL	RFW-103	SUR	19870424
	4RFW(11)A-3	EL TO SLEEVE	RFW-103	VOL	19870424
	4RFW(11)A-3	EL TO SLEEVE	RFW-103	SUR	19870424
	20RRC(6)-3LUI	EL SEAM	RRC-105	VOL	19870429
	20RRC(6)-3LUI	EL SEAM	RRC-105	SUR	19870428
	20RRC(6)-3LU0	EL SEAM	RRC-105	VOL	19870429

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M/D)
	20RRC(6)-3LUO	EL SEAM	RRC-105	SUR	19870427
	20RRC(6)-3	EL TO PIPE	RRC-105	VOL	19870429
	20RRC(6)-3	EL TO PIPE	RRC-105	SUR	19870427
	20RRC(6)-3LD	PIPE SEAM	RRC-105	VOL	19870429
	20RRC(6)-3LD	PIPE SEAM	RRC-105	SUR	19870427
	20RRC(6)-4LU	PIPE SEAM	RRC-105	VOL	19870429
	20RRC(6)-4LU	PIPE SEAM	RRC-105	SUR	19870427
	20RRC(6)-4	PIPE TO EL	RRC-105	VOL	19870429
	20RRC(6)-4	PIPE TO EL	RRC-105	SUR	19870427
	20RRC(6)-4LDI	EL SEAM	RRC-105	VOL	19870429
	20RRC(6)-4LDI	EL SEAM	RRC-105	SUR	19870427
	20RRC(6)-4LDO	EL SEAM	RRC-105	VOL	19870429
	20RRC(6)-4LDO	EL SEAM	RRC-105	SUR	19870427
	20RRC(6)-5LUI	EL SEAM	RRC-105	VOL	19870429
	20RRC(6)-5LUI	EL SEAM	RRC-105	SUR	19870427
	20RRC(6)-5LUO	EL SEAM	RRC-105	VOL	19870429
	20RRC(6)-5LUO	EL SEAM	RRC-105	SUR	19870427
	20RRC(6)-5	EL TO PIPE	RRC-105	VOL	19870429
	20RRC(6)-5	EL TO PIPE	RRC-105	SUR	19870427
	20RRC(6)-5LD	PIPE SEAM	RRC-105	VOL	19870430
	20RRC(6)-5LD	PIPE SEAM	RRC-105	SUR	19870427
	20RRC(6)-6LU	PIPE SEAM	RRC-105	VOL	19870430
	20RRC(6)-6LU	PIPE SEAM	RRC-105	SUR	19870427
	20RRC(6)-6	PIPE TO EL	RRC-105	VOL	19870430
	20RRC(6)-6	PIPE TO EL	RRC-105	SUR	19870427
	20RRC(6)-6LDI	EL SEAM	RRC-105	VOL	19870430
	20RRC(6)-6LDI	EL SEAM	RRC-105	SUR	19870427
	20RRC(6)-6LDO	EL SEAM	RRC-105	VOL	19870430
	20RRC(6)-6LDO	EL SEAM	RRC-105	SUR	19870427
	12RRC(7)A-1	VALVE TO PIPE	RRC-106	VOL	19870430
	12RRC(7)A-1	VALVE TO PIPE	RRC-106	SUR	19870429
	12RRC(7)A-1LD	PIPE SEAM	RRC-106	VOL	19870430
	12RRC(7)A-1LD	PIPE SEAM	RRC-106	SUR	19870429
	12RRC(7)A-2LU	PIPE SEAM	RRC-106	VOL	19870430

T/C II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M)
		12RRC(7)A-2LU	PIPE SEAM	RRC-106	SUR	19870429
		12RRC(7)A-2	PIPE TO EL	RRC-106	VOL	19870430
		12RRC(7)A-2	PIPE TO EL	RRC-106	SUR	19870429
		12RRC(7)A-2LDI	EL SEAM	RRC-106	VOL	19870501
		12RRC(7)A-2LDI	EL SEAM	RRC-106	SUR	19870429
		12RRC(7)A-2LDO	EL SEAM	RRC-106	VOL	19870501
		12RRC(7)A-2LDO	EL SEAM	RRC-106	SUR	19870429
		12RRC(7)A-3LUI	EL SEAM	RRC-106	VOL	19870501
		12RRC(7)A-3LUI	EL SEAM	RRC-106	SUR	19870429
		12RRC(7)A-3LUO	EL SEAM	RRC-106	VOL	19870501
		12RRC(7)A-3LUO	EL SEAM	RRC-106	SUR	19870429
		12RRC(7)A-3	EL TO PIPE	RRC-106	VOL	19870501
		12RRC(7)A-3	EL TO PIPE	RRC-106	SUR	19870429
		12RRC(7)A-3LD	PIPE SEAM	RRC-106	VOL	19870501
		12RRC(7)A-3LD	PIPE SEAM	RRC-106	SUR	19870429
		12RRC(7)A-4LU	PIPE SEAM	RRC-106	VOL	19870501
		12RRC(7)A-4LU	PIPE SEAM	RRC-106	SUR	19870501
		12RRC(7)A-4	PIPE TO EL	RRC-106	VOL	19870501
		12RRC(7)A-4	PIPE TO EL	RRC-106	SUR	19870501
		12RRC(7)A-4LDI	EL SEAM	RRC-106	VOL	19870501
		12RRC(7)A-4LDI	EL SEAM	RRC-106	SUR	19870501
		12RRC(7)A-4LDO	EL SEAM	RRC-106	VOL	19870501
		12RRC(7)A-4LDO	EL SEAM	RRC-106	SUR	19870501
		12RRC(7)B-4LU	PIPE SEAM	RRC-107	VOL	19870505
		12RRC(7)B-4LU	PIPE SEAM	RRC-107	SUR	19870505
		12RRC(7)B-4	PIPE TO EL	RRC-107	VOL	19870505
		12RRC(7)B-4	PIPE TO EL	RRC-107	SUR	19870505
		12RRC(7)B-4LDI	EL SEAM	RRC-107	VOL	19870505
		12RRC(7)B-4LDI	EL SEAM	RRC-107	SUR	19870505
		12RRC(7)B-4LDO	EL SEAM	RRC-107	VOL	19870505
		12RRC(7)B-4LDO	EL SEAM	RRC-107	SUR	19870505
		12RRC(7)B-5LUI	EL SEAM	RRC-107	VOL	19870505
		12RRC(7)B-5LUI	EL SEAM	RRC-107	SUR	19870505
		12RRC(7)B-5LUO	EL SEAM	RRC-107	VOL	19870505

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M/D)
	12RRC(7)B-5LU0	EL SEAM	RRC-107	SUR	19870505
	12RRC(7)B-5	EL TO PIPE	RRC-107	VOL	19870505
	12RRC(7)B-5	EL TO PIPE	RRC-107	SUR	19870505
	12RRC(7)B-5LD	PIPE SEAM	RRC-107	VOL	19870505
	12RRC(7)B-5LD	PIPE SEAM	RRC-107	SUR	19870505
	12RRC(7)B-6LU	PIPE SEAM	RRC-107	VOL	19870505
	12RRC(7)B-6LU	PIPE SEAM	RRC-107	SUR	19870505
	12RRC(7)B-6	PIPE TO SWL	RRC-107	VOL	19870505
	12RRC(7)B-6	PIPE TO SWL	RRC-107	SUR	19870505
	2RRC(6)A-3	PIPE TO EL	RRC-110	SUR	19870424
	2RRC(6)A-3A	EL TO PIPE	RRC-110	SUR	19870424
	2RRC(6)A-4	PIPE TO EL	RRC-110	SUR	19870424
	2RRC(6)A-5	VALVE TO PIPE	RRC-110	SUR	19870424
	2RRC(6)A-6	PIPE TO VALVE	RRC-110	SUR	19870424
	2RRC(6)B-2	EL TO EL	RRC-111	SUR	19870513
	2RRC(6)B-4	PIPE TO VALVE	RRC-111	SUR	19870513
	2RRC(6)B-5	VALVE TO PIPE	RRC-111	SUR	19870513
	2RRC(6)B-6	PIPE TO EL	RRC-111	SUR	19870513
	2RRC(6)B-7	EL TO PIPE	RRC-111	SUR	19870513
	2RRC(6)B-8	PIPE TO VALVE	RRC-111	SUR	19870513
	COUNT =	207			
B-K-1	RCIC-940N(W)	1 WELDED LUG	RCIC-102	SUR	19870506
	RCIC-931N(W)	8 WELDED LUGS	RCIC-102	SUR	19870506
	LPCS-909N(W)	8 WELDED LUGS	LPCS-101	SUR	19870509
	RHR-528(W)	4 WELDED LUGS	RHR-101	SUR	19870422
	RHR-SA-58(W)	16 WELDED LUGS	RHR-104	SUR	19870421
	RHR-SB-39(W)	8 WELDED LUGS	RHR-106	SUR	19870423
	MS FLUED HEAD A	FLUED HEAD WELD	MS-101	SUR	19870425
	COUNT =	7			
B-L-2	RRC-P-1A-BDY	PUMP BODY	RRC-103	VT-3	19870524
	COUNT =	1			

T J C II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M)
B-M-2	RHR-V-23-BDY	VALVE BODY	RCIC-102	VT-3	19870528
	RHR-V-53A-BDY	VALVE BODY	RHR-105	VT-3	19861123
	RHR-V-53B-BDY	VALVE BODY	RHR-106	VT-3	19870527
	RHR-V-50B-BDY	VALVE BODY	RHR-106	VT-3	19870528

COUNT = 4

B-P	RPV-PB-101(L)	LK PRES BNDRY	RPV-101	VT-2	19870629
	RPV-PB-102(L)	LK PRES BNDRY	RPV-102	VT-2	19870620
	RCIC-PB-101(L)	LK PRES BNDRY	RCIC-101	VT-2	19870620
	RCIC-PB-102(L)	LK PRES BNDRY	RCIC-102	VT-2	19870620
	HPCS-PB-101(L)	LK PRES BNDRY	HPCS-101	VT-2	19870620
	LPCS-PB-101(L)	LK PRES BNDRY	LPCS-101	VT-2	19870620
	RHR-PB-101(L)	LK PRES BNDRY	RHR-101	VT-2	19870620
	RHR-PB-102(L)	LK PRES BNDRY	RHR-102	VT-2	19870620
	RHR-PB-103(L)	LK PRES BNDRY	RHR-103	VT-2	19870620
	RHR-PB-104(L)	LK PRES BNDRY	RHR-104	VT-2	19870620
	RHR-PB-105(L)	LK PRES BNDRY	RHR-105	VT-2	19870620
	RHR-PB-106(L)	LK PRES BNDRY	RHR-106	VT-2	19870620
	MS-PB-101(L)	LK PRES BNDRY	MS-101	VT-2	19870620
	MS-PB-102(L)	LK PRES BNDRY	MS-102	VT-2	19870620
	MS-PB-103(L)	LK PRES BNDRY	MS-103	VT-2	19870620
	MS-PB-104(L)	LK PRES BNDRY	MS-104	VT-2	19870620
	MS-PB-105(L)	LK PRES BNDRY	MS-105	VT-2	19870620
	MS-PB-106(L)	LK PRES BNDRY	MS-106	VT-2	19870620
	RFW-PB-101(L)	LK PRES BNDRY	RFW-101	VT-2	19870620
	RFW-PB-102(L)	LK PRES BNDRY	RFW-102	VT-2	19870620
	RFW-PB-103(L)	LK PRES BNDRY	RFW-103	VT-2	19870620
	RRC-PB-101(L)	LK PRES BNDRY	RRC-101	VT-2	19870620
	RRC-PB-102(L)	LK PRES BNDRY	RRC-102	VT-2	19870620
	RRC-PB-103(L)	LK PRES BNDRY	RRC-103	VT-2	19870620
	RRC-PB-104(L)	LK PRES BNDRY	RRC-104	VT-2	19870620
	RRC-PB-105(L)	LK PRES BNDRY	RRC-105	VT-2	19870620
	RRC-PB-106(L)	LK PRES BNDRY	RRC-106	VT-2	19870620

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M/D)
	RRC-PB-107(L)	LK PRES BNDRY	RRC-107	VT-2	19870620
	RRC-PB-108(L)	LK PRES BNDRY	RRC-108	VT-2	19870620
	RRC-PB-109(L)	LK PRES BNDRY	RRC-109	VT-2	19870620
	RRC-PB-110(L)	LK PRES BNDRY	RRC-110	VT-2	19870620
	RRC-PB-111(L)	LK PRES BNDRY	RRC-111	VT-2	19870620
	RWCU-PB-101(L)	LK PRES BNDRY	RWCU-101	VT-2	19870620
	SLC-PB-101(L)	LK PRESS BNDRY	SLC-101	VT-2	19870620
	COUNT =	34			
C-A	AC-1	FLG/SHEL CIRWLD	RHR-214	VOL	19870506
	COUNT =	1			
C-B	AN-3	INLET NZ/SHELWD	RHR-214	VCL	19870502
	AN-3	INLET NZ/SHELWD	RHR-214	SUR	19870501
	COUNT =	2			
C-C	RHR-354(W)	4 WELDED LUGS	RHR-201	SUR	19870428
	RHR-367(W)	4 WELDED LUGS	RHR-201	SUR	19870428
	RHR-365(W)	8 WELDED LUGS	RHR-201	SUR	19870428
	RHR-138(W)	4 WELDED LUGS	RHR-205	SUR	19870427
	RHR-121(W)	8 WELDED LUGS	RHR-206	SUR	19870429
	RHR-230(W)	4 WELDED LUGS	RHR-207	SUR	19870503
	RHR-117(W)	4 WELDED LUGS	RHR-209	SUR	19870504
	RHR-118(W)	4 WELDED LUGS	RHR-209	SUR	19870429
	AS-1	HEATXCHG SUP WD	RHR-214	SUR	19870501
	COUNT =	9			
C-F-2	6RCIC(1)-46	NOZZLE TO PIPE	RCIC-205	VOL	19870427
	6RCIC(1)-46	NOZZLE TO PIPE	RCIC-205	SUR	19870425
	6RCIC(6)-11	ELL TO PIPE	RCIC-205	VOL	19870427



T C II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M)
		6RCIC(6)-11	ELL TO PIPE	RCIC-205	SUR	19870425
		6RCIC(1)-111	PIPE TO VALVE	RCIC-205	SUR	19870508
		6RCIC(1)-111	PIPE TO VALVE	RCIC-205	VOL	19870508
		10HPCS(9)-1	TEE TO PIPE	HPCS-202	VOL	19870428
		10HPCS(9)-1	TEE TO PIPE	HPCS-202	SUR	19870428
		12HPCS(3)-1	TEE TO PIPE	HPCS-202	VOL	19870508
		12HPCS(3)-1	TEE TO PIPE	HPCS-202	SUR	19870508
		18RHR(1)A-14	PIPE TO EL	RHR-201	SUR	19870507
		18RHR(1)A-14	PIPE TO EL	RHR-201	VOL	19870508
		18RHR(1)A-15	EL TO PIPE	RHR-201	SUR	19870507
		18RHR(1)A-15	EL TO PIPE	RHR-201	VOL	19870508
		18RHR(11)A-8	PIPE TO EL	RHR-201	SUR	19870428
		18RHR(11)A-8	PIPE TO EL	RHR-201	VOL	19870428
		18RHR(11)A-9	EL TO PIPE	RHR-201	SUR	19870428
		18RHR(11)A-9	EL TO PIPE	RHR-201	VOL	19870428
		18RHR(1)A-39	PIPE TO EL	RHR-201	SUR	19870428
		18RHR(1)A-39	PIPE TO EL	RHR-201	VOL	19870428
		18RHR(1)A-40	EL TO PIPE	RHR-201	SUR	19870428
		18RHR(1)A-40	EL TO PIPE	RHR-201	VOL	19870428
		18RHR(1)A-60	PIPE TO EL	RHR-201	SUR	19870427
		18RHR(1)A-60	PIPE TO EL	RHR-201	VOL	19870427
		18RHR(1)A-61	EL TO PIPE	RHR-201	SUR	19870427
		18RHR(1)A-61	EL TO PIPE	RHR-201	VOL	19870427
COUNT =			26			
D-A		MSRV-1A-3(W)	WELDED ATTACH	MS-301	VT-3	19870514
		MSRV-1A-4(W)	WELDED ATTACH	MS-301	VT-3	19870514
		MSRV-1A-2(W)	WELDED ATTACH	MS-301	VT-3	19870514
		MS-267(W)	WELDED ATTACH	MS-301	VT-3	19870514
		MSRV-1A-6(W)	WELDED ATTACH	MS-301	VT-3	19870514
		MSRV-2A-2(W)	WELDED ATTACH	MS-302	VT-3	19870514
		MSRV-2A-3(W)	WELDED ATTACH	MS-302	VT-3	19870514
		MSRV-2A-1(W)	WELDED ATTACH	MS-302	VT-3	19870514

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M/D)
	MSRV-2A-5(W)	WELDED ATTACH	MS-302	VT-3	19870514
	MS-270(W)	WELDED ATTACH	MS-302	VT-3	19870514
	MS-271(W)	WELDED ATTACH	MS-302	VT-3	19870514
	MSRV-3A-2(W)	WELDED ATTACH	MS-303	VT-3	19870514
	MSRV-3A-3(W)	WELDED ATTACH	MS-303	VT-3	19870514
	MSRV-3A-1(W)	WELDED ATTACH	MS-303	VT-3	19870514
	MSRV-3A-4(W)	WELDED ATTACH	MS-303	VT-3	19870514
	MSRV-3A-5(W)	WELDED ATTACH	MS-303	VT-3	19870514
	MSRV-3B-2(W)	WELDED ATTACH	MS-307	VT-3	19870515
	MS-284(W)	WELDED ATTACH	MS-307	VT-3	19870515
	MSRV-3B-5(W)	WELDED ATTACH	MS-307	VT-3	19870515
	MSRV-3B-4(W)	WELDED ATTACH	MS-307	VT-3	19870515
	MSRV-3B-6(W)	WELDED ATTACH	MS-307	VT-3	19870515
	MSRV-3B-7(W)	WELDED ATTACH	MS-307	VT-3	19870515
	MS-286(W)	WELDED ATTACH	MS-307	VT-3	19870515
	MSRV-2C-2(W)	WELDED ATTACH	MS-311	VT-3	19870515
	MSRV-2C-3(W)	WELDED ATTACH	MS-311	VT-3	19870515
	MSRV-2C-9(W)	WELDED ATTACH	MS-311	VT-3	19870515
	MS-297(W)	WELDED ATTACH	MS-311	VT-3	19870515
	MSRV-2C-5(W)	WELDED ATTACH	MS-311	VT-3	19870515
	MSRV-2C-4(W)	WELDED ATTACH	MS-311	VT-3	19870515
	MSRV-2C-6(W)	WELDED ATTACH	MS-311	VT-3	19870515
	MS-298(W)	WELDED ATTACH	MS-311	VT-3	19870515
	MS-299(W)	WELDED ATTACH	MS-311	VT-3	19870515
	MSRV-2D-2(W)	WELDED ATTACH	MS-316	VT-3	19870515
	MSRV-2D-3(W)	WELDED ATTACH	MS-316	VT-3	19870515
	MSRV-2D-1(W)	WELDED ATTACH	MS-316	VT-3	19870515
	MS-312(W)	WELDED ATTACH	MS-316	VT-3	19870515
	MSRV-2D-5(W)	WELDED ATTACH	MS-316	VT-3	19870515
	MSRV-2D-4(W)	WELDED ATTACH	MS-316	VT-3	19870515
	MS-313(W)	WELDED ATTACH	MS-316	VT-3	19870515
	MS-341(W)	WELDED ATTACH	MS-316	VT-3	19870515

COUNT = 40

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/)
D-B	SW-78(W)	WELDED ATTACH	SW-301	VT-3	19870513
	SW-121(W)	WELDED ATTACH	SW-301	VT-3	19870513
	SW-151(W)	WELDED ATTACH	SW-303	VT-3	19870513
	SW-212(W)	WELDED ATTACH	SW-303	VT-3	19870513
	SW-149(W)	WELDED ATTACH	SW-303	VT-3	19870513
	SW-150(W)	WELDED ATTACH	SW-303	VT-3	19870513
	SW-127(W)	WELDED ATTACH	SW-303	VT-3	19870513
	SW-198(W)	WELDED ATTACH	SW-305	VT-3	19870513
	SW-251(W)	WELDED ATTACH	SW-308	VT-3	19870513
	SW-960N(W)	WELDED ATTACH	SW-313	VT-3	19870513
	RCC-434(W)	WELDED ATTACH	RCC-301	VT-3	19870515
	RCC-440(W)	WELDED ATTACH	RCC-301	VT-3	19870515
	RCC-327(W)	WELDED ATTACH	RCC-302	VT-3	19870515
		COUNT =	13		
IWF	RCIC-940N	SPRING	RCIC-102	VT3H	19870412
	RCIC-931N	PSA-3 SNUBBER	RCIC-102	VT3H	19870410
	RCIC-927N	ANCHOR	RCIC-204	VT3H	19870407
	RCIC-902N	SPRING	RCIC-204	VT3H	19870407
	RCIC-903N	STRUT	RCIC-204	VT3H	19870407
	RCIC-916N	STRUT	RCIC-204	VT3H	19870407
	RCIC-904N	BOX	RCIC-204	VT3H	19870407
	RCIC-52	ANCHOR	RCIC-204	VT3H	19870407
	RCIC-967N	PSA-1/4 SN(2)	RCIC-204	VT3H	19870407
	HPCS-916N	BOX	HPCS-202	VT3H	19870407
	HPCS-35	SPRING	HPCS-202	VT3H	19870407
	HPCS-37	ANCHOR	HPCS-202	VT3H	19870407
	HPCS-38	SPRING	HPCS-202	VT3H	19870407
	HPCS-40	STRUT	HPCS-202	VT3H	19870407
	HPCS-925N	PSA-3 SNUBBER	HPCS-202	VT3H	19870407
	LPCS-904N	STRUT	LPCS-101	VT3H	19870410
	LPCS-909N	PSA-3 SN(2)	LPCS-101	VT3H	19870410
	LPCS-908N	PSA-10 SNUBBER	LPCS-101	VT3H	19870410

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M/D)
	LPCS-907N	STRUT	LPCS-101	VT3H	19870414
	RHR-528	SPRING	RHR-101	VT3H	19870414
	RHR-382	PSA-35 SNUBBER	RHR-101	VT3H	19870414
	RHR-SA-59	PSA-35 SNUBBER	RHR-104	VT3H	19870414
	RHR-431	SPRING	RHR-104	VT3H	19870413
	RHR-SA-32	PSA-10 SN(2)	RHR-105	VT3H	19870415
	RHR-SA-33	PSA-10 SNUBBER	RHR-105	VT3H	19870415
	RHR-SA-34	PSA-35 SNUBBER	RHR-105	VT3H	19870415
	RHR-SB-40	PSA-10 SNUBBER	RHR-106	VT3H	19870413
	RHR-SB-39	PSA-3 SN(2)	RHR-106	VT3H	19870413
	RHR-354	SPRING	RHR-201	VT3H	19870407
	RHR-355	PSA-3 SNUBBER	RHR-201	VT3H	19870429
	RHR-356	PSA-10 SNUBBER	RHR-201	VT3H	19870429
	RHR-367	SPRING	RHR-201	VT3H	19870407
	RHR-368	STRUT	RHR-201	VT3H	19870407
	RHR-365	STRUT	RHR-201	VT3H	19870407
	RHR-366	STRUT	RHR-201	VT3H	19870407
	RHR-263	SPRING	RHR-201	VT3H	19870407
	RHR-176	STRUT	RHR-205	VT3H	19870407
	RHR-909N	STRUT	RHR-205	VT3H	19870407
	RHR-136	STRUT	RHR-205	VT3H	19870407
	RHR-138	SPRING	RHR-205	VT3H	19870407
	RHR-135	STRUT	RHR-205	VT3H	19870407
	RHR-137	PSA-10 SN(2)	RHR-205	VT3H	19870407
	RHR-121	PSA-10 SN(2)	RHR-206	VT3H	19870407
	RHR-609	SPRING	RHR-207	VT3H	19870416
	RHR-433	SPRING	RHR-207	VT3H	19870416
	RHR-435	STRUT	RHR-207	VT3H	19870407
	RHR-436	BOX	RHR-207	VT3H	19870407
	RHR-434	BOX	RHR-207	VT3H	19870407
	RHR-438	STRUT	RHR-207	VT3H	19870416
	RHR-437	PSA-3 SN(2)	RHR-207	VT3H	19870416
	RHR-462	SPRING	RHR-207	VT3H	19870416
	RHR-54	SPRING	RHR-207	VT3H	19870407

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EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M)
RHR-476			BOX	RHR-207	VT3H	19870407
RHR-239			BOX	RHR-207	VT3H	19870407
RHR-228			ANCHOR	RHR-207	VT3H	19870407
RHR-976N			STRUT	RHR-207	VT3H	19870407
RHR-488			ANCHOR	RHR-207	VT3H	19870407
RHR-491			SPRING	RHR-207	VT3H	19870407
RHR-908N			PSA-3 SN(2)	RHR-207	VT3H	19870407
RHR-492			PSA-3 SN(2)	RHR-207	VT3H	19870407
RHR-904N			STRUT	RHR-209	VT3H	19870407
RHR-117			SPRING	RHR-209	VT3H	19870407
RHR-84			ANCHOR	RHR-209	VT3H	19870407
RHR-79			SPRING	RHR-209	VT3H	19870407
RHR-80			STRUT	RHR-209	VT3H	19870407
RHR-167			SPRING	RHR-209	VT3H	19870407
RHR-118			SPRING	RHR-209	VT3H	19870407
RHR-81			STRUT	RHR-209	VT3H	19870407
MS-SB-5			PSA-35 SNUBBER	MS-102	VT3H	19870414
MS-SB-8			PSA-35 SNUBBER	MS-102	VT3H	19870414
MS-HB-2			SPRING	MS-102	VT3H	19870414
MS-SB-10			PSA-35 SNUBBER	MS-102	VT3H	19870414
MS-SB-9			PSA-35 SNUBBER	MS-102	VT3H	19870414
RFW-158			SPRING	RFW-101	VT3H	19870414
RFW-178			BOX	RFW-103	VT3H	19870413
RFW-179			SPRING	RFW-103	VT3H	19870413
RFW-903N			SPRING	RFW-103	VT3H	19870424
RFW-180			PSA-1 SNUBBER	RFW-103	VT3H	19870424
RRC-SA-16			PSA-35 SNUBBER	RRC-101	VT3H	19870414
RRC-SA-66			PSA-35 SNUBBER	RRC-101	VT3H	19870414
RRC-HA-7			SPRING	RRC-101	VT3H	19870413
RRC-SB-12			PSA-35 SNUBBER	RRC-102	VT3H	19870412
RRC-HA-2			SPRING	RRC-103	VT3H	19870410
RRC-HA-3			SPRING	RRC-103	VT3H	19870413
RRC-10			SPRING	RRC-107	VT3H	19870413
RHR-SB-31			PSA-10 SNUBBER	RRC-107	VT3H	19870413

~~TABLE 11-11111~~  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M)
	RRC-2	SPRING	RRC-108	VT3H	19870414
	RWCU-142	SPRING	RWCU-101	VT3H	19870414
	RWCU-141	SPRING	RWCU-101	VT3H	19870414
	SW-227	STRUT	SW-303	VT3H	19870407
	SW-315	STRUT	SW-303	VT3H	19870407
	SW-127	STRUT	SW-303	VT3H	19870407
	SW-956N	RIGID	SW-313	VT3H	19870407
	SW-955N	RIGID	SW-313	VT3H	19870407
	SW-1022N	RIGID	SW-313	VT3H	19870306
	SW-1032N	RIGID	SW-313	VT3H	19870306
	FPC-184	SPRING	FPC-302	VT3H	19870407
	FPC-182	BOX	FPC-302	VT3H	19870407
	FPC-185	BOX	FPC-302	VT3H	19870407
	FPC-186	SPRING	FPC-302	VT3H	19870402
	FPC-69	RIGID	FPC-305	VT3H	19870407
	FPC-70	RIGID	FPC-305	VT3H	19870407
	FPC-67	RIGID	FPC-305	VT3H	19870407
	FPC-66	RIGID	FPC-305	VT3H	19870407
	FPC-168	BOX	FPC-305	VT3H	19870407
	FPC-914N	RIGID	FPC-307	VT3H	19870407
	RCC-308	STRUT	RCC-302	VT3H	19870413
	RCC-309	STRUT	RCC-302	VT3H	19870413
	RCC-472	STRUT	RCC-302	VT3H	19870413
	RCC-312	STRUT	RCC-302	VT3H	19870413
	RCC-311	STRUT	RCC-302	VT3H	19870413
	RCC-475	STRUT	RCC-302	VT3H	19870413
	MSRV-2B-5	STRUT	MS-306	VT3H	19870601
	MS-283	SPRING	MS-307	VT3H	19870413
	MSRV-3B-2	PSA-10 SNUBBER	MS-307	VT3H	19870413
	MSRV-3B-3	PSA-10 SNUBBER	MS-307	VT3H	19870413
	MSRV-3B-1	PSA-10 SNUBBER	MS-307	VT3H	19870413
	MS-284	SPRING	MS-307	VT3H	19870413
	MSRV-3B-5	PSA-10 SNUBBER	MS-307	VT3H	19870413
	MSRV-3B-4	PSA-10 SNUBBER	MS-307	VT3H	19870413

TAC II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M)
	MSRV-3B-6	PSA-10 SNUBBER	MS-307	VT3H	1987-4-13
	MS-285	SPRING	MS-307	VT3H	1987-4-13
	MSRV-3B-7	PSA-10 SNUBBER	MS-307	VT3H	1987-4-13
	MS-286	SPRING	MS-307	VT3H	1987-4-13
	MS-335	SPRING	MS-307	VT3H	1987-4-13
	MS-296	SPRING	MS-311	VT3H	1987-4-13
	MSRV-2C-2	PSA-10 SNUBBER	MS-311	VT3H	1987-4-13
	MSRV-2C-1	PSA-10 SNUBBER	MS-311	VT3H	1987-4-13
	MSRV-2C-3	PSA-10 SNUBBER	MS-311	VT3H	1987-4-13
	MSRV-2C-8	PSA-10 SNUBBER	MS-311	VT3H	1987-4-13
	MSRV-2C-9	PSA-10 SNUBBER	MS-311	VT3H	1987-4-13
	MS-297	SPRING	MS-311	VT3H	1987-4-13
	MSRV-2C-5	PSA-10 SNUBBER	MS-311	VT3H	1987-4-12
	MSRV-2C-4	PSA-10 SNUBBER	MS-311	VT3H	1987-4-12
	MSRV-2C-6	PSA-10 SNUBBER	MS-311	VT3H	1987-4-12
	MS-298	SPRING	MS-311	VT3H	1987-4-13
	MSRV-2C-7	PSA-10 SNUBBER	MS-311	VT3H	1987-4-12
	MS-299	SPRING	MS-311	VT3H	1987-4-13
	MS-337	SPRING	MS-311	VT3H	1987-4-13
	MSRV-2C-10PS	RIGID	MS-311	VT3H	1987-4-13
	MSRV-3C-4	STRUT	MS-312	VT3H	1987-5-31
	MSRV-4C-4	STRUT	MS-313	VT3H	1987-5-31
	MS-311	SPRING	MS-316	VT3H	1987-4-13
	MSRV-2D-2	PSA-10 SNUBBER	MS-316	VT3H	1987-4-13
	MSRV-2D-3	PSA-10 SNUBBER	MS-316	VT3H	1987-4-13
	MSRV-2D-1	PSA-10 SNUBBER	MS-316	VT3H	1987-4-13
	MS-312	SPRING	MS-316	VT3H	1987-4-13
	MSRV-2D-5	PSA-10 SNUBBER	MS-316	VT3H	1987-4-13
	MSRV-2D-4	PSA-10 SNUBBER	MS-316	VT3H	1987-4-13
	MS-313	SPRING	MS-316	VT3H	1987-4-13
	MS-341	SPRING	MS-316	VT3H	1987-4-13
	MSRV-2D-6PS	RIGID	MS-316	VT3H	1987-4-13
	SLC-4475-12	STRUT	SLC-101	VT3H	1987-6-2
	SLC-4475-120	STRUT	SLC-101	VT3H	1987-6-2

TABLE II  
EXAMINATIONS COMPLETED DURING  
OUTAGE RF87A

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ISI DRAWING	METHOD	EXAM. DATE (Y/M)
	SLC-4475-122	STRUT	SLC-101	VT3H	19870602
	SLC-4475-25	STRUT	SLC-101	VT3H	19870602
	SLC-4475-24	STRUT	SLC-101	VT3H	19870602
	SLC-4475-21	PSA-1 SNUBBER	SLC-101	VT3H	19870602
	SLC-4475-22	SPRING	SLC-101	VT3H	19870602
	SLC-4475-112	STRUT	SLC-101	VT3H	19870601
	SLC-4475-113	PSA-1/2 SNUBBER	SLC-101	VT3H	19870413
	SLC-4475-114	STRUT	SLC-101	VT3H	19870601

COUNT = 162

N/A	JET PUMP SENSING LINES	JP SENSING LINE	RPV-101	VT-1	19870511
	INCORE DRY TUBES	INCORE DRY TUBE	RPV-101	VT-1	19870511
	STEAM DRYER	STEAM DRYER	RPV-101	VT-1	19870511
	6CRD(12)A-3	PIPE TO ELL	CRD-201	VOL	19870427
	6CRD(12)A-18	PIPE TO ELL	CRD-201	VOL	19870427
	RWCU THRM SLEEVE	THERMAL SLEEVE	MISC	VOL	19870511

COUNT = 6

TOTAL COUNT = 614



TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.		TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
DE-2839-14B PSA-1/4 SNUBBER	399	19870423	ACC		NO
DE-3 WEST PSA-3 SN(2)	3925	19870424	ACC		NO
FDR-901N PSA-1/4 SNUBBER	293	19870418	ACC		NO
FPC-228 NORTH PSA-1/2 SN(2)	2463	19870422	REJ	DELETED	N/A
FPC-228 SOUTH PSA-1/2 SN(2)	390	19870422	REJ	DELETED	N/A
HPCS-47 SOUTH PSA-3 SN(2)	485	19870423	ACC		NO
LPCS-61 SOUTH PSA-10 SN(2)	327	19870420	ACC		NO
MD-1287-11 PSA-1/4 SNUBBER	379	19870418	ACC		NO
MD-1290-11B PSA-1/4 SNUBBER	378	19870418	ACC		NO
MD-1364-12A PSA-1/4 SNUBBER	19890	19870418	ACC		NO
MS-174 PSA-35 SNUBBER	8688	19870504	ACC		NO

**TABLE III  
SNUBBER TEST SUMMARY**

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MS-177 SOUTH PSA-3 SN(2) 299	19870424	ACC		NO
MS-2619-11 PSA-1/4 SNUBBER 398	19870424	ACC		NO
MS-2619-12 PSA-1/4 SNUBBER 6226	19870424	ACC		NO
MS-2619-21 PSA-1 SNUBBER 22346	19870420	ACC		NO
MS-2619-311 PSA-1/2 SNUBBER 102	19870421	ACC		NO
MS-2619-319 PSA-1/2 SNUBBER 2536	19870420	ACC		NO
MS-2619-45 PSA-1/4 SNUBBER 28450	19870420	ACC		NO
MS-4448-411 PSA-1/4 SNUBBER 299	19870418	REJ	DELETED	N/A
MS-4448-46 PSA-1/4 SNUBBER 433	19870418	ACC		NO
MS-56 BOTTOM PSA-10 SN(2) 9907	19870430	ACC		NO
MS-96 TOP PSA-10 SN(2) 772	19870430	ACC		NO

**TABLE III  
SNUBBER TEST SUMMARY**

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MS-SA-1 PSA-100 SNUBBER 608	19870501	ACC*	1474	NO
MS-SA-1 PSA-100 SNUBBER 1474	19870504	ACC		NO
MSLC-2822-12 PSA-1/2 SNUBBER 121	19870418	ACC		NO
MSRV-1A-1 PSA-10 SNUBBER 9902	19870507	ACC		NO
MSRV-1A-2 PSA-10 SNUBBER 9901	19870508	ACC		NO
MSRV-1A-3 PSA-10 SNUBBER 11857	19870430	ACC		NO
MSRV-1A-4 PSA-10 SNUBBER 9925	19870501	ACC		NO
MSRV-1A-5 PSA-10 SNUBBER 682	19870501	ACC		NO
MSRV-1A-6 PSA-10 SNUBBER 302	19870430	ACC		NO
MSRV-1B-1 PSA-10 SNUBBER 13681	19870504	ACC		NO
MSRV-1B-2 PSA-10 SNUBBER 13035	19870506	ACC		NO

\*Replacement snubber was for schedule convenience. Not replaced for failure.

**TABLE III  
SNUBBER TEST SUMMARY**

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-1B-3 PSA-10 SNUBBER 4864	19870430	ACC		NO
MSRV-1B-4 PSA-10 SNUBBER 690	19870501	ACC		NO
MSRV-1B-5 PSA-10 SNUBBER 295	19870506	ACC		NO
MSRV-1C-1 PSA-10 SNUBBER 4870	19870508	ACC		NO
MSRV-1C-2 PSA-35 SNUBBER 10566	19870506	ACC		NO
MSRV-1C-3 PSA-35 SNUBBER 10731	19870506	ACC		NO
MSRV-1C-4 PSA-10 SNUBBER 9943	19870506	ACC		NO
MSRV-1C-5 PSA-10 SNUBBER 9908	19870501	ACC		NO
MSRV-1C-7 PSA-10 SNUBBER 681	19870506	ACC		NO
MSRV-1D-1 PSA-10 SNUBBER 9914	19870509	ACC		NO
MSRV-1D-2 PSA-10 SNUBBER 9928	19870509	ACC		NO

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-1D-3 PSA-10 SNUBBER 9930	19870506	ACC		NO
MSRV-1D-4 PSA-10 SNUBBER 9904	19870501	ACC		NO
MSRV-1D-5 PSA-10 SNUBBER 9956	19870507	ACC		NO
MSRV-1D-6 PSA-10 SNUBBER 9962	19870501	ACC		NO
MSRV-1D-7 EAST PSA-10 SN(2) 9927	19870506	ACC		NO
MSRV-1D-7 WEST PSA-10 SN(2) 9964	19870506	ACC		NO
MSRV-2A-1 PSA-10 SNUBBER 317	19870430	ACC		NO
MSRV-2A-2 PSA-10 SNUBBER 702	19870506	ACC		NO
MSRV-2A-3 PSA-35 SNUBBER 10565	19870506	ACC		NO
MSRV-2A-4 PSA-10 SNUBBER 11853	19870501	ACC		NO
MSRV-2A-5 PSA-10 SNUBBER 11846	19870506	ACC		NO

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-2B-1 PSA-10 SNUBBER 13063	19870506	ACC		NO
MSRV-2B-2 PSA-10 SNUBBER 13047	19870507	ACC		NO
MSRV-2B-3 PSA-35 SNUBBER 10729	19870506	ACC		NO
MSRV-2B-4 PSA-10 SNUBBER 13037	19870429	REJ	17367	N/A
MSRV-2B-4 PSA-10 SNUBBER 17367	19870504	ACC		YES
MSRV-2B-5 PSA-10 SNUBBER 771	19870609	REJ	STRUT	N/A
MSRV-2B-6 PSA-10 SNUBBER 9910	19870506	ACC		NO
MSRV-2B-7 PSA-10 SNUBBER 13040	19870429	REJ	17365	N/A
MSRV-2B-7 PSA-10 SNUBBER 17365	19870502	ACC		YES
MSRV-2B-8 PSA-10 SNUBBER 13045	19870506	ACC		NO
MSRV-2C-1 PSA-10 SNUBBER 685	19870501	ACC		NO

**TABLE III  
SNUBBER TEST SUMMARY**

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-2C-2 PSA-10 SNUBBER 4867	19870506	ACC		NO
MSRV-2C-3 PSA-10 SNUBBER 4871	19870508	ACC		NO
MSRV-2C-4 PSA-10 SNUBBER 9917	19870501	ACC		NO
MSRV-2C-5 PSA-10 SNUBBER 9921	19870502	ACC		NO
MSRV-2C-6 PSA-10 SNUBBER 9947	19870502	ACC		NO
MSRV-2C-7 PSA-10 SNUBBER 9926	19870502	ACC		NO
MSRV-2C-8 PSA-10 SNUBBER 9905	19870502	ACC		NO
MSRV-2C-9 PSA-10 SNUBBER 9954	19870508	ACC		NO
MSRV-2D-1 PSA-10 SNUBBER 287	19870507	ACC		NO
MSRV-2D-2 PSA-10 SNUBBER 326	19870501	ACC		NO
MSRV-2D-3 PSA-10 SNUBBER 9957	19870507	ACC		NO

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-2D-4 PSA-10 SNUBBER	9909	19870506	ACC	NO
MSRV-2D-5 PSA-10 SNUBBER	9898	19870501	ACC	NO
MSRV-3A-1 PSA-10 SNUBBER	11852	19870504	ACC	NO
MSRV-3A-2 PSA-10 SNUBBER	703	19870506	ACC	NO
MSRV-3A-3 PSA-10 SNUBBER	13041	19870501	ACC	NO
MSRV-3A-4 PSA-10 SNUBBER	4858	19870506	ACC	NO
MSRV-3A-5 PSA-10 SNUBBER	701	19870501	ACC	NO
MSRV-3A-6 PSA-10 SNUBBER	321	19870506	ACC	NO
MSRV-3B-1 PSA-10 SNUBBER	13048	19870506	ACC	NO
MSRV-3B-2 PSA-10 SNUBBER	316	19870501	ACC	NO
MSRV-3B-3 PSA-10 SNUBBER	13050	19870506	ACC	NO



TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-3B-4 PSA-10 SNUBBER 274	19870501	ACC		NO
MSRV-3B-5 PSA-10 SNUBBER 4862	19870506	ACC		NO
MSRV-3B-6 PSA-10 SNUBBER 13056	19870501	ACC		NO
MSRV-3B-7 PSA-10 SNUBBER 13062	19870505	ACC		NO
MSRV-3C-1 PSA-35 SNUBBER 9262	19870506	ACC		NO
MSRV-3C-10 EAST PSA-10 SN(2) 9912	19870506	ACC		NO
MSRV-3C-10 WEST PSA-10 SN(2) 9918	19870506	ACC		NO
MSRV-3C-2 PSA-10 SNUBBER 4865	19870506	ACC		NO
MSRV-3C-3 PSA-10 SNUBBER 4866	19870509	ACC		NO
MSRV-3C-4 PSA-10 SNUBBER 4874	19870501	REJ	STRUT	N/A
MSRV-3C-5 PSA-10 SNUBBER 313	19870430	ACC		NO

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.		TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-3C-6 PSA-10 SNUBBER	319	19870502	ACC		NO
MSRV-3C-7 PSA-10 SNUBBER	9897	19870502	ACC		NO
MSRV-3C-8 PSA-10 SNUBBER	698	19870527	ACC		NO
MSRV-3D-1 PSA-10 SNUBBER	9948	19870507	ACC		NO
MSRV-3D-2 PSA-10 SNUBBER	9923	19870507	ACC		NO
MSRV-3D-3 PSA-10 SNUBBER	9919	19870430	ACC		NO
MSRV-3D-4 PSA-10 SNUBBER	9922	19870506	ACC		NO
MSRV-3D-5 PSA-10 SNUBBER	1472	19870430	ACC		NO
MSRV-3D-6 PSA-10 SNUBBER	323	19870506	ACC		NO
MSRV-3D-7 PSA-10 SNUBBER	9945	19870506	ACC		NO
MSRV-4A-1 PSA-10 SNUBBER	1457	19870430	ACC		NO

**TABLE III  
SNUBBER TEST SUMMARY**

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-4A-10 PSA-10 SNUBBER 13038	19870506	ACC		NO
MSRV-4A-2 PSA-10 SNUBBER 694	19870506	ACC		NO
MSRV-4A-3 PSA-10 SNUBBER 13049	19870504	ACC		NO
MSRV-4A-4 PSA-10 SNUBBER 13039	19870507	ACC		NO
MSRV-4A-5 PSA-10 SNUBBER 13042	19870507	ACC		NO
MSRV-4A-6 PSA-10 SNUBBER 11865	19870506	ACC		NO
MSRV-4A-7 PSA-10 SNUBBER 1461	19870505	ACC		NO
MSRV-4A-8 PSA-10 SNUBBER 13064	19870501	ACC		NO
MSRV-4A-9 PSA-10 SNUBBER 13055	19870501	ACC		NO
MSRV-4B-10 PSA-35 SNUBBER 6119	19870506	ACC		NO
MSRV-4B-2 PSA-10 SNUBBER 9953	19870506	ACC		NO

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-4B-3 PSA-10 SNUBBER 11863	19870506	ACC		NO
MSRV-4B-4 PSA-10 SNUBBER 13027	19870507	ACC		NO
MSRV-4B-5 PSA-35 SNUBBER 6202	19870501	ACC		NO
MSRV-4B-6 PSA-10 SNUBBER 13032	19870506	ACC		NO
MSRV-4B-7 PSA-10 SNUBBER 106	19870506	ACC		NO
MSRV-4B-8 PSA-10 SNUBBER 294	19870506	ACC		NO
MSRV-4B-9 PSA-10 SNUBBER 13052	19870505	ACC		NO
MSRV-4C-1 PSA-10 SNUBBER 712	19870509	ACC		NO
MSRV-4C-2 PSA-10 SNUBBER 282	19870506	ACC		NO
MSRV-4C-3 PSA-10 SNUBBER 9932	19870508	ACC		NO
MSRV-4C-4 PSA-10 SNUBBER 9911	19870501	REJ	STRUT	N/A

**TABLE III  
SNUBBER TEST SUMMARY**

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-4C-5 PSA-10 SNUBBER 9946	19870502	ACC		NO
MSRV-4C-6 PSA-10 SNUBBER 116	19870502	ACC		NO
MSRV-4C-7 PSA-10 SNUBBER 714	19870507	ACC		NO
MSRV-4C-8 PSA-35 SNUBBER 10736	19870506	ACC		NO
MSRV-4C-9 EAST PSA-3 SN(2) 4502	19870507	ACC		NO
MSRV-4C-9 WEST PSA-3 SN(2) 4468	19870507	ACC		NO
MSRV-4D-1 PSA-10 SNUBBER 9952	19870430	ACC		NO
MSRV-4D-2 PSA-10 SNUBBER 9933	19870506	ACC		NO
MSRV-4D-3 PSA-10 SNUBBER 697	19870507	ACC		NO
MSRV-4D-4 PSA-10 SNUBBER 9941	19870506	ACC		NO
MSRV-4D-5 PSA-10 SNUBBER 9920	19870506	ACC		NO

**TABLE III  
SNUBBER TEST SUMMARY**

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.		TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-4D-6 PSA-10 SNUBBER	9940	19870501	ACC		NO
MSRV-5B-1 PSA-3 SN(2)	3904	19870507	ACC		NO
MSRV-5B-1 PSA-3 SN(2)	3948	19870507	ACC		NO
MSRV-5B-2 PSA-35 SNUBBER	6205	19870506	ACC		NO
MSRV-5B-3 PSA-10 SNUBBER	291	19870507	ACC		NO
MSRV-5B-4 PSA-10 SNUBBER	13054	19870509	ACC		NO
MSRV-5B-5 PSA-10 SNUBBER	684	19870507	ACC		NO
MSRV-5B-6 PSA-10 SNUBBER	11866	19870506	ACC		NO
MSRV-5B-7 PSA-10 SNUBBER	13051	19870505	ACC		NO
MSRV-5B-8 PSA-10 SNUBBER	578	19870505	ACC		NO
MSRV-5B-9 PSA-10 SNUBBER	11854	19870506	ACC		NO

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
MSRV-5C-1 PSA-10 SNUBBER 13058	19870430	ACC		NO
MSRV-5C-2 PSA-10 SNUBBER 4872	19870507	ACC		NO
MSRV-5C-3 PSA-35 SNUBBER 9263	19870506	ACC		NO
MSRV-5C-4 PSA-35 SNUBBER 10737	19870506	ACC*		NO
MSRV-5C-5 PSA-10 SNUBBER 9903	19870501	ACC		NO
MSRV-5C-6 PSA-10 SNUBBER 11858	19870506	ACC		NO
MSRV-5C-7 PSA-10 SNUBBER 273	19870507	ACC		NO
MSRV-5C-8 PSA-35 SNUBBER 10740	19870506	ACC		NO
MSRV-5C-9 PSA-10 SNUBBER 9963	19870430	ACC		NO
RCIC-1 PSA-1 SNUBBER 587	19870423	ACC		NO
RCIC-100 WEST PSA-1/2 SN(2) 2464	19870422	ACC		NO

\*MSRV-5C-4 cannot be removed for testing.  
The snubber was stroked in place and  
determined to be operable.

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
RCIC-1C-13      BOTTOM PSA-3 SN(2)      4450	19870424	ACC		NO
RCIC-5      EAST PSA-1/2 SN(2)      2139	19870418	ACC		NO
RCIC-5      WEST PSA-1/2 SN(2)      2465	19870418	ACC		NO
RCIC-938N PSA-3 SNUBBER      2378	19870420	ACC		NO
RCIC-975S PSA-1/4 SNUBBER      28459	19870421	ACC		NO
RFW-148 PSA-35 SNUBBER      8930	19870506	ACC		NO
RFW-150      TOP PSA-10 SN(2)      136	19870430	ACC		NO
RFW-166      BOTTOM PSA-10 SN(2)      120	19870430	ACC		NO
RHR-121      EAST PSA-10 SN(2)      11855	19870430	ACC		NO
RHR-2264-21 PSA-1/4 SNUBBER      19889	19870420	ACC		NO
RHR-244 PSA-35 SNUBBER      6239	19870430	ACC*	12713	NO

Replacement snubber was for schedule convenience. Not replaced for failure.



TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
RHR-244 PSA-35 SNUBBER 12713	19870502	ACC		NO
RHR-273 PSA-3 SNUBBER 508	19870422	ACC		NO
RHR-286 WEST PSA-10 SN(2) 15466	19870420	ACC		NO
RHR-326 EAST PSA-1/4 SN(2) 392	19870422	ACC		NO
RHR-326 WEST PSA-1/4 SN(2) 385	19870422	ACC		NO
RHR-345 WEST PSA-1 SN(2) 570	19870423	ACC		NO
RHR-39 NORTH PSA-3 SN(2) 2348	19870423	ACC		NO
RHR-400 PSA-1/2 SNUBBER 4012	19870421	ACC		NO
RHR-416 BOTTOM PSA-10 SN(2) 9934	19870430	ACC		NO
RHR-441 PSA-1/2 SNUBBER 4034	19870422	REJ	STRUT	N/A
RHR-443 PSA-1/2 SNUBBER 2156	19870422	ACC		NO

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
RHR-44B PSA-1/2 SNUBBER 4019	19870421	ACC		NO
RHR-4605-41A PSA-1/4 SNUBBER 6211	19870422	ACC		NO
RHR-465 SOUTH PSA-3 SN(2) 2364	19870422	ACC		NO
RHR-503 PSA-35 SNUBBER 8687	19870506	ACC		NO
RHR-906N NORTH/WE PSA-10 SN(2) 696	19870430	ACC		NO
RHR-942N SOUTH PSA-1 SN(2) 609	19870423	ACC		NO
RHR-945N WEST PSA-1 SN(2) 134	19870423	ACC		NO
RHR-954N EAST PSA-1 SN(2) 126	19870422	ACC		NO
RHR-954N WEST PSA-1 SN(2) 125	19870422	ACC		NO
RHR-974N PSA-3 SNUBBER 4457	19870423	ACC		NO
RHR-977N NORTH PSA-3 SN(2) 250	19870422	ACC		NO

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N
RHR-9B6N PSA-1 SNUBBER 122	19870422	ACC		NO
RHR-SA-33 PSA-10 SNUBBER 11849	19870430	ACC		NO
RHR-SA-50 PSA-35 SNUBBER 6095	19870506	ACC		NO
RHR-SA-53 PSA-10 SNUBBER 113	19870506	ACC		NO
RRC-1549-62 PSA-1/4 SNUBBER 28437	19870420	ACC		NO
RRC-1552-12 PSA-1/4 SNUBBER 300	19870420	REJ	DELETED	N/A
RRC-1946-31 PSA-1/4 SNUBBER 396	19870420	REJ	DELETED	N/A
RRC-SA-1 PSA-35 SNUBBER 4157	19870501	ACC		NO
RRC-SB-66 PSA-35 SNUBBER 4168	19870501	ACC		NO
SLC-4453-69 PSA-1/4 SNUBBER 294	19870418	ACC		NO
SLC-4475-122 PSA-1/4 SNUBBER 28441	19870420	ACC	STRUT	N/A

TABLE III  
SNUBBER TEST SUMMARY

HANGER MARK NO. (& POSITION) DESCRIPTION & SERIAL NO.	TEST DATE YR/MO/DA	TEST RESULT ACC/REJ	REPLACEMENT SERIAL NO.	RETEST NEXT OUTAGE: Y/N	
SLC-4475-19 PSA-1/2 SNUBBER	2480	19870420	ACC	STRUT	N/A
VR-3 WEST PSA-1/2 SN(2)	2151	19870418	ACC		NO
VR-900N PSA-1/2 SNUBBER	2112	19870418	ACC		NO

TOTAL COUNT = 212

APPENDIX A

NIS-1 Owner's Data Report For Inservice Inspection



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## FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

- Washington Public Power Supply System
1. Owner 3000 George Washington Way, P.O. Box 968, Richland, WA 99352  
(Name and Address of Owner)
2. Plant WNP-2, Hanford Reservation, Benton County, Washington  
(Name and Address of Plant)
3. Plant Unit WNP-2 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date 12/13/84 6. National Board Number for Unit N/A
7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
RPV	CBIN Nuclear Co.	T-45	29936-84W	CBIN-8
RRC-P-1A	Bingham-Willamette	210099 (1)	N/A	134
RHR-V-23	Anchor/Darling Valve Co.	1N-104	N/A	N/A
RHR-V-53A	Anchor/Darling Valve Co.	1N-141	N/A	N/A
RHR-V-53B	Anchor/Darling Valve Co.	1N-140	N/A	N/A
LPCS-V-5	Velan	0289	N/A	N/A
RHR-V-42A	Velan	0377	N/A	N/A
RHR-V-50B	Velan	0414	N/A	N/A
RHR-V-111A	Velan	0061	N/A	N/A
RHR-HX-1A	Delta Southern Co.	35009-74-1	N/A	3489
MS-RV-3B	Crosby Valve and Gage Co.	N63790-00-0058	N/A	N/A
MS-RV-4B	Crosby Valve and Gage Co.	N63790-00-0057	N/A	N/A
MS-RV-5B	Crosby Valve and Gage Co.	N63790-00-0061	N/A	N/A
Lg Bore Pipe	Bechtel	(2)	N/A	N/A
Notes:	(1) Installers number			
	(2) The piping examined is included on Page 3 through Page 21 of this NIS-1 form.			

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 data 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.

## FORM NIS-1 (back)

8. Examination Dates 6/13/86 to 6/24/87 9. Inspection Interval from 12/13/84 to 12/13/94
10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. Approximately 21% of the examinations required for this inspection interval are complete. See Pages 3 through 21 for examination list.
11. Abstract of Conditions Noted. Two dye penetrant indications exceeded acceptance criteria, one component support exceeded visual acceptance criteria. visual examination during
12. Abstract of Corrective Measures Recommended and Taken One dye penetrant indication, 5RFW(11)B-1, was repaired by grinding. Reexamination by dye penetrant was acceptable. The other dye penetrant indication, 18RHR(1)A-14, was examined by alternate ultrasonic method with acceptable results (IWB-3514-2b). The component support was repaired and visually reexamined with acceptable results. The 3 fitting leaks were repaired\*\*
- 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.

Date 15 September 19 87 Signed WPPSS By C.M. Brown  
Owner

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of WASHINGTON and employed by LUNDGREN'S MUTUAL CASUALTY COMPANY of LONG GROVE, IL have inspected the components described in this Owners' Data Report during the period 6-13-86 to 6-24-87, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data 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 Owners' Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9-15 19 87  
Dan Hoagland Commissions 9556 W  
Inspector's Signature National Board, State, Province and No.

\*Code Category B-P leakage test found 3 fitting leaks. One main steam relief valve (MSRV) discharge line snubber in the initial sample failed testing. After further investigation and testing of all 136 MSRV snubbers a total of five snubbers on the MSRV discharge lines were found to be failed. No significant indications were found using ultrasonic or magnetic particle methods.

\*\*and reexamined with acceptable results. The MSRV snubber failures were attributed to improper line slope. Two MSRV discharge lines were resloped. Two of the five failed snubbers were replaced with new snubbers and three were changed to rigid struts.



1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 969, RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD PRESERVATION, BENTON COUNTY, IDAHO 3. UNIT: WNP-2 4. OWNER CERTIFICATE OF MAINTENANCE: N/A 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATIONAL BOARD NUMBER: N/A 1G. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE CATEGORY IDENTIFICATION NO. DESCRIPTION ITEM NO. METHOD DRAWING NO.

B-A	AE	#4 SC-FL CRC WD	B1.30	VOL	RPV-101
	AG	TOP HD-FLG WELD	B1.40	VOL	RPV-102
	AG	TOP HD-FLG WELD	B1.40	SUR	RPV-102

B-D	N2-30	RRC NZ-V @ 30	B3.90	VOL	RPV-101
	N2-30-IR	RRC NZ-IR @ 30	B3.100	VOL	RPV-101
	N2-60	RRC NZ-V @ 60	B3.90	VOL	RPV-101
	N2-60-IR	RRC NZ-IR @ 60	B3.100	VOL	RPV-101
	N3-72	MS NZ-V @ 72	B3.90	VOL	RPV-101
	N3-72-IR	MS NZ-IR @ 72	B3.100	VOL	RPV-101
	N4-30	FW NZ-V @ 30	B3.90	VOL	RPV-101
	N4-90	FW NZ-V @ 90	B3.90	VOL	RPV-101
	N4-90-IR	FW NZ-IR @ 90	B3.100	VOL	RPV-101
	N4-90-NB	FW NZ BORE @ 90	B3.100	VOL	RPV-101
	N5-120	LPCS NZ-V @ 120	B3.90	VOL	RPV-101
	N5-120-IR	LPCS NZ-IR @ 120	B3.100	VOL	RPV-101
	N6-45	LPCI NZ-V @ 45	B3.90	VOL	RPV-101
	N6-45-IR	LPCI NZ-IR @ 45	B3.100	VOL	RPV-101
	N7	HD SP NZ-HD TOP	B3.90	VOL	RPV-102
	N7-IR	HD SP NZ-HD IR	B3.100	VOL	RPV-102

B-F	10LPCS(1)-3	SE EXT TO SE	B5.10	VOL	LPCS-101
	10LPCS(1)-3	SE EXT TO SE	B5.10	SUR	LPCS-101
	10LPCS(1)-4	SE TO NOZZLE	B5.10	VOL	LPCS-101
	10LPCS(1)-4	SE TO NOZZLE	B5.10	SUR	LPCS-101
	12LPCI(1)A-5	SE EXT TO SE	B5.50	VOL	RHR-101
	12LPCI(1)A-5	SE EXT TO SE	B5.50	SUR	RHR-101
	12LPCI(1)A-6	SE TO NOZZLE	B5.10	VOL	RHR-101
	12LPCI(1)A-6	SE TO NOZZLE	B5.10	SUR	RHR-101
	12RFW(1)AB-9	SE EXT-SE STUB	B5.10	VOL	RFW-101
	12RFW(1)AB-9	SE EXT-SE STUB	B5.10	SUR	RFW-101
	12RFW(1)AB-10	SE STUB TO SE	B5.10	VOL	RFW-101
	12RFW(1)AB-10	SE STUB TO SE	B5.10	SUR	RFW-101

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3006 GEORGE WASHINGTON WAY, P.O. BOX 969, RICHLAND, WASHINGTON 99352
2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA.
3. PLANT UNIT: WNP-2
4. OWNER CERTIFICATE OF AUTHORIZATION: N/A
5. COMMERCIAL SERVICE DATE: 12/13/1984
6. NATIONAL BOARD NUMBER: N/A
10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
B-F		12RFW(1)AB-11	SE TO N4	B5.10	VOL	RFW-101
		12RFW(1)AB-11	SE TO N4	B5.10	SUR	RFW-101
B-G-1		RPV STUD 35-1-2A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-2A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-8A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-8A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-15A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-15A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-22A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-22A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-29A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-29A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-36A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-36A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-43A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-43A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-51A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-51A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-57A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-57A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-64A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-64A	RPV STUD	B6.30	SUR	RPV-101
		RPV STUD 35-1-71A	RPV STUD	B6.20	VOL	RPV-101
		RPV STUD 35-1-71A	RPV STUD	B6.30	SUR	RPV-101
		RPV NUT 36-1-2A	RPV NUT	B6.10	VOL	RPV-101
		RPV NUT 36-1-2A	RPV NUT	B6.10	SUR	RPV-101
		RPV NUT 36-1-8A	RPV NUT	B6.10	VOL	RPV-101
		RPV NUT 36-1-8A	RPV NUT	B6.10	SUR	RPV-101
		RPV NUT 36-1-15A	RPV NUT	B6.10	VOL	RPV-101
		RPV NUT 36-1-15A	RPV NUT	B6.10	SUR	RPV-101
		RPV NUT 36-1-22A	RPV NUT	B6.10	VOL	RPV-101
		RPV NUT 36-1-22A	RPV NUT	B6.10	SUR	RPV-101

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968,  
 RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY,  
 3. UNIT: WNP-2 4. OWNER CERTIFICATE OF AUTHORIZATION: N/A  
 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATION BOARD NUMBER: N/A  
 10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE CATEGORY IDENTIFICATION NO. DESCRIPTION ITEM NO. METHOD DRAWING NO.

B-G-1

RPV NUT 36-1-29A	RPV NUT	B6.10	VOL	RPV-101
RPV NUT 36-1-29A	RPV NUT	B6.10	SUR	RPV-101
RPV NUT 36-1-36A	RPV NUT	B6.10	VOL	RPV-101
RPV NUT 36-1-36A	RPV NUT	B6.10	SUR	RPV-101
RPV NUT 36-1-43A	RPV NUT	B6.10	VOL	RPV-101
RPV NUT 36-1-43A	RPV NUT	B6.10	SUR	RPV-101
RPV NUT 36-1-51A	RPV NUT	B6.10	VOL	RPV-101
RPV NUT 36-1-51A	RPV NUT	B6.10	SUR	RPV-101
RPV NUT 36-1-57A	RPV NUT	B6.10	VOL	RPV-101
RPV NUT 36-1-57A	RPV NUT	B6.10	SUR	RPV-101
RPV NUT 36-1-64A	RPV NUT	B6.10	VOL	RPV-101
RPV NUT 36-1-64A	RPV NUT	B6.10	SUR	RPV-101
RPV NUT 36-1-71A	RPV NUT	B6.10	VOL	RPV-101
RPV NUT 36-1-71A	RPV NUT	B6.10	SUR	RPV-101
RPV WASHERS*	RPV WASHER-76EA	B6.50	VT-1	RPV-101
RPV THREADS	THREADS-RPV FLG	B6.40	VOL	RPV-101
RRC-P-1A-BLT	PUMP BOLTING	B6.180	VOL	RRC-103
RRC-P-1A-BLT	PUMP BOLTING	B6.190	VT-1	RRC-103
RRC-P-1A-BLT	PUMP BOLTING	B6.200	VT-1	RRC-103

B-G-2

CRD HOUSING BLT**	CRD HOUSING BLT	B7.80	VT-1	RPV-102
6RCIC(1)-41ABD	FLANGE BOLTING	B7.50	VT-1	RCIC-102
6RCIC(1)-44BD	FLANGE BOLTING	B7.50	VT-1	RCIC-102
LPCS-V-5-BLT	VALVE BOLTING	B7.70	VT-1	LPCS-101
RHR-V-42A-BLT	VALVE BOLTING	B7.70	VT-1	RHR-101
RHR-V-111A-BLT	VALVE BOLTING	B7.70	VT-1	RHR-101
RHR-V-50A-BLT	VALVE BOLTING	B7.70	VT-1	RHR-105
RHR-V-50B-BLT	VALVE BOLTING	B7.70	VT-1	RHR-106
8MSR-5B-2BD	FLANGE BOLTING	B7.50	VT-1	MS-102
MS-RV-5B-BLT	VALVE BOLTING	B7.70	VT-1	MS-102
8MSR-4B-2BD	FLANGE BOLTING	B7.50	VT-1	MS-102
MS-RV-4B-BLT	VALVE BOLTING	B7.70	VT-1	MS-102
8MSR-3B-2BD	FLANGE BOLTING	B7.50	VT-1	MS-102

\*The following RPV washers were examined: 36-1-2A, 36-1-8A, 36-1-15A, 36-1-22A, 36-1-29A, 36-1-36A, 36-1-43A, 36-1-51A, 36-1-57A, 36-1-64A, 36-1-71A.

\*\*Bolting from the following CRD housings was examined: 02-23, 06-23, 10-15, 14-07, 14-55, 22-03, 22-31, 26-27, 26-55, 26-59, 30-11, 30-55, 30-59, 34-27, 34-59, 38-35, 42-47, 50-35, 58-27, 58-39

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968,  
 RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA.  
 3. PLANT UNIT: WNP-2 4. OWNER CERTIFICATE OF AUTHORIZATION: N/A  
 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATIONAL BOARD NUMBER: N/A  
 10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
B-G-2		MS-RV-3B-BLT	VALVE BOLTING	B7.70	VT-1	MS-102
B-J		6RCIC(1)-41A	PIPE TO FLANGE	B9.11	VOL	RCIC-102
		6RCIC(1)-41A	PIPE TO FLANGE	B9.11	SUR	RCIC-102
		6RCIC(1)-42	FLANGE TO EL	B9.11	VOL	RCIC-102
		6RCIC(1)-42	FLANGE TO EL	B9.11	SUR	RCIC-102
		6RCIC(1)-43	EL TO PIPE	B9.11	VOL	RCIC-102
		6RCIC(1)-43	EL TO PIPE	B9.11	SUR	RCIC-102
		6RCIC(1)-45	FLG TO NOZZLE	B9.11	VOL	RCIC-102
		6RCIC(1)-45	FLG TO NOZZLE	B9.11	SUR	RCIC-102
		12LPCS(1)-15	PIPE TO EL	B9.11	VOL	LPCS-101
		12LPCS(1)-15	PIPE TO EL	B9.11	SUR	LPCS-101
		12LPCS(1)-16	EL TO PIPE	B9.11	VOL	LPCS-101
		12LPCS(1)-16	EL TO PIPE	B9.11	SUR	LPCS-101
		12LPCS(1)-18	EL TO PIPE	B9.11	VOL	LPCS-101
		12LPCS(1)-18	EL TO PIPE	B9.11	SUR	LPCS-101
		10LPCS(1)-1	EL TO PIPE	B9.11	VOL	LPCS-101
		10LPCS(1)-1	EL TO PIPE	B9.11	SUR	LPCS-101
		10LPCS(1)-2	PIPE TO SE EXT	B9.11	VOL	LPCS-101
		10LPCS(1)-2	PIPE TO SE EXT	B9.11	SUR	LPCS-101
		14LPCI(1)A-9	PIPE TO EL	B9.11	VOL	RHR-101
		14LPCI(1)A-9	PIPE TO EL	B9.11	SUR	RHR-101
		14LPCI(1)A-10	EL TO PIPE	B9.11	VOL	RHR-101
		14LPCI(1)A-10	EL TO PIPE	B9.11	SUR	RHR-101
		12LPCI(1)A-1	REDUCER TO PIPE	B9.11	VOL	RHR-101
		12LPCI(1)A-1	REDUCER TO PIPE	B9.11	SUR	RHR-101
		12LPCI(1)A-2	PIPE TO EL	B9.11	VOL	RHR-101
		12LPCI(1)A-2	PIPE TO EL	B9.11	SUR	RHR-101
		12LPCI(1)A-3	EL TO PIPE	B9.11	VOL	RHR-101
		12LPCI(1)A-3	EL TO PIPE	B9.11	SUR	RHR-101
		12LPCI(1)A-4	PIPE TO SE	B9.11	VOL	RHR-101
		12LPCI(1)A-4	PIPE TO SE	B9.11	SUR	RHR-101
		20RHR(2)-8	PIPE TO EL	B9.11	VOL	RHR-104

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY,
3. UNIT: WNP-2
4. OWNER CERTIFICATE OF AUTHORIZATION: N/A
5. COMMERCIAL SERVICE DATE: 12/13/1984
6. NATIONAL BOARD NUMBER: N/A
10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
B-J		20RHR(2)-8	PIPE TO EL	B9.11	SUR	RHR-104
		20RHR(2)-9	EL TO PIPE	B9.11	VOL	RHR-104
		20RHR(2)-9	EL TO PIPE	B9.11	SUR	RHR-104
		20RHR(2)-10	PIPE TO EL	B9.11	VOL	RHR-104
		20RHR(2)-10	PIPE TO EL	B9.11	SUR	RHR-104
		12RHR(1)A-16LU	PIPE SEAM	B9.12	VOL	RHR-105
		12RHR(1)A-16LU	PIPE SEAM	B9.12	SUR	RHR-105
		12RHR(1)A-16	PIPE TO EL	B9.11	VOL	RHR-105
		12RHR(1)A-16	PIPE TO EL	B9.11	SUR	RHR-105
		12RHR(1)A-16LDI	EL SEAM	B9.12	VOL	RHR-105
		12RHR(1)A-16LDI	EL SEAM	B9.12	SUR	RHR-105
		12RHR(1)A-16LDO	EL SEAM	B9.12	VOL	RHR-105
		12RHR(1)A-16LDO	EL SEAM	B9.12	SUR	RHR-105
		12RHR(1)A-17LUI	EL SEAM	B9.12	VOL	RHR-105
		12RHR(1)A-17LUI	EL SEAM	B9.12	SUR	RHR-105
		12RHR(1)A-17LUO	EL SEAM	B9.12	VOL	RHR-105
		12RHR(1)A-17LUO	EL SEAM	B9.12	SUR	RHR-105
		12RHR(1)A-17	EL TO PIPE	B9.11	VOL	RHR-105
		12RHR(1)A-17	EL TO PIPE	B9.11	SUR	RHR-105
		12RHR(1)A-17LD	PIPE SEAM	B9.12	VOL	RHR-105
		12RHR(1)A-17LD	PIPE SEAM	B9.12	SUR	RHR-105
		12RHR(1)A-18LU	PIPE SEAM	B9.12	VOL	RHR-105
		12RHR(1)A-18LU	PIPE SEAM	B9.12	SUR	RHR-105
		12RHR(1)A-18	PIPE TO VLV	B9.11	VOL	RHR-105
		12RHR(1)A-18	PIPE TO VLV	B9.11	SUR	RHR-105
		12RHR(1)B-2	PEN TO PIPE	B9.11	VOL	RHR-106
		12RHR(1)B-2	PEN TO PIPE	B9.11	SUR	RHR-106
		12RHR(1)B-5	PIPE TO EL	B9.11	VOL	RHR-106
		12RHR(1)B-5	PIPE TO EL	B9.11	SUR	RHR-106
		12RHR(1)B-6	EL TO PIPE	B9.11	VOL	RHR-106
		12RHR(1)B-6	EL TO PIPE	B9.11	SUR	RHR-106
		26MS(1)B-9/8MSR-5B	PIPE TO SWL	B9.31	VOL	MS-102
		26MS(1)B-9/8MSR-5B	PIPE TO SWL	B9.31	SUR	MS-102

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA.
3. PLANT UNIT: WNP-2
4. OWNER CERTIFICATE OF AUTHORIZATION: N/A
5. COMMERCIAL SERVICE DATE: 12/13/1984
6. NATIONAL BOARD NUMBER: N/A
10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
B-J	8MSR-5B1	SWL TO PIPE	B9.11	VOL	MS-102
	8MSR-5B1	SWL TO PIPE	B9.11	SUR	MS-102
	26MS(1)B-9/8MSR-3B	PIPE TO SWL	B9.31	VOL	MS-102
	26MS(1)B-9/8MSR-3B	PIPE TO SWL	B9.31	SUR	MS-102
	5RFW(11)A-1	SLEEVE-SLEEVE	B9.11	SUR	RFW-101
	24RFW(1)A-2	PIPE TO VALVE	B9.11	VOL	RFW-101
	24RFW(1)A-2	PIPE TO VALVE	B9.11	SUR	RFW-101
	24RFW(1)A-3	VALVE TO PENE	B9.11	VOL	RFW-101
	24RFW(1)A-3	VALVE TO PENE	B9.11	SUR	RFW-101
	24RFW(1)A-4	PENE TO VALVE	B9.11	VOL	RFW-101
	24RFW(1)A-4	PENE TO VALVE	B9.11	SUR	RFW-101
	24RFW(1)A-5	VALVE TO PIPE	B9.11	VOL	RFW-101
	24RFW(1)A-5	VALVE TO PIPE	B9.11	SUR	RFW-101
	24RFW(1)A-6	PIPE TO EL	B9.11	VOL	RFW-101
	24RFW(1)A-6	PIPE TO EL	B9.11	SUR	RFW-101
	24RFW(1)A-6LDO	EL SEAM	B9.12	VOL	RFW-101
	24RFW(1)A-6LDO	EL SEAM	B9.12	SUR	RFW-101
	24RFW(1)A-6LDI	EL SEAM	B9.12	VOL	RFW-101
	24RFW(1)A-6LDI	EL SEAM	B9.12	SUR	RFW-101
	24RFW(1)A-7LUI	EL SEAM	B9.12	VOL	RFW-101
	24RFW(1)A-7LUI	EL SEAM	B9.12	SUR	RFW-101
	24RFW(1)A-7LUO	EL SEAM	B9.12	VOL	RFW-101
	24RFW(1)A-7LUO	EL SEAM	B9.12	SUR	RFW-101
	24RFW(1)A-7	EL TO PIPE	B9.11	VOL	RFW-101
	24RFW(1)A-7	EL TO PIPE	B9.11	SUR	RFW-101
	12RFW(1)AB-4	PIPE TO EL	B9.11	VOL	RFW-101
	12RFW(1)AB-4	PIPE TO EL	B9.11	SUR	RFW-101
	12RFW(1)AB-5	EL TO PIPE	B9.11	VOL	RFW-101
	12RFW(1)AB-5	EL TO PIPE	B9.11	SUR	RFW-101
	12RFW(1)AB-6	PIPE TO EL	B9.11	VOL	RFW-101
	12RFW(1)AB-6	PIPE TO EL	B9.11	SUR	RFW-101
	12RFW(1)AB-7	EL TO PIPE	B9.11	VOL	RFW-101
	12RFW(1)AB-7	EL TO PIPE	B9.11	SUR	RFW-101

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, IDAHO 3. UNIT: WNP-2 4. OWNER CERTIFICATE OF AUTHORIZATION: N/A 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATIONAL BOARD NUMBER: N/A 10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
B-J		12RFW(1)AB-8	PIPE-SE EXT	B9.11	VOL	RFW-101
		12RFW(1)AB-8	PIPE-SE EXT	B9.11	SUR	RFW-101
		24RFW(1)B-1	VALVE TO PIPE	B9.11	VOL	RFW-102
		24RFW(1)B-1	VALVE TO PIPE	B9.11	SUR	RFW-102
		24RFW(1)B-1/5RFW(11)-4	PIPE TO WOL	B9.31	VOL	RFW-102
		24RFW(1)B-1/5RFW(11)-4	PIPE TO WOL	B9.31	SUR	RFW-102
		5RFW(11)B-2	SLEEVE TO WOL	B9.11	VOL	RFW-102
		5RFW(11)B-2	SLEEVE TO WOL	B9.11	SUR	RFW-102
		5RFW(11)B-1	SLEEVE-SLEEVE	B9.11	SUR	RFW-102
		24RFW(1)B-2	PIPE TO VALVE	B9.11	VOL	RFW-102
		24RFW(1)B-2	PIPE TO VALVE	B9.11	SUR	RFW-102
		24RFW(1)B-3	VALVE TO PENE	B9.11	VOL	RFW-102
		24RFW(1)B-3	VALVE TO PENE	B9.11	SUR	RFW-102
		4RFW(11)A-1	TEE TO PIPE	B9.11	VOL	RFW-103
		4RFW(11)A-1	TEE TO PIPE	B9.11	SUR	RFW-103
		4RFW(11)A-2	PIPE TO EL	B9.11	VOL	RFW-103
		4RFW(11)A-2	PIPE TO EL	B9.11	SUR	RFW-103
		4RFW(11)A-3	EL TO SLEEVE	B9.11	VOL	RFW-103
		4RFW(11)A-3	EL TO SLEEVE	B9.11	SUR	RFW-103
		20RRC(6)-3LUI	EL SEAM	B9.12	VOL	RRC-105
		20RRC(6)-3LUI	EL SEAM	B9.12	SUR	RRC-105
		20RRC(6)-3LUO	EL SEAM	B9.12	VOL	RRC-105
		20RRC(6)-3LUO	EL SEAM	B9.12	SUR	RRC-105
		20RRC(6)-3	EL TO PIPE	B9.11	VOL	RRC-105
		20RRC(6)-3	EL TO PIPE	B9.11	SUR	RRC-105
		20RRC(6)-3LD	PIPE SEAM	B9.12	VOL	RRC-105
		20RRC(6)-3LD	PIPE SEAM	B9.12	SUR	RRC-105
		20RRC(6)-4LU	PIPE SEAM	B9.12	VOL	RRC-105
		20RRC(6)-4LU	PIPE SEAM	B9.12	SUR	RRC-105
		20RRC(6)-4	PIPE TO EL	B9.12	VOL	RRC-105
		20RRC(6)-4	PIPE TO EL	B9.12	SUR	RRC-105
		20RRC(6)-4LDI	EL SEAM	B9.12	VOL	RRC-105
		20RRC(6)-4LDI	EL SEAM	B9.12	SUR	RRC-105

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 969,  
 RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA.  
 3. PLANT UNIT: WNP-2 4. OWNER CERTIFICATE OF AUTHORIZATION: N/A  
 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATIONAL BOARD NUMBER: N/A  
 16. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
B-J	20RRC(6)-4LDO	EL SEAM	B9.12	VOL	RRC-105
	20RRC(6)-4LDO	EL SEAM	B9.12	SUR	RRC-105
	20RRC(6)-5LUI	EL SEAM	B9.12	VOL	RRC-105
	20RRC(6)-5LUI	EL SEAM	B9.12	SUR	RRC-105
	20RRC(6)-5LUO	EL SEAM	B9.12	VOL	RRC-105
	20RRC(6)-5LUO	EL SEAM	B9.12	SUR	RRC-105
	20RRC(6)-5	EL TO PIPE	B9.11	VOL	RRC-105
	20RRC(6)-5	EL TO PIPE	B9.11	SUR	RRC-105
	20RRC(6)-5LD	PIPE SEAM	B9.12	VOL	RRC-105
	20RRC(6)-5LD	PIPE SEAM	B9.12	SUR	RRC-105
	20RRC(6)-6LU	PIPE SEAM	B9.12	VOL	RRC-105
	20RRC(6)-6LU	PIPE SEAM	B9.12	SUR	RRC-105
	20RRC(6)-6	PIPE TO EL	B9.11	VOL	RRC-105
	20RRC(6)-6	PIPE TO EL	B9.11	SUR	RRC-105
	20RRC(6)-6LDI	EL SEAM	B9.12	VOL	RRC-105
	20RRC(6)-6LDI	EL SEAM	B9.12	SUR	RRC-105
	20RRC(6)-6LDO	EL SEAM	B9.12	VOL	RRC-105
	20RRC(6)-6LDO	EL SEAM	B9.12	SUR	RRC-105
	12RRC(7)A-1	VALVE TO PIPE	B9.11	VOL	RRC-106
	12RRC(7)A-1	VALVE TO PIPE	B9.11	SUR	RRC-106
	12RRC(7)A-1LD	PIPE SEAM	B9.12	VOL	RRC-106
	12RRC(7)A-1LD	PIPE SEAM	B9.12	SUR	RRC-106
	12RRC(7)A-2LU	PIPE SEAM	B9.12	VOL	RRC-106
	12RRC(7)A-2LU	PIPE SEAM	B9.12	SUR	RRC-106
	12RRC(7)A-2	PIPE TO EL	B9.11	VOL	RRC-106
	12RRC(7)A-2	PIPE TO EL	B9.11	SUR	RRC-106
	12RRC(7)A-2LDI	EL SEAM	B9.12	VOL	RRC-106
	12RRC(7)A-2LDI	EL SEAM	B9.12	SUR	RRC-106
	12RRC(7)A-2LDO	EL SEAM	B9.12	VOL	RRC-106
	12RRC(7)A-2LDO	EL SEAM	B9.12	SUR	RRC-106
	12RRC(7)A-3LUI	EL SEAM	B9.12	VOL	RRC-106
	12RRC(7)A-3LUI	EL SEAM	B9.12	SUR	RRC-106
	12RRC(7)A-3LUO	EL SEAM	B9.12	VOL	RRC-106



1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968,  
 RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA  
 3. UNIT: WNP-2 4. OWNER CERTIFICATE OF AUTHORIZATION: N/A  
 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATIONAL BOARD NUMBER: N/A  
 10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
B-J		12RRC(7)A-3LUO	EL SEAM	B9.12	SUR	RRC-106
		12RRC(7)A-3	EL TO PIPE	B9.11	VOL	RRC-106
		12RRC(7)A-3	EL TO PIPE	B9.11	SUR	RRC-106
		12RRC(7)A-3LD	PIPE SEAM	B9.12	VOL	RRC-106
		12RRC(7)A-3LD	PIPE SEAM	B9.12	SUR	RRC-106
		12RRC(7)A-4LU	PIPE SEAM	B9.12	VOL	RRC-106
		12RRC(7)A-4LU	PIPE SEAM	B9.12	SUR	RRC-106
		12RRC(7)A-4	PIPE TO EL	B9.11	VOL	RRC-106
		12RRC(7)A-4	PIPE TO EL	B9.11	SUR	RRC-106
		12RRC(7)A-4LDI	EL SEAM	B9.12	VOL	RRC-106
		12RRC(7)A-4LDI	EL SEAM	B9.12	SUR	RRC-106
		12RRC(7)A-4LDO	EL SEAM	B9.12	VOL	RRC-106
		12RRC(7)A-4LDO	EL SEAM	B9.12	SUR	RRC-106
		12RRC(7)B-4LU	PIPE SEAM	B9.12	VOL	RRC-107
		12RRC(7)B-4LU	PIPE SEAM	B9.12	SUR	RRC-107
		12RRC(7)B-4	PIPE TO EL	B9.11	VOL	RRC-107
		12RRC(7)B-4	PIPE TO EL	B9.11	SUR	RRC-107
		12RRC(7)B-4LDI	EL SEAM	B9.12	VOL	RRC-107
		12RRC(7)B-4LDI	EL SEAM	B9.12	SUR	RRC-107
		12RRC(7)B-4LDO	EL SEAM	B9.12	VOL	RRC-107
		12RRC(7)B-4LDO	EL SEAM	B9.12	SUR	RRC-107
		12RRC(7)B-5LUI	EL SEAM	B9.12	VOL	RRC-107
		12RRC(7)B-5LUI	EL SEAM	B9.12	SUR	RRC-107
		12RRC(7)B-5LUO	EL SEAM	B9.12	VOL	RRC-107
		12RRC(7)B-5LUO	EL SEAM	B9.12	SUR	RRC-107
		12RRC(7)B-5	EL TO PIPE	B9.11	VOL	RRC-107
		12RRC(7)B-5	EL TO PIPE	B9.11	SUR	RRC-107
		12RRC(7)B-5LD	PIPE SEAM	B9.12	VOL	RRC-107
		12RRC(7)B-5LD	PIPE SEAM	B9.12	SUR	RRC-107
		12RRC(7)B-6LU	PIPE SEAM	B9.12	VOL	RRC-107
		12RRC(7)B-6LU	PIPE SEAM	B9.12	SUR	RRC-107
		12RRC(7)B-6	PIPE TO SWL	B9.11	VOL	RRC-107
		12RRC(7)B-6	PIPE TO SWL	B9.11	SUR	RRC-107

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA.
3. PLANT UNIT: WNP-2
4. OWNER CERTIFICATE OF AUTHORIZATION: N/A
5. COMMERCIAL SERVICE DATE: 12/13/1984
6. NATIONAL BOARD NUMBER: N/A
10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
B-J		2RRC(6)A-3	PIPE TO EL	B9.21	SUR	RRC-110
		2RRC(6)A-3A	EL TO PIPE	B9.21	SUR	RRC-110
		2RRC(6)A-4	PIPE TO EL	B9.21	SUR	RRC-110
		2RRC(6)A-5	VALVE TO PIPE	B9.21	SUR	RRC-110
		2RRC(6)A-6	PIPE TO VALVE	B9.21	SUR	RRC-110
		2RRC(6)B-2	EL TO EL	B9.21	SUR	RRC-111
		2RRC(6)B-4	PIPE TO VALVE	B9.21	SUR	RRC-111
		2RRC(6)B-5	VALVE TO PIPE	B9.21	SUR	RRC-111
		2RRC(6)B-6	PIPE TO EL	B9.21	SUR	RRC-111
		2RRC(6)B-7	EL TO PIPE	B9.21	SUR	RRC-111
		2RRC(6)B-8	PIPE TO VALVE	B9.21	SUR	RRC-111
B-K-1		RCIC-940N(W)	1 WELDED LUG	B10.10	SUR	RCIC-102
		RCIC-931N(W)	8 WELDED LUGS	B10.10	SUR	RCIC-102
		LPCS-909N(W)	8 WELDED LUGS	B10.10	SUR	LPCS-101
		RHR-528(W)	4 WELDED LUGS	B10.10	SUR	RHR-101
		RHR-SA-58(W)	16 WELDED LUGS	B10.10	SUR	RHR-104
		RHR-SB-39(W)	8 WELDED LUGS	B10.10	SUR	RHR-106
		MS FLUED HEAD A	FLUED HEAD WELD	B10.10	SUR	MS-101
B-L-2		RRC-P-1A-BDY	PUMP BODY	B12.20	VT-3	RRC-103
B-M-2		RHR-V-23-BDY	VALVE BODY	B12.40	VT-3	RCIC-102
		RHR-V-53A-BDY	VALVE BODY	B12.40	VT-3	RHR-105
		RHR-V-53B-BDY	VALVE BODY	B12.40	VT-3	RHR-106
		RHR-V-50B-BDY	VALVE BODY	B12.40	VT-3	RHR-106
B-P		RPV-PB-101(L)	LK PRES BNDRY	B15.10	VT-2	RPV-101
		RPV-PB-102(L)	LK PRES BNDRY	B15.10	VT-2	RPV-102
		RCIC-PB-101(L)	LK PRES BNDRY	B15.50	VT-2	RCIC-101
		RCIC-PB-102(L)	LK PRES BNDRY	B15.50	VT-2	RCIC-102
		HPCS-PB-101(L)	LK PRES BNDRY	B15.50	VT-2	HPCS-101
		LPCS-PB-101(L)	LK PRES BNDRY	B15.50	VT-2	LPCS-101

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968,  
 RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA  
 3. UNIT: WNP-2 4. OWNER CERTIFICATE OF AUTHORIZATION: N/A  
 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATION BOARD NUMBER: N/A  
 10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE CATEGORY IDENTIFICATION NO. DESCRIPTION ITEM NO. METHOD DRAWING NO.

B-P	RHR-PB-101(L)	LK PRES BNDRY	B15.50	VT-2	RHR-101
	RHR-PB-102(L)	LK PRES BNDRY	B15.50	VT-2	RHR-102
	RHR-PB-103(L)	LK PRES BNDRY	B15.50	VT-2	RHR-103
	RHR-PB-104(L)	LK PRES BNDRY	B15.50	VT-2	RHR-104
	RHR-PB-105(L)	LK PRES BNDRY	B15.50	VT-2	RHR-105
	RHR-PB-106(L)	LK PRES BNDRY	B15.50	VT-2	RHR-106
	MS-PB-101(L)	LK PRES BNDRY	B15.50	VT-2	MS-101
	MS-PB-102(L)	LK PRES BNDRY	B15.50	VT-2	MS-102
	MS-PB-103(L)	LK PRES BNDRY	B15.50	VT-2	MS-103
	MS-PB-104(L)	LK PRES BNDRY	B15.50	VT-2	MS-104
	MS-PB-105(L)	LK PRES BNDRY	B15.50	VT-2	MS-105
	MS-PB-106(L)	LK PRES BNDRY	B15.50	VT-2	MS-106
	RFW-PB-101(L)	LK PRES BNDRY	B15.50	VT-2	RFW-101
	RFW-PB-102(L)	LK PRES BNDRY	B15.50	VT-2	RFW-102
	RFW-PB-103(L)	LK PRES BNDRY	B15.50	VT-2	RFW-103
	RRC-PB-101(L)	LK PRES BNDRY	B15.50	VT-2	RRC-101
	RRC-PB-102(L)	LK PRES BNDRY	B15.50	VT-2	RRC-102
	RRC-PB-103(L)	LK PRES BNDRY	B15.50	VT-2	RRC-103
	RRC-PB-104(L)	LK PRES BNDRY	B15.50	VT-2	RRC-104
	RRC-PB-105(L)	LK PRES BNDRY	B15.50	VT-2	RRC-105
	RRC-PB-106(L)	LK PRES BNDRY	B15.50	VT-2	RRC-106
	RRC-PB-107(L)	LK PRES BNDRY	B15.50	VT-2	RRC-107
	RRC-PB-108(L)	LK PRES BNDRY	B15.50	VT-2	RRC-108
	RRC-PB-109(L)	LK PRES BNDRY	B15.50	VT-2	RRC-109
	RRC-PB-110(L)	LK PRES BNDRY	B15.50	VT-2	RRC-110
	RRC-PB-111(L)	LK PRES BNDRY	B15.50	VT-2	RRC-111
RWCU-PB-101(L)	LK PRES BNDRY	B15.50	VT-2	RWCU-101	
SLC-PB-101(L)	LK PRESS BNDRY	B15.50	VT-2	SLC-101	
C-A	AC-1	FLG/SHEL CIRWLD	C1.10	VOL	RHR-214
C-B	AN-3	INLET NZ/SHELWD	C2.20	VOL	RHR-214
	AN-3	INLET NZ/SHELWD	C2.20	SUR	RHR-214

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 960,  
RICHLAND, WASHINGTON 99352
2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA.
3. PLANT UNIT: WNP-2
4. OWNER CERTIFICATE OF AUTHORIZATION: N/A
5. COMMERCIAL SERVICE DATE: 12/13/1984
6. NATIONAL BOARD NUMBER: N/A
10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
C-C	RHR-354(W)	4 WELDED LUGS	C3.40	SUR	RHR-201
	RHR-367(W)	4 WELDED LUGS	C3.40	SUR	RHR-201
	RHR-365(W)	8 WELDED LUGS	C3.40	SUR	RHR-201
	RHR-138(W)	4 WELDED LUGS	C3.40	SUR	RHR-205
	RHR-121(W)	8 WELDED LUGS	C3.40	SUR	RHR-206
	RHR-230(W)	4 WELDED LUGS	C3.40	SUR	RHR-207
	RHR-117(W)	4 WELDED LUGS	C3.40	SUR	RHR-209
	RHR-118(W)	4 WELDED LUGS	C3.40	SUR	RHR-209
	AS-1	HEATXCHG SUP WD	C3.10	SUR	RHR-214
C-F-2	6RCIC(1)-46	NOZZLE TO PIPE	C5.51	VOL	RCIC-205
	6RCIC(1)-46	NOZZLE TO PIPE	C5.51	SUR	RCIC-205
	6RCIC(6)-11	ELL TO PIPE	C5.51	VOL	RCIC-205
	6RCIC(6)-11	ELL TO PIPE	C5.51	SUR	RCIC-205
	6RCIC(1)-111	PIPE TO VALVE	C5.51	SUR	RCIC-205
	6RCIC(1)-111	PIPE TO VALVE	C5.51	VOL	RCIC-205
	10HPCS(9)-1	TEE TO PIPE	C5.51	VOL	HPCS-202
	10HPCS(9)-1	TEE TO PIPE	C5.51	SUR	HPCS-202
	12HPCS(3)-1	TEE TO PIPE	C5.51	VOL	HPCS-202
	12HPCS(3)-1	TEE TO PIPE	C5.51	SUR	HPCS-202
	18RHR(1)A-14	PIPE TO EL	C5.51	SUR	RHR-201
	18RHR(1)A-14	PIPE TO EL	C5.51	VOL	RHR-201
	18RHR(1)A-15	EL TO PIPE	C5.51	SUR	RHR-201
	18RHR(1)A-15	EL TO PIPE	C5.51	VOL	RHR-201
	18RHR(11)A-8	PIPE TO EL	C5.51	SUR	RHR-201
	18RHR(11)A-8	PIPE TO EL	C5.51	VOL	RHR-201
	18RHR(11)A-9	EL TO PIPE	C5.51	SUR	RHR-201
	18RHR(11)A-9	EL TO PIPE	C5.51	VOL	RHR-201
	18RHR(1)A-39	PIPE TO EL	C5.51	SUR	RHR-201
	18RHR(1)A-39	PIPE TO EL	C5.51	VOL	RHR-201
	18RHR(1)A-40	EL TO PIPE	C5.51	SUR	RHR-201
	18RHR(1)A-40	EL TO PIPE	C5.51	VOL	RHR-201
	18RHR(1)A-60	PIPE TO EL	C5.51	SUR	RHR-201

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY,
3. UNIT: WNP-2
4. OWNER CERTIFICATE OF AUTHORIZATION: N/A
5. COMMERCIAL SERVICE DATE: 12/13/1984
6. NATIONAL BOARD NUMBER: N/A
10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
C-F-2	18RHR(1)A-60	PIPE TO EL	C5.51	VOL	RHR-201
	18RHR(1)A-61	EL TO PIPE	C5.51	SUR	RHR-201
	18RHR(1)A-61	EL TO PIPE	C5.51	VOL	RHR-201
D-A	MSRV-1A-3(W)	WELDED ATTACH	D2.30	VT-3	MS-301
	MSRV-1A-4(W)	WELDED ATTACH	D2.30	VT-3	MS-301
	MSRV-1A-2(W)	WELDED ATTACH	D2.30	VT-3	MS-301
	MS-267(W)	WELDED ATTACH	D2.40	VT-3	MS-301
	MSRV-1A-6(W)	WELDED ATTACH	D2.30	VT-3	MS-301
	MSRV-2A-2(W)	WELDED ATTACH	D2.30	VT-3	MS-302
	MSRV-2A-3(W)	WELDED ATTACH	D1.30	VT-3	MS-302
	MSRV-2A-1(W)	WELDED ATTACH	D2.30	VT-3	MS-302
	MSRV-2A-5(W)	WELDED ATTACH	D2.30	VT-3	MS-302
	MS-270(W)	WELDED ATTACH	D2.40	VT-3	MS-302
	MS-271(W)	WELDED ATTACH	D2.40	VT-3	MS-302
	MSRV-3A-2(W)	WELDED ATTACH	D2.30	VT-3	MS-303
	MSRV-3A-3(W)	WELDED ATTACH	D2.30	VT-3	MS-303
	MSRV-3A-1(W)	WELDED ATTACH	D2.30	VT-3	MS-303
	MSRV-3A-4(W)	WELDED ATTACH	D2.30	VT-3	MS-303
	MSRV-3A-5(W)	WELDED ATTACH	D2.30	VT-3	MS-303
	MSRV-3B-2(W)	WELDED ATTACH	D2.30	VT-3	MS-307
	MS-284(W)	WELDED ATTACH	D2.40	VT-3	MS-307
	MSRV-3B-5(W)	WELDED ATTACH	D2.30	VT-3	MS-307
	MSRV-3B-4(W)	WELDED ATTACH	D2.30	VT-3	MS-307
	MSRV-3B-6(W)	WELDED ATTACH	D2.30	VT-3	MS-307
	MSRV-3B-7(W)	WELDED ATTACH	D2.30	VT-3	MS-307
	MS-286(W)	WELDED ATTACH	D2.40	VT-3	MS-307
	MSRV-2C-2(W)	WELDED ATTACH	D2.30	VT-3	MS-311
	MSRV-2C-3(W)	WELDED ATTACH	D2.30	VT-3	MS-311
	MSRV-2C-9(W)	WELDED ATTACH	D2.30	VT-3	MS-311
	MS-297(W)	WELDED ATTACH	D2.40	VT-3	MS-311
	MSRV-2C-5(W)	WELDED ATTACH	D2.30	VT-3	MS-311
	MSRV-2C-4(W)	WELDED ATTACH	D2.30	VT-3	MS-311

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA.
3. PLANT UNIT: WNP-2
4. OWNER CERTIFICATE OF AUTHORIZATION: N/A
5. COMMERCIAL SERVICE DATE: 12/13/1984
6. NATIONAL BOARD NUMBER: N/A
10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
D-A		MSRV-2C-6(W)	WELDED ATTACH	D2.30	VT-3	MS-311
		MS-298(W)	WELDED ATTACH	D2.40	VT-3	MS-311
		MS-299(W)	WELDED ATTACH	D2.40	VT-3	MS-311
		MSRV-2D-2(W)	WELDED ATTACH	D2.30	VT-3	MS-316
		MSRV-2D-3(W)	WELDED ATTACH	D2.30	VT-3	MS-316
		MSRV-2D-1(W)	WELDED ATTACH	D2.30	VT-3	MS-316
		MS-312(W)	WELDED ATTACH	D2.40	VT-3	MS-316
		MSRV-2D-5(W)	WELDED ATTACH	D2.30	VT-3	MS-316
		MSRV-2D-4(W)	WELDED ATTACH	D2.30	VT-3	MS-316
		MS-313(W)	WELDED ATTACH	D2.40	VT-3	MS-316
		MS-341(W)	WELDED ATTACH	D2.40	VT-3	MS-316
D-B		SW-78(W)	WELDED ATTACH	D2.40	VT-3	SW-301
		SW-121(W)	WELDED ATTACH	D2.40	VT-3	SW-301
		SW-151(W)	WELDED ATTACH	D2.20	VT-3	SW-303
		SW-212(W)	WELDED ATTACH	D2.20	VT-3	SW-303
		SW-149(W)	WELDED ATTACH	D2.20	VT-3	SW-303
		SW-150(W)	WELDED ATTACH	D2.40	VT-3	SW-303
		SW-127(W)	WELDED ATTACH	D2.20	VT-3	SW-303
		SW-198(W)	WELDED ATTACH	D2.20	VT-3	SW-305
		SW-251(W)	WELDED ATTACH	D2.20	VT-3	SW-308
		SW-960N(W)	WELDED ATTACH	D2.20	VT-3	SW-313
		RCC-434(W)	WELDED ATTACH	D2.20	VT-3	RCC-301
		RCC-440(W)	WELDED ATTACH	D2.20	VT-3	RCC-301
		RCC-327(W)	WELDED ATTACH	D2.30	VT-3	RCC-302
IWF*		RCIC-940N	SPRING	F-X**	VT3H***	RCIC-102
		RCIC-931N	PSA-3 SNUBBER	F-X	VT3H	RCIC-102
		RCIC-927N	ANCHOR	F-X	VT3H	RCIC-204
		RCIC-902N	SPRING	F-X	VT3H	RCIC-204
		RCIC-903N	STRUT	F-X	VT3H	RCIC-204
		RCIC-916N	STRUT	F-X	VT3H	RCIC-204
		RCIC-904N	BOX	F-X	VT3H	RCIC-204

\*Includes Category F-A, F-B and F-C.

\*\*Includes items F-1, F-2, F-3 and F-4 as applicable.

\*\*\*Visual examination VT-3 and/or VT-4 as applicable. i.e. VT-3 is required for all supports. VT-4 is required for snubber and spring supports.

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD RESERVATION, FENTON COUNTY, WY  
 3. PLANT UNIT: WNP-2 4. OWNER CERTIFICATE OF AUTHORIZATION: N/A  
 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATIONAL BOARD NUMBER: N/A  
 10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS: 1984

CODE CATEGORY IDENTIFICATION NO. DESCRIPTION ITEM NO. METHOD DRAWING NO.

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
IWF	RCIC-52	ANCHOR	F-X	VT3H	RCIC-204
	RCIC-967N	PSA-1/4 SN(2)	F-X	VT3H	RCIC-204
	HPCS-916N	BOX	F-X	VT3H	HPCS-202
	HPCS-35	SPRING	F-X	VT3H	HPCS-202
	HPCS-37	ANCHOR	F-X	VT3H	HPCS-202
	HPCS-38	SPRING	F-X	VT3H	HPCS-202
	HPCS-40	STRUT	F-X	VT3H	HPCS-202
	HPCS-925N	PSA-3 SNUBBER	F-X	VT3H	HPCS-202
	LPCS-904N	STRUT	F-X	VT3H	LPCS-101
	LPCS-909N	PSA-3 SN(2)	F-X	VT3H	LPCS-101
	LPCS-908N	PSA-10 SNUBBER	F-X	VT3H	LPCS-101
	LPCS-907N	STRUT	F-X	VT3H	LPCS-101
	RHR-528	SPRING	F-X	VT3H	RHR-101
	RHR-382	PSA-35 SNUBBER	F-X	VT3H	RHR-101
	RHR-SA-59	PSA-35 SNUBBER	F-X	VT3H	RHR-104
	RHR-431	SPRING	F-X	VT3H	RHR-104
	RHR-SA-32	PSA-10 SN(2)	F-X	VT3H	RHR-105
	RHR-SA-33	PSA-10 SNUBBER	F-X	VT3H	RHR-105
	RHR-SA-34	PSA-35 SNUBBER	F-X	VT3H	RHR-105
	RHR-SB-40	PSA-10 SNUBBER	F-X	VT3H	RHR-106
	RHR-SB-39	PSA-3 SN(2)	F-X	VT3H	RHR-106
	RHR-354	SPRING	F-X	VT3H	RHR-201
	RHR-355	PSA-3 SNUBBER	F-X	VT3H	RHR-201
	RHR-356	PSA-10 SNUBBER	F-X	VT3H	RHR-201
	RHR-367	SPRING	F-X	VT3H	RHR-201
	RHR-368	STRUT	F-X	VT3H	RHR-201
	RHR-365	STRUT	F-X	VT3H	RHR-201
	RHR-366	STRUT	F-X	VT3H	RHR-201
	RHR-263	SPRING	F-X	VT3H	RHR-201
	RHR-176	STRUT	F-X	VT3H	RHR-205
	RHR-909N	STRUT	F-X	VT3H	RHR-205
	RHR-136	STRUT	F-X	VT3H	RHR-205
	RHR-138	SPRING	F-X	VT3H	RHR-205

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 958, RICHLAND, WASHINGTON 99352
2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA.
3. PLANT UNIT: WNP-2
4. OWNER CERTIFICATE OF AUTHORIZATION: N/A
5. COMMERCIAL SERVICE DATE: 12/13/1984
6. NATIONAL BOARD NUMBER: N/A
10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
IWF	RHR-135	STRUT	F-X	VT3H	RHR-205
	RHR-137	PSA-10 SN(2)	F-X	VT3H	RHR-205
	RHR-121	PSA-10 SN(2)	F-X	VT3H	RHR-206
	RHR-609	SPRING	F-X	VT3H	RHR-207
	RHR-433	SPRING	F-X	VT3H	RHR-207
	RHR-435	STRUT	F-X	VT3H	RHR-207
	RHR-436	BOX	F-X	VT3H	RHR-207
	RHR-434	BOX	F-X	VT3H	RHR-207
	RHR-438	STRUT	F-X	VT3H	RHR-207
	RHR-437	PSA-3 SN(2)	F-X	VT3H	RHR-207
	RHR-462	SPRING	F-X	VT3H	RHR-207
	RHR-54	SPRING	F-X	VT3H	RHR-207
	RHR-476	BOX	F-X	VT3H	RHR-207
	RHR-230	BOX	F-X	VT3H	RHR-207
	RHR-228	ANCHOR	F-X	VT3H	RHR-207
	RHR-976N	STRUT	F-X	VT3H	RHR-207
	RHR-488	ANCHOR	F-X	VT3H	RHR-207
	RHR-491	SPRING	F-X	VT3H	RHR-207
	RHR-908N	PSA-3 SN(2)	F-X	VT3H	RHR-207
	RHR-492	PSA-3 SN(2)	F-X	VT3H	RHR-207
	RHR-904N	STRUT	F-X	VT3H	RHR-209
	RHR-117	SPRING	F-X	VT3H	RHR-209
	RHR-84	ANCHOR	F-X	VT3H	RHR-209
	RHR-79	SPRING	F-X	VT3H	RHR-209
	RHR-80	STRUT	F-X	VT3H	RHR-209
	RHR-167	SPRING	F-X	VT3H	RHR-209
	RHR-118	SPRING	F-X	VT3H	RHR-209
	RHR-81	STRUT	F-X	VT3H	RHR-209
	MS-SB-5	PSA-35 SNUBBER	F-X	VT3H	MS-102
	MS-SB-8	PSA-35 SNUBBER	F-X	VT3H	MS-102
	MS-HB-2	SPRING	F-X	VT3H	MS-102
	MS-SB-10	PSA-35 SNUBBER	F-X	VT3H	MS-102
	MS-SB-9	PSA-35 SNUBBER	F-X	VT3H	MS-102



1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA  
 3. UNIT: WNP-2 4. OWNER CERTIFICATE OF AUTHORIZATION: N/A  
 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATIONAL BOARD NUMBER: N/A  
 10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
IWF		RFW-158	SPRING	F-X	VT3H	RFW-101
		RFW-178	BOX	F-X	VT3H	RFW-103
		RFW-179	SPRING	F-X	VT3H	RFW-103
		RFW-903N	SPRING	F-X	VT3H	RFW-103
		RFW-180	PSA-1 SNUBBER	F-X	VT3H	RFW-103
		RRC-SA-16	PSA-35 SNUBBER	F-X	VT3H	RRC-101
		RRC-SA-66	PSA-35 SNUBBER	F-X	VT3H	RRC-101
		RRC-HA-7	SPRING	F-X	VT3H	RRC-101
		RRC-SB-12	PSA-35 SNUBBER	F-X	VT3H	RRC-102
		RRC-HA-2	SPRING	F-X	VT3H	RRC-103
		RRC-HA-3	SPRING	F-X	VT3H	RRC-103
		RRC-10	SPRING	F-X	VT3H	RRC-107
		RHR-SB-31	PSA-10 SNUBBER	F-X	VT3H	RRC-107
		RRC-2	SPRING	F-X	VT3H	RRC-108
		RWCU-142	SPRING	F-X	VT3H	RWCU-101
		RWCU-141	SPRING	F-X	VT3H	RWCU-101
		SW-227	STRUT	F-X	VT3H	SW-303
		SW-315	STRUT	F-X	VT3H	SW-303
		SW-127	STRUT	F-X	VT3H	SW-303
		SW-956N	RIGID	F-X	VT3H	SW-313
		SW-955N	RIGID	F-X	VT3H	SW-313
		SW-1022N	RIGID	F-X	VT3H	SW-313
		SW-1032N	RIGID	F-X	VT3H	SW-313
		FPC-184	SPRING	F-X	VT3H	FPC-302
		FPC-182	BOX	F-X	VT3H	FPC-302
		FPC-185	BOX	F-X	VT3H	FPC-302
		FPC-186	SPRING	F-X	VT3H	FPC-302
		FPC-69	RIGID	F-X	VT3H	FPC-305
		FPC-70	RIGID	F-X	VT3H	FPC-305
		FPC-67	RIGID	F-X	VT3H	FPC-305
		FPC-66	RIGID	F-X	VT3H	FPC-305
		FPC-168	BOX	F-X	VT3H	FPC-305
		FPC-914N	RIGID	F-X	VT3H	FPC-307

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968,  
RICHLAND, WASHINGTON 99352
2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY, WA.
3. PLANT UNIT: WNP-2
4. OWNER CERTIFICATE OF AUTHORIZATION: N/A
5. COMMERCIAL SERVICE DATE: 12/13/1984
6. NATIONAL BOARD NUMBER: N/A
10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
IWF		RCC-308	STRUT	F-X	VT3H	RCC-302
		RCC-309	STRUT	F-X	VT3H	RCC-302
		RCC-472	STRUT	F-X	VT3H	RCC-302
		RCC-312	STRUT	F-X	VT3H	RCC-302
		RCC-311	STRUT	F-X	VT3H	RCC-302
		RCC-475	STRUT	F-X	VT3H	RCC-302
		MSRV-2B-5	STRUT	F-X	VT3H	MS-306
		MS-283	SPRING	F-X	VT3H	MS-307
		MSRV-3B-2	PSA-10 SNUBBER	F-X	VT3H	MS-307
		MSRV-3B-3	PSA-10 SNUBBER	F-X	VT3H	MS-307
		MSRV-3B-1	PSA-10 SNUBBER	F-X	VT3H	MS-307
		MS-284	SPRING	F-X	VT3H	MS-307
		MSRV-3B-5	PSA-10 SNUBBER	F-X	VT3H	MS-307
		MSRV-3B-4	PSA-10 SNUBBER	F-X	VT3H	MS-307
		MSRV-3B-6	PSA-10 SNUBBER	F-X	VT3H	MS-307
		MS-285	SPRING	F-X	VT3H	MS-307
		MSRV-3B-7	PSA-10 SNUBBER	F-X	VT3H	MS-307
		MS-286	SPRING	F-X	VT3H	MS-307
		MS-335	SPRING	F-X	VT3H	MS-307
		MS-296	SPRING	F-X	VT3H	MS-311
		MSRV-2C-2	PSA-10 SNUBBER	F-X	VT3H	MS-311
		MSRV-2C-1	PSA-10 SNUBBER	F-X	VT3H	MS-311
		MSRV-2C-3	PSA-10 SNUBBER	F-X	VT3H	MS-311
		MSRV-2C-8	PSA-10 SNUBBER	F-X	VT3H	MS-311
		MSRV-2C-9	PSA-10 SNUBBER	F-X	VT3H	MS-311
		MS-297	SPRING	F-X	VT3H	MS-311
		MSRV-2C-5	PSA-10 SNUBBER	F-X	VT3H	MS-311
		MSRV-2C-4	PSA-10 SNUBBER	F-X	VT3H	MS-311
		MSRV-2C-6	PSA-10 SNUBBER	F-X	VT3H	MS-311
		MS-298	SPRING	F-X	VT3H	MS-311
		MSRV-2C-7	PSA-10 SNUBBER	F-X	VT3H	MS-311
		MS-299	SPRING	F-X	VT3H	MS-311
		MS-337	SPRING	F-X	VT3H	MS-311

1. OWNER: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968,  
 RICHLAND, WASHINGTON 99352 2. PLANT: WNP-2, HANFORD RESERVATION, BENTON COUNTY,  
 3. UNIT: WNP-2 4. OWNER CERTIFICATE OF AUTHORIZATION: N/A  
 5. COMMERCIAL SERVICE DATE: 12/13/1984 6. NATIONAL BOARD NUMBER: N/A  
 10. ABSTRACT OF EXAMINATIONS. LIST OF EXAMINATIONS:

CODE	CATEGORY	IDENTIFICATION NO.	DESCRIPTION	ITEM NO.	METHOD	DRAWING NO.
IWF		MSRV-2C-10PS	RIGID	F-X	VT3H	MS-311
		MSRV-3C-4	STRUT	F-X	VT3H	MS-312
		MSRV-4C-4	STRUT	F-X	VT3H	MS-313
		MS-311	SPRING	F-X	VT3H	MS-316
		MSRV-2D-2	PSA-10 SNUBBER	F-X	VT3H	MS-316
		MSRV-2D-3	PSA-10 SNUBBER	F-X	VT3H	MS-316
		MSRV-2D-1	PSA-10 SNUBBER	F-X	VT3H	MS-316
		MS-312	SPRING	F-X	VT3H	MS-316
		MSRV-2D-5	PSA-10 SNUBBER	F-X	VT3H	MS-316
		MSRV-2D-4	PSA-10 SNUBBER	F-X	VT3H	MS-316
		MS-313	SPRING	F-X	VT3H	MS-316
		MS-341	SPRING	F-X	VT3H	MS-316
		MSRV-2D-6PS	RIGID	F-X	VT3H	MS-316
		SLC-4475-12	STRUT	F-X	VT3H	SLC-101
		SLC-4475-120	STRUT	F-X	VT3H	SLC-101
		SLC-4475-122	STRUT	F-X	VT3H	SLC-101
		SLC-4475-25	STRUT	F-X	VT3H	SLC-101
		SLC-4475-24	STRUT	F-X	VT3H	SLC-101
		SLC-4475-21	PSA-1 SNUBBER	F-X	VT3H	SLC-101
		SLC-4475-22	SPRING	F-X	VT3H	SLC-101
		SLC-4475-112	STRUT	F-X	VT3H	SLC-101
		SLC-4475-113	PSA-1/2 SNUBBER	F-X	VT3H	SLC-101
		SLC-4475-114	STRUT	F-X	VT3H	SLC-101



## APPENDIX B

### NDE Examination Summary

Note: Outage RF87A is identified as "R2" in this summary.

Note 1: This weld did not receive full coverage from both sides. It did receive full coverage from one side and meets code requirements.



WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RPV-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RPV  
DESCRIPTION: SHL CRS & SKRT KNKL

PA 01  
DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. SHEET NO.	EXAMINATION RESULTS-----				REMARKS-----
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
AE	VOL	1RPU-003		0			GEOMETRIC INDICATION 100% DAC FROM FLANGE LIP. EXAM LIMITED FOR 2" BETWEEN EACH STUD AND THE OUTSIDE RADIUS OF THE CLAD SURFACE. EXAM COVERS FLANGE FROM MATING SURFACE BETWEEN 180 AND 360 D.

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RPV-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RPV  
 DESCRIPTION: NOZZLES - SHELL

PAGE 002  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
N2-30	VOL	1RPU-033	0,45,60				MID PLATE SEGREGATES. NO CHANGE FROM PSI
N2-30-IR	VOL	1RPU-027	0				NO RECORDABLE INDICATIONS
		1RPU-028	21				NO RECORDABLE INDICATIONS
N2-60	VOL	1RPU-033	0,45,60				NO RECORDABLE INDICATIONS
N2-60-IR	VOL	1RPU-026	0				NO RECORDABLE INDICATIONS
		1RPU-029	21				NO RECORDABLE INDICATIONS
N3-72	VOL	1RPU-022	0				NO RECORDABLE INDICATIONS.
		1RPU-023	46				NO RECORDABLE INDICATIONS.
		1RPU-024	61				NO RECORDABLE INDICATIONS. EXAM LIMITED DUE TO NOZZLE CONFIGURATION. NO SCAN NOZZLE SIDE
N3-72-IR	VOL	1RPU-030	0, 25				NO RECORDABLE INDICATIONS
N4-30	VOL	1RPU-033	0,45,60				NO RECORDABLE INDICATIONS
N4-90	VOL	1RPU-033	0,45,60				NO RECORDABLE INDICATIONS



WNP-02  
 INTER : 01  
 PERIOD 01  
 OUTAGE: R2  
 DRAWING NO. RPV-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT: RPV  
 DESCRIPTION: NOZZLES - SHELL

PAGE 03  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
N4-90-IR	VOL	1RPU-005	71				AN INDICATION LESS THAN 25% FSH (APPROX. 20%) WAS SEEN DURING THIS EXAMINATION AND DURING THE PSI. 260 mR TOTAL EXPOSURE 4 PEOPLE
N4-90-N8	VOL	1RPU-006	25				NO RECORDABLE INDICATIONS
N5-120	VOL	1RPU-033	0,45,60				NO RECORDABLE INDICATIONS
N5-120-IR	VOL	1RPU-025	0				NO RECORDABLE INDICATIONS
		1RPU-031	19				NO RECORDABLE INDICATIONS
N6-45	VOL	1RPU-033	0,45,60				NO RECORDABLE INDICATIONS
N6-45-IR	VOL	1RPU-032	0, 19				NO RECORDABLE INDICATIONS

WNP-92  
INTERVAL: C1  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RPV-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RPV  
DESCRIPTION: RPV STUDS, NUTS, ETC

PAGE 004  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
RPV STUD 35-1-2A	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
	SUR	1RPM-006	ACC				NO RECORDABLE INDICATIONS
RPV STUD 35-1-8A	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
	SUR	1RPM-005	ACC				NO RECORDABLE INDICATIONS
RPV STUD 35-1-15A	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
	SUR	1RPM-011	ACC				NO RECORDABLE INDICATIONS
RPV STUD 35-1-22A	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
	SUR	1RPM-007	ACC				NO RECORDABLE INDICATIONS
RPV STUD 35-1-29A	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
	SUR	1RPM-008	ACC				NO RECORDABLE INDICATIONS
RPV STUD 35-1-36A	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
	SUR	1RPM-012	ACC				NO RECORDABLE INDICATIONS
RPV STUD 35-1-43A	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
	SUR	1RPM-009	ACC				NO RECORDABLE INDICATIONS
RPV STUD 35-1-51A	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS

WNP-02  
 INTER: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RPV-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RPV  
 DESCRIPTION: RPV STUDS, NUTS, ETC

PA 05  
 DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM.	EXAMINATION RESULTS				REMARKS-----
		DATA SHEET NO.-----	NO	INSIGNIF	SIGNIFICANT		
			INDIC.---	INDIC.---	GEOMETRY	OTHER---	
RPV STUD 35-1-57A	SUR	1RPM-002	ACC				NO RECORDABLE INDICATIONS
	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
RPV STUD 35-1-64A	SUR	1RPM-010	ACC				NO RECORDABLE INDICATIONS
	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
RPV STUD 35-1-71A	SUR	1RPM-003	ACC				NO RECORDABLE INDICATIONS
	VOL	1RPU-007	0				NO RECORDABLE INDICATIONS
RPV NUT 36-1-2A	SUR	1RPM-004	ACC				NO RECORDABLE INDICATIONS
	VOL	1RPU-021	0,37,45				NO RECORDABLE INDICATIONS
RPV NUT 36-1-8A	SUR	1RPM-013	ACC				NO RECORDABLE INDICATIONS
	VOL	1RPU-020	0,37,45				NO RECORDABLE INDICATIONS
RPV NUT 36-1-15A	SUR	1RPM-014	ACC				NO RECORDABLE INDICATIONS
	VOL	1RPU-019	0,37,45				NO RECORDABLE INDICATIONS
RPV NUT 36-1-22A	SUR	1RPM-015	ACC				NO RECORDABLE INDICATIONS
	VOL	1RPU-018	0,37,45				NO RECORDABLE INDICATIONS
	SUR	1RPM-016	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RPV-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RPV  
DESCRIPTION: RPV STUDS, NUTS, ETC

PAGE 006  
DATE 08/26/87

IDENT. NO.	EXAM. DATA SHEET NO.	EXAM. MTH.	EXAMINATION RESULTS			REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER	
RPV NUT 36-1-29A	VOL	1RPU-017	0,37,45			NO RECORDABLE INDICATIONS
	SUR	1RPM-017	ACC			NO RECORDABLE INDICATIONS
RPV NUT 36-1-36A	VOL	1RPU-016	0,37,45			NO RECORDABLE INDICATIONS
	SUR	1RPM-018	ACC			NO RECORDABLE INDICATIONS
RPV NUT 36-1-43A	VOL	1RPU-015	0,37,45			NO RECORDABLE INDICATIONS
	SUR	1RPM-019	ACC			NO RECORDABLE INDICATIONS
RPV NUT 36-1-51A	VOL	1RPU-014	0,37,45			NO RECORDABLE INDICATIONS
	SUR	1RPM-020	ACC			NO RECORDABLE INDICATIONS
RPV NUT 36-1-57A	VOL	1RPU-013	0,37,45			NO RECORDABLE INDICATIONS
	SUR	1RPM-021	ACC			NO RECORDABLE INDICATIONS
RPV NUT 36-1-64A	VOL	1RPU-012	0,37,45			NO RECORDABLE INDICATIONS
	SUR	1RPM-022	ACC			NO RECORDABLE INDICATIONS
RPV NUT 36-1-71A	VOL	1RPU-011	0,37,45			NO RECORDABLE INDICATIONS
	SUR	1RPM-023	ACC			NO RECORDABLE INDICATIONS

WMP-02  
 INTER : G1  
 PERI 01  
 CUTAGE: R2  
 DRAWING NO. RPV-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RPV  
 DESCRIPTION: RPV STUDS, NUTS, ETC

PA 07  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
RPV WASHERS	VT-1	1RPV-006	ACC				THE FOLLOWING WASHERS WERE EXAMINED: 2A, 8A, 15A, 22A, 29A, 36A, 43A, 51A, 57A, 64A, 71A
RPV THREADS	VOL	1RPU-004	0				NO RECORDABLE INDICATIONS. EXAM LIMITED FOR 2" BETWEEN EACH STUD HOLE AND THE OUTSIDE RADIUS OF THE CLAD SURFACE. EXAM COVERS FLANGE THREADS BETWEEN STUD HOLES 38 THROUGH 76
CORE SPRAY SPARGERS	VT-1	1RPV-019	ACC				NO RECORDABLE INDICATIONS
RPV-PB-101(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: C1  
OUTAGE: R2  
DRAWING NO. RPV-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RPV  
DESCRIPTION: TOP & BOTTOM HEAD

PAGE 001  
DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO.	INDIC.	INSIGNIF	SIGNIFICANT	
AG			INDIC.	INDIC.	GEOMETRY	OTHER	
	VOL	1RPU-008	45,60	0			
	SUR	1RPM-001	ACC				NO PSI SUR EXAM REQ'D.

WNP-02  
 INTER: 01  
 PERI 01  
 OUTAGE: R2  
 DRAWING NO. RPV-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RPV  
 DESCRIPTION: TOP & BTM HD NOZZLES

PA 02  
 DATE 68726/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
N7	VOL	1RPU-009			45,60		45 DEGREE- 160% DAC INTERMITTENT NOZZLE IR GEOMETRY 60 DEGREE- 160% DAC INTERMITTENT NOZZLE IR GEOMETRY 1/2 V 316% DAC INTERMITTENT NOZZLE IR AND BORE FULL V.
N7-IR	VOL	1RPU-010	60,70				NO RECORDABLE INDICATIONS.
CRD HOUSING BLT	VT-1	1RPV-007	ACC				REPORT COVERS CRD FLANGE BOLTING FOR CRD 02-23
		1RPV-005	ACC				REPORT COVERS CRD FLANGE BOLTING FOR CRD 14-55, 26-59, 30-59; 34-59 SLIGHT WATER STAINS. SOME MINOR SPOTTED CORROSION.
		SEE RMKS	ACC				DATA SHTS 1RPV-008 THROUGH 1RPV-017 CRD 06-23, 10-15, 14-07, 26-55, 30-55, 58-39, 58-27, 22-03, 30-11, 50-35, 42-47, 38-35, 22-31, 34-27, 26-27.
RPV-PB-102(L)	VT-2	1RPV-018	ACC				CRD 30-55
		1VT2-87	ACC				NO RECORDABLE INDICATIONS.

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RCIC-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RCIC(13)-4  
DESCRIPTION: RCIC STEAM SUPPLY

PAGE 001  
DATE 08/26/87

<u>IDENT..NO.</u>	<u>EXAM.</u> <u>MTH.</u>	<u>EXAM.</u> <u>DATA</u> <u>SHEET</u> <u>NO.</u>	<u>EXAMINATION RESULTS</u>				<u>REMARKS</u>
			<u>NO</u>	<u>INSIGNIF</u>	<u>SIGNIFICANT</u>		
			<u>INDIC.</u>	<u>INDIC.</u>	<u>GEOMETRY</u>	<u>OTHER</u>	
RCIC-PB-101(L)	VT-2	1VT2-87			ACC		RCIC-V-620 PIPE CAP LEAKS. RE-THREADED AND REEXAMINED WITH ACCEPTABLE RESULTS.



WNP-02  
 INTE : 01  
 PERI 01  
 OUTAGE: R2  
 DRAWING NO. RCIC-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RHR(10)-4  
 DESCRIPTION: RPV HEAD SPRAY

P 001  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
RHR-V-23-BDY	VT-3	1RHV-007		ACC			MINOR CORROSION IN SPOTS IN BOTH THE VALVE INLET AND OUTLET CONDUITS AND IN BOWL
RCIC-940N(W)	SUR	1RIM-017	ACC				NO RECORDABLE INDICATIONS
RCIC-940N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCIC-931N(W)	SUR	1RIM-018	ACC				NO RECORDABLE INDICATIONS
RCIC-931N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
6RCIC(1)-41A	VOL	1RIU-021		45			I.D. GEO. 360 deg INTERMITTENT 85% DAC
	SUR	1RIM-019	ACC				NO RECORDABLE INDICATIONS
6RCIC(1)-41ABD	VT-1	1RIV-001	ACC				NO RECORDABLE INDICATIONS
6RCIC(1)-42	VOL	1RIU-020		45			I.D. GEO. 360 deg INTERMITTENT 50% DAC
	SUR	1RIM-015	ACC				NO RECORDABLE INDICATIONS
6RCIC(1)-43	VOL	1RIU-019	45				NO RECORDABLE INDICATIONS
	SUR	1RIM-016	ACC				NO RECORDABLE INDICATIONS
6RCIC(1)-44BD	VT-1	1RIV-002	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: C1  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RCIC-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RCIC(1)-4  
DESCRIPTION: RPV HEAD SPRAY

PAGE 002  
DATE 08/26/87

<u>IDENT..NO.</u> <u>6RCIC(1)-45</u>	EXAM. DATA SHEET NO.	<u>EXAMINATION RESULTS</u>				<u>REMARKS</u>
		<u>NO</u>	<u>INSIGNIF</u>	<u>SIGNIFICANT</u>		
	<u>MTN.</u>	<u>NO.</u>	<u>INDIC.</u>	<u>INDIC.</u>	<u>GEOMETRY OTHER</u>	
	VOL	1RIU-018	44			NO RECORDABLE INDICATIONS
RCIC-PB-102(L)	SUR	1RIM-014	ACC			NO RECORDABLE INDICATIONS.
	VT-2	1VT2-87	ACC			NO RECORDABLE INDICATIONS

WNP-02  
INTE : 01  
PERI 01  
OUTAGE: R2  
DRAWING NO. RCIC-204

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RCIC(10)-1  
DESCRIPTION: PUMP SUCTION LINES

PA 001  
DATE 08/26/87

IDENT..NO.-----	EXAM. MTH.	EXAM.	EXAMINATION RESULTS				REMARKS-----
		DATA	NO	INSIGNIF	SIGNIFICANT	OTHER	
		SHEET					
		NO.-----	INDIC.---	INDIC.---	GEOMETRY		
RCIC-927N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCIC-902N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCIC-903N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCIC-916N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCIC-904N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCIC-52	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCIC-967N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RCIC-205

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RCIC(1)-4  
DESCRIPTION: RCIC PUMP DISCHARGE

PAGE 001  
DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS			REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER	
6RCIC(1)-46	VOL	1RIU-017	45			NO EXAM ON NOZZLE SIDE NO RECORDABLE INDICATIONS SEE NOTE 1.
6RCIC(6)-11	SUR	1RIP-009	ACC			NO RECORDABLE INDICATIONS
	VOL	1RIU-016		45		I.D. GEO. 50% DAC
6RCIC(1)-111	SUR	1RIP-008	ACC			NO RECORDABLE INDICATIONS
	SUR	1RIM-020	ACC			NO RECORDABLE INDICATIONS
	VOL	1RIU-022		44		I.D. GEO. 50% DAC

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. HPCS-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT HPCS(1)-4  
DESCRIPTION: HIGH PRES CORE SPRAY

PA 01  
DATE 08/26/87

IDENT. NO. HPCS-PB-101(L)	EXAM. MTH. VT-2	EXAM. DATA SHEET NO. 1VT2-87	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
			ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. HPCS-202

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT HPCS(9)-4  
 DESCRIPTION: HPCS-P-1 DISCHARGE

PAGE 001  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS		REMARKS
			NO INDIC.	INSIGNIF INDIC.	
10HPCS(9)-1	VOL	1HPU-006		45	ID GEO. 360 DEG. 50% DAC
12HPCS(3)-1	SUR	1HPP-005 ACC			NO RECORDABLE INDICATIONS
	VOL	1HPU-007		46	I.D. GEO. 360 deg INTERMITTENT 65% DAC
HPCS-916N	SUR	1HPM-001 ACC			NO RECORDABLE INDICATIONS
	VT3H	1HV-0054 ACC			NO RECORDABLE INDICATIONS
HPCS-35	VT3H	1HV-0054 ACC			NO RECORDABLE INDICATIONS
HPCS-37	VT3H	1HV-0054 ACC			NO RECORDABLE INDICATIONS
HPCS-38	VT3H	1HV-0054 ACC			NO RECORDABLE INDICATIONS
HPCS-40	VT3H	1HV-0054 ACC			NO RECORDABLE INDICATIONS
HPCS-925N	VT3H	1HV-0054 ACC			NO RECORDABLE INDICATIONS
	VT3H	1HV-0054 ACC			NO RECORDABLE INDICATIONS

WNP-02  
 INTENT: G1  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. LPCS-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT LPCS(1)-4  
 DESCRIPTION: LOW PRES CORE SPRAY

PA 001  
 DATE 08/26/87

IDENT..NO. -----	EXAM. MTH. -----	EXAM. DATA SHEET NO.-----	EXAMINATION RESULTS				REMARKS -----
			NO INDIC.---	INSIGNIF INDIC.---	SIGNIFICANT GEOMETRY OTHER-----		
LPCS-V-5-BLT	VT-1	1LPV-001	ACC				NO RECORDABLE INDICATIONS
LPCS-904N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
LPCS-909N(W)	SUR	1LPM-001	ACC				NO RECORDABLE INDICATIONS
LPCS-909N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
LPCS-908N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
LPCS-907N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
12LPCS(1)-15	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
	VOL	1LPU-004		45			I.D. GEO. 360 deg INTERMITTENT 50-60% DAC
12LPCS(1)-16	SUR	1LPP-004	ACC				NO RECORDABLE INDICATIONS
	VOL	1LPU-005		45			I.D. GEO. 360 deg INTERMITTENT 50-75% DAC
12LPCS(1)-18	SUR	1LPP-005	ACC				NO RECORDABLE INDICATIONS
	VOL	1LPU-006	45				NO RECORDABLE INDICATIONS
10LPCS(1)-1	SUR	1LPP-006	ACC				NO RECORDABLE INDICATIONS
	VOL	1LPU-007	46				NO RECORDABLE INDICATIONS
	SUR	1LPP-007	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. LPCS-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT LPCS(1)-4  
 DESCRIPTION: LOW PRES CORE SPRAY

PAGE 002  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS		REMARKS
			NO INDIC.	INSIGNIF INDIC.	
10LPCS(1)-2	VOL	1LPU-008		46	I.D. GEO. 360 deg VARYING IN AMPLITUDE 90% DAC MAX
10LPCS(1)-3	SUR	1LPP-008		ACC	5/32in ROUNDED
	VOL	1LPU-010	45		NO RECORDABLE INDICATIONS
10LPCS(1)-4	SUR	1LPP-009	ACC		NO RECORDABLE INDICATIONS
	VOL	1LPU-009		45	BEAM REDIRECTION DUE TO GRAIN STRUCTURE 180 % DAC
LPCS-PB-101(L)	SUR	1LPP-010	ACC		NO RECORDABLE INDICATIONS
	VT-2	1VT2-87	ACC		NO RECORDABLE INDICATIONS



WNP-02  
 INTER: 01  
 PERI: 01  
 OUTAGE: R2  
 DRAWING NO. RHR-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RHR(1)-4  
 DESCRIPTION: RHR/LPCI LOOP "A"

PA: 01  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
RHR-V-42A-BLT	VT-1	1RHV-002	ACC				NO RECORDABLE INDICATIONS
RHR-528(W)	SUR	1RHM-006	ACC				NO RECORDABLE INDICATIONS
RHR-528	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
14LPCI(1)A-9	VOL	1RHU-020	45				NO RECORDABLE INDICATIONS
14LPCI(1)A-10	SUR	1RHP-020	ACC				NO RECORDABLE INDICATIONS
	VOL	1RHU-021		45			I.D. GEO. OF ELBOW AT "BEND" MARK FROM MFG. 50-60% DAC
RHR-382	SUR	1RHP-021	ACC				NO RECORDABLE INDICATIONS
	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-V-111A-BLT	VT-1	1RHV-003	ACC				NO RECORDABLE INDICATIONS
12LPCI(1)A-1	VOL	1RHU-025		45			IND #1 SPOT IND. CL WELD CW SCAN 45% DAC IND #2 I.D. GEO 360 DEG INTERMITTENT 60% DAC. NO SCAN A DUE TO REDUCER CONFIGURATION. SEE NOTE 1
12LPCI(1)A-2	SUR	1RHP-022	ACC				NO RECORDABLE INDICATIONS
	VOL	1RHU-026		45			ID GEO 360 DEGREE INTERMITTENT 75% DAC

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RHR-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RHR(1)-4  
DESCRIPTION: RHR/LPCI LOOP "A"

PAGE 002  
DATE 08/26/87

IDENT..NO..	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
12LPCI(1)A-3	SUR	1RHP-023	ACC			NO RECORDABLE INDICATIONS	
	VOL	1RHU-027	45			NO RECORDABLE INDICATIONS	
12LPCI(1)A-4	SUR	1RHP-024	ACC			NO RECORDABLE INDICATIONS	
	VOL	1RHU-053		45		I.D. GEO. 360 deg INTERMITTENT AT VARYING AMPLITUDES 63% DAC MAX	
12LPCI(1)A-5	SUR	1RHP-046	ACC			NO RECORDABLE INDICATIONS	
	VOL	1RHU-052	45			NO RECORDABLE INDICATIONS	
12LPCI(1)A-6	SUR	1RHP-047	ACC			NO RECORDABLE INDICATIONS	
	VOL	1RHU-051		45		BEAM REDIRECTION DUE TO GRAIN BOUNDARY 90% DAC	
RHR-PB-101(L)	SUR	1RHP-048	ACC			NO RECORDABLE INDICATIONS	
	VT-2	1VT2-87	ACC			NO RECORDABLE INDICATIONS	

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RHR-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RHR(1)-4  
DESCRIPTION: RHR/LPCI LOOP "B"

PAGE 001  
DATE 08/26/87

IDENT. NO. RHR-PB-102(L)	EXAM. MTM. NO.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			INDIC.	INSIGNIF	SIGNIFICANT	GEOMETRY OTHER	
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: G1  
PERIOD: C1  
OUTAGE: R2  
DRAWING NO. RHR-103

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RHR(1)-4  
DESCRIPTION: RHR SHUTDN COOL SUCT

PAGE 001  
DATE 08/26/87

<u>IDENT..NO.</u>	<u>EXAM.</u>	<u>DATA</u>	<u>EXAMINATION RESULTS</u>				<u>REMARKS</u>
			<u>SHEET</u>	<u>NO</u>	<u>INSIGNIF</u>	<u>SIGNIFICANT</u>	
<u>MTN.</u>	<u>NO.</u>	<u>INDIC.</u>	<u>INDIC.</u>	<u>GEOMETRY</u>	<u>OTHER</u>		
RHR-PB-103(L)	VT-2	1VT2-87	ACC			NO RECORDABLE INDICATIONS	

WNP-02  
 INTER: 01  
 PERI: 01  
 OUTAGE: R2  
 DRAWING NO. RHR-104

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RHR(2)-4  
 DESCRIPTION: RHR SHUTDOWN COOL SUCTION

PA: 001  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
RHR-SA-59	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-SA-58(W)	SUR	1RHM-005	ACC				NO RECORDABLE INDICATIONS
RHR-431	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
20RHR(2)-8	VOL	1RHU-017	45				NO RECORDABLE INDICATIONS
20RHR(2)-9	SUR	1RHP-017	ACC				NO RECORDABLE INDICATIONS
	VOL	1RHU-018	45				NO RECORDABLE INDICATIONS
20RHR(2)-10	SUR	1RHP-018	ACC				NO RECORDABLE INDICATIONS
	VOL	1RHU-019		45			I.D. GEO 360 deg INTERMITTENT AT LOWER AMPL. 65% DAC
RHR-PB-104(L)	SUR	1RHP-019	ACC				NO RECORDABLE INDICATIONS
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RHR-105

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RHR(1)-4  
 DESCRIPTION: SHUTDN COOL RET LP-A

PAGE 001  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAMINATION RESULTS				REMARKS
		EXAM. DATA SHEET NO.	NO. INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER	
RHR-V-53A-BDY	VT-3	1RHV-001		ACC		EROSION ON DISC GUIDE BARS. DID NOT PENETRATE INTO VALVE BODY.
RHR-V-50A-BLT	VT-1	1RHV-004	ACC			NO RECORDABLE INDICATIONS
RHR-SA-32	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
RHR-SA-33	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
12RHR(1)A-16LU	VOL	1RHU-034	45			NO RECORDABLE INDICATIONS
	SUR	1RHP-037	ACC			NO RECORDABLE INDICATIONS
12RHR(1)A-16	VOL	1RHU-035	45			NO RECORDABLE INDICATIONS
	SUR	1RHP-034		ACC		0.08" ROUNDED, 0.10" ROUNDED
12RHR(1)A-16LDI	VOL	1RHU-037	45			NO RECORDABLE INDICATIONS
	SUR	1RHP-042	ACC			NO RECORDABLE INDICATIONS
12RHR(1)A-16LDO	VOL	1RHU-036	45			NO RECORDABLE INDICATIONS
	SUR	1RHP-040	ACC			NO RECORDABLE INDICATIONS
12RHR(1)A-17LUI	VOL	1RHU-039	45			NO RECORDABLE INDICATIONS
	SUR	1RHP-043	ACC			NO RECORDABLE INDICATIONS

WNP-02  
 INTER: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RHR-105

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RHR(1)-4S  
 DESCRIPTION: SHUTDOWN COOL RET LP-A

PA 002  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAMINATION RESULTS				REMARKS
		EXAM. DATA SHEET NO.	NO.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER	
12RHR(1)A-17LUO	VOL	1RHU-038	45			NO RECORDABLE INDICATIONS
12RHR(1)A-17	SUR	1RHP-041	ACC			NO RECORDABLE INDICATIONS
	VOL	1RHU-040		45		I.D. GEO. 360 deg INTERMITTENT 60% DAC
12RHR(1)A-17LD	SUR	1RHP-035	ACC			NO RECORDABLE INDICATIONS
	VOL	1RHU-041	45			NO RECORDABLE INDICATIONS
RHR-SA-34	SUR	1RHP-038	ACC			NO RECORDABLE INDICATIONS
	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
12RHR(1)A-18LU	VOL	1RHU-042	45			NO RECORDABLE INDICATIONS
	SUR	1RHP-039	ACC			NO RECORDABLE INDICATIONS
12RHR(1)A-18	VOL	1RHU-043	45			NO RECORDABLE INDICATIONS
	SUR	1RHP-036	ACC			NO RECORDABLE INDICATIONS
RHR-PB-105(L)	VT-2	1VT2-87	ACC			NO RECORDABLE INDICATIONS

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RHR-106

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RHR(1)-4  
 DESCRIPTION: SHUTDOWN COOL RET LP-B

PAGE 001  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS			REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER	
RHR-V-53B-BDY	VT-3	1RHV-008		ACC		EROSION ON ALL 3 DISC GUIDES. THE BOTTOM 1.4 IN. OF EACH GUIDE IS ESSENTIALLY GONE. NO EROSION INTO PRESSURE BOUNDARY AT THIS TIME.
12RHR(1)B-2	VOL	1RHU-024		45		INTERMITTANT INDICATION 75% DAC
RHR-SB-40	SUR	1RHP-025	ACC			NO RECORDABLE INDICATIONS
RHR-SB-39(U)	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
RHR-SB-39	SUR	1RHM-007	ACC			NO RECORDABLE INDICATIONS
12RHR(1)B-5	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
	VOL	1RHU-023	45			NO RECORDABLE INDICATIONS
12RHR(1)B-6	SUR	1RHP-026	ACC			NO RECORDABLE INDICATIONS
	VOL	1RHU-022	45			NO RECORDABLE INDICATIONS
RHR-V-50B-BDY	SUR	1RHP-027	ACC			NO RECORDABLE INDICATIONS
	VT-3	1RHV-006		ACC		MINOR UNIFORM CORROSSION IN VALVE INTERNALS
RHR-V-50B-BLT	VT-1	1RHV-005		ACC		REMOVED GALLING ON NUTS PER MWR AU9923. NUTS ACCEPTABLE.



WNP-02  
INTE : 01  
PERI 01  
OUTAGE: R2  
DRAWING NO. RHR-106

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RHR(1)-4S  
DESCRIPTION: SHUTDN COOL RET LP-B

PA 02  
DATE 08/26/87

IDENT..NO. RHR-PB-106(L)	EXAM. MTH.	EXAM. NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY OTHER		
	VT-2	1VT2-87	ACC			NO RECORDABLE INDICATIONS	

WNP-02  
 INTERVAL: 01.  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RHR-201

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RHR(1)-2  
 DESCRIPTION: STM SPLY TO RHR HX1A

PAGE 001  
 DATE 98/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
18RHR(1)A-14	SUR	1RHP-044			ACC		TWO 3/16" ROUNDED INDICATIONS NEXT TO EACH OTHER THEREFORE REJECTABLE. EXAMINED BY UT ACCEPTABLE. SEE REPORT 1RHU-050. IWB-3514.2(b)
18RHR(1)A-15	VOL	1RHU-050 45					NO RECORDABLE INDICATIONS
	SUR	1RHP-045 ACC					NO RECORDABLE INDICATIONS
18RHR(11)A-8	VOL	1RHU-049 45					NO RECORDABLE INDICATIONS
	SUR	1RHP-031 ACC					NO RECORDABLE INDICATIONS
18RHR(11)A-9	VOL	1RHU-031 46					NO RECORDABLE INDICATIONS
	SUR	1RHP-030		ACC			3/16 ROUNDED, 3/32 ROUNDED
RHR-354(W)	VOL	1RHU-030 46					NO RECORDABLE INDICATIONS
	SUR	1RHM-009 ACC					NO RECORDABLE INDICATIONS
RHR-354	VT3H	1HV-0054 ACC					NO RECORDABLE INDICATIONS
RHR-355	VT3H	1HV-0054 ACC					NO RECORDABLE INDICATIONS
RHR-356	VT3H	1HV-0054 ACC					NO RECORDABLE INDICATIONS
RHR-367(W)	SUR	1RHM-011 ACC					NO RECORDABLE INDICATIONS

WNP-02  
 INTER: U1  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RHR-201

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RHR(1)-2  
 DESCRIPTION: STM SPLY TO RHR HX1A

PAGE 002  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAMINATION RESULTS				REMARKS
		EXAM. DATA SHEET NO.	NO. INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER	
RHR-367	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
RHR-368	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
18RHR(1)A-39	SUR	1RHP-032	ACC			NO RECORDABLE INDICATIONS
	VOL	1RHU-029		46		IND #1 I.D. GEO 360 deg INTERMITTENT 85% DAC
18RHR(1)A-40	SUR	1RHP-033	ACC			NO RECORDABLE INDICATIONS
	VOL	1RHU-028	46			NO RECORDABLE INDICATIONS
RHR-365(W)	SUR	1RHM-010	ACC			NO RECORDABLE INDICATIONS
RHR-365	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
RHR-366	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
RHR-263	VT3H	1HV-0054	ACC			NO RECORDABLE INDICATIONS
18RHR(1)A-60	SUR	1RHP-029	ACC			NO RECORDABLE INDICATIONS
	VOL	1RHU-032	45			NO RECORDABLE INDICATIONS
18RHR(1)A-61	SUR	1RHP-028	ACC			NO RECORDABLE INDICATIONS
	VOL	1RHU-033	45			NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIGD: 01  
OUTAGE: R2  
DRAWING NO. RHR-205

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT 24RHR(2)-2  
DESCRIPTION: RHR SHUTDN COOL SUCT

PAGE 001  
DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. DATA SHEET NO.---	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
RHR-176	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-909N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-136	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-138(W)	SUR	1RHM-008	ACC				NO RECORDABLE INDICATIONS
RHR-138	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-135	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-137	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RHR-206

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT 20RHR(8)-2  
DESCRIPTION: RHR-LPCS\_CROSSTIE

PA 01  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO. INDIC.	INSIGNIF. INDIC.	SIGNIFICANT GEOMETRY	OTHER	
RHR-121(W)							
RHR-121	SUR	1RHM-013	ACC				NO RECORDABLE INDICATIONS
	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RHR-207

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RHR(1)2  
DESCRIPTION: LOOP\_B\_SPLY-RHR\_HX1B

PAGE 001  
DATE 08/26/87

IDENT..NO.-----	EXAM. MTH.	EXAM. DATA SHEET NO.-----	EXAMINATION RESULTS-----				REMARKS-----
			NO INDIC.---	INSIGNIF INDIC.---	SIGNIFICANT GEOMETRY OTHER		
RHR-609	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-433	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-435	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-436	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-434	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-438	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-437	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-462	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-54	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-476	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-230	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-230(W)	SUR	1RHM-017	ACC				NO RECORDABLE INDICATIONS
RHR-228	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-976N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-488	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTE: 01  
PERI: 01  
OUTAGE: R2  
DRAWING NO. RHR-207

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RHR(1)2  
DESCRIPTION: LOOP\_B SPLY-RHR HX1B

PA: 202  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			INDIC.	INSIGNIF. INDIC.	SIGNIFICANT GEOMETRY	OTHER	
RHR-491	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-908N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-492	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-62  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RHR-209

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RHR(1)2  
DESCRIPTION: LOOP B SPLY-RHR HX1B

PAGE 001  
DATE 08/26/87

IDENT..NO.-----	EXAM. MTH.	EXAM. DATA SHEET NO.-----	EXAMINATION RESULTS-----				REMARKS-----
			NO INDIC.---	INSIGNIF INDIC.---	SIGNIFICANT GEOMETRY OTHER---		
RHR-9C4N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-117(W)	SUR	1RHM-016	ACC				NO RECORDABLE INDICATIONS
RHR-117	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-84	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-79	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-80	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-167	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-118(W)	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-118	SUR	1RHM-012	ACC				NO RECORDABLE INDICATIONS
RHR-81	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS



WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RHR-214

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RHR-HX-1A  
DESCRIPTION: RHR HEAT EXCHANGE 1A

PAGE 001  
DATE 06/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
AC-1	VOL	1RHU-045	45				NO RECORDABLE INDICATIONS
		1RHU-046	0				NO RECORDABLE INDICATIONS
		1RHU-048	60				NO RECORDABLE INDICATIONS
AN-3	VOL	1RHU-044	0, 45				NO RECORDABLE INDICATIONS
		1RHU-047	60				NO RECORDABLE INDICATIONS
		1RHM-014	ACC				NO RECORDABLE INDICATIONS
AS-1	SUR	1RHM-015	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(1)-4  
DESCRIPTION: MAIN STEAM LINE A

PAGE 001  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
MS FLUED HEAD A	SUR	1MSM-007	ACC				NO RECORDABLE INDICATIONS
MS-PB-101(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTER: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. MS-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT MS(1)-4  
 DESCRIPTION: MAIN STEAM LINE B

PAGE 001  
 DATE 08/26/87

IDENT..NO.-----	EXAM. MTH.-----	EXAM. DATA SHEET NO.-----	EXAMINATION RESULTS-----				REMARKS-----
			NO INDIC.---	INSIGNIF INDIC.---	SIGNIFICANT GEOMETRY OTHER-----		
MS-SB-5	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-SB-8	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
26MS(1)B-9/8MSR-5B	VOL	1MSU-041	45				NO RECORDABLE INDICATIONS
	SUR	1MSP-051	ACC				NO RECORDABLE INDICATIONS
8MSR-5B1	VOL	1MSU-042	45				NO RECORDABLE INDICATIONS
	SUR	1MSP-050	ACC				NO RECORDABLE INDICATIONS
8MSR-5B-2BD	VT-1	1MSV-002	ACC				NO RECORDABLE INDICATIONS
MS-RV-5B-BLT	VT-1	1MSV-003	ACC				NO RECORDABLE INDICATIONS FLANGE WAS ASSEMBLED
	VT-1	1MSV-002	ACC				NO RECORDABLE INDICATIONS
8MSR-4B-2BD	VT-1	1MSV-003	ACC				NO RECORDABLE INDICATIONS FLANGE WAS ASSEMBLED
MS-RV-4B-BLT	VT-1	1MSV-002	ACC				NO RECORDABLE INDICATIONS
	VT-1	1MSV-003	ACC				NO RECORDABLE INDICATIONS FLANGE WAS ASSEMBLED
MS-HB-2	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
26MS(1)B-9/8MSR-3B	VOL	1MSU-040	45				NO RECORDABLE INDICATIONS
	SUR	1MSP-052	ACC				4 ROUNDED 0.04" TO 0.08"
8MSR-3B-2BD	VT-1	1MSV-002	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(1)-4  
DESCRIPTION: MAIN STEAM LINE B

PAGE 002  
DATE 08/26/87

<u>IDENT. NO.</u>	<u>EXAM. MTH.</u>	<u>EXAM. DATA SHEET NO.</u>	<u>EXAMINATION RESULTS</u>				<u>REMARKS</u>
			<u>NO. INDIC.</u>	<u>INSIGNIF INDIC.</u>	<u>SIGNIFICANT GEOMETRY</u>	<u>OTHER</u>	
MS-RV-3B-BLT	VT-1	1MSV-003	ACC				NO RECORDABLE INDICATIONS FLANGE WAS ASSEMBLED
MS-SB-10	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-SB-9	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-PB-102(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS.

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-103

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(1)-4  
DESCRIPTION: MAIN STEAM LINE C

PA 001  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
MS-PB-103(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-104

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(1)-4  
DESCRIPTION: MAIN STEAM LINE D

PAGE 001  
DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
<u>MS-PB-104(L)</u>		<u>NO.</u>	<u>INDIC.</u>	<u>INDIC.</u>	<u>GEOMETRY</u>	<u>OTHER</u>	
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-105

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(9)-4  
DESCRIPTION: MS VALVE DRAINS

PAGE 001  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
MS-PB-105(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-106

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(12)-4  
DESCRIPTION: MS RX VES HEAD VENT

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<u>IDENT..NO.</u>	<u>EXAM.</u> <u>MTH.</u>	<u>EXAM.</u> <u>DATA</u> <u>SHEET</u> <u>NO.</u>	<u>EXAMINATION RESULTS</u>				<u>REMARKS</u>
			<u>INDIC.</u>	<u>INDIC.</u>	<u>INSIGNIF</u>	<u>SIGNIFICANT</u>	
					<u>GEOMETRY</u>	<u>OTHER</u>	
MS-PB-106(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS



WNP-00  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-203

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT 2MS(2C)-4  
DESCRIPTION: MS PRESS STAB. LINE

PA 001  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
2MS(20)C-1	SUR	1MSP-047	ACC				NO RECORDABLE INDICATIONS
2MS(20)C-2	SUR	1MSP-048	ACC				NO RECORDABLE INDICATIONS
2MS(20)C-3	SUR	1MSP-049	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RFW-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RFW(1)-4  
 DESCRIPTION: RX FEEDWATER LINE A

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 DATE 08/26/87

IDENT..NO.-----	EXAM. MTH.	EXAM.	EXAMINATION RESULTS				REMARKS-----
		DATA SHEET NO.-----	NO	INSIGNIF	SIGNIFICANT		
			INDIC.---	INDIC.---	GEOMETRY	OTHER---	
5RFW(1)A-1	SUR	1FWP-039	ACC				NO RECORDABLE INDICATIONS
24RFW(1)A-2	VOL	1FWU-038		46			I.D. GEO. 360 deg INTERMITTENT 80% DAC
24RFW(1)A-3	SUR	1FWP-038	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-041		45			I.D. GEO. 360 deg 90% DAC
24RFW(1)A-4	SUR	1FWP-029	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-049		45			IND #1 I.D. GEO. 50% DAC IND #2 DAMPENS ON O.D. SURFACE SCAN FROM SURFACE 2 SIDE ONLY 60% DAC
24RFW(1)A-5	SUR	1FWP-040	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-050		45			ID GEOMETRY. 60% DAC. SCAN LIMITED TO 2" FROM TOE OF WELD DUE TO HANGER.
24RFW(1)A-6	SUR	1FWP-041	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-043		45	45		IND #1 I.D. GEO. 360 deg 90% DAC IND #2 MODE CONVERSION TO O.D. SCAN FROM SURFACE SIDE ONLY 120% DAC

WNP-02  
 INTER: C1  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RFW-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RFW(1)-4  
 DESCRIPTION: RX FEEDWATER LINE A

PAGE 02  
 DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM.	EXAMINATION RESULTS				REMARKS
		DATA SHEET NO.---	NO	INSIGNIF	SIGNIFICANT		
			INDIC.---	INDIC.---	GEOMETRY	OTHER	
		1FWU-051	45				NO RECORDABLE INDICATIONS. SCAN FROM SURFACE 2 ONLY
24RFW(1)A-6LDO	SUR	1FWP-043	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-048	45				NO RECORDABLE INDICATIONS
24RFW(1)A-6LDI	SUR	1FWP-044	ACC				NO RECORDABLE INDICATIONS.
	VOL	1FWU-046	45				NO RECORDABLE INDICATIONS
24RFW(1)A-7LUI	SUR	1FWP-042	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-047	45				NO RECORDABLE INDICATIONS
24RFW(1)A-7LUO	SUR	1FWP-046	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-045	45				NO RECORDABLE INDICATIONS
24RFW(1)A-7	SUR	1FWP-047	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-044		45			IND #1 I.D. GEO. 60% DAC IND #2 DAMPENS ON O.D. SURFACE SCAN FROM SURFACE 2 ONLY 80% DAC
		1FWU-052	45				NO RECORDABLE INDICATIONS. SCAN FROM SURFACE 1 ONLY.
	SUR	1FWP-045	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RFW-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RFW(1)-4  
 DESCRIPTION: RX FEEDWATER LINE A

PAGE 003  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM.	EXAMINATION RESULTS				REMARKS
		DATA SHEET NO.	NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
12RFW(1)AB-4	VOL	1FWU-029		45			I.D. GEO 360 deg INTERMITTENT 50% DAC SCAN LIMITED DUE TO PIPE WHIP RESTRAINT SEE NOTE 1
12RFW(1)AB-5	SUR	1FWP-025	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-030		45			I.D. GEO 360 deg INTERMITTENT 55% DAC
RFW-158	SUR	1FWP-026	ACC				NO RECORDABLE INDICATIONS
	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
12RFW(1)AB-6	VOL	1FWU-031		45			I.D. GEO 360 deg INTERMITTENT 55% DAC
12RFW(1)AB-7	SUR	1FWP-027	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-032	45				I.D. GEO LESS THAN 50% DAC
12RFW(1)AB-8	SUR	1FWP-028	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-054		45			I.D. GEO. 360 deg INTERMITTENT 65% DAC
12RFW(1)AB-9	SUR	1FWP-049		ACC			1/16 in ROUNDED
	VOL	1FWU-056	45				NO RECORDABLE INDICATIONS

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RFW-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RFW(1)-4  
DESCRIPTION: RX FEEDWATER LINE A

PA 04  
DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
12RFW(1)AB-10	SUR	1FWP-050	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-055	45				NO RECORDABLE INDICATIONS
12RFW(1)AB-11	SUR	1FWP-052	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-053		45			I.D. GEO. 360 deg INTERMITTENT 85X DAC
RFW-PB-101(L)	SUR	1FWP-051	ACC				NO RECORDABLE INDICATIONS
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
GUTAGE: R2  
DRAWING NO. RFW-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RFW(1)-4  
DESCRIPTION: RX FEEDWATER LINE B

PAGE 001  
DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM.	EXAMINATION RESULTS				REMARKS
		DATA SHEET NO.	NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
24RFW(1)B-1	VOL	1FWU-036	46				NO RECORDABLE INDICATIONS
24RFW(1)B-1/5RFW(11)-4	SUR	1FWP-032		ACC			3/32 INCH ROUNDED
	VOL	1FWU-039	46				NO RECORDABLE INDICATIONS
5RFW(11)B-2	SUR	1FWP-037	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-040	45				NO RECORDABLE INDICATIONS
5RFW(11)B-1	SUR	1FWP-036	ACC				NO RECORDABLE INDICATIONS
	SUR	1FWP-024				REJ	0.25 ROUNDED INDICATION. REPAIRED SEC XI PLAN 2-0360 NCR 287-124, ERTR 1-001 REEXAM OF REPAIRED AREA 1FWP-048 ACCEPTABLE.
		1FWP-048		ACC			0.18 ROUNDED INDICATION. EXAM OF REPAIRED AREA ONLY
24RFW(1)B-2	VOL	1FWU-037		46			I.D. GEO. 360 deg INTERMITTENT 95% DAC
24RFW(1)B-3	SUR	1FWP-030	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-042	45				NO RECORDABLE INDICATIONS. SEE NOTE 1

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RFW-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RFW(1)-4  
DESCRIPTION: RX FEEDWATER LINE B

PA 02  
DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
RFW-PB-102(L)	SUR	1FWP-031	ACC				NO RECORDABLE INDICATIONS
	VT-2	1VT2-87		ACC			LESS THAN ONE DROP PER MINUTE AT RFW-V-121/122 CAP. EVALUATED BY TECHNICAL STAFF AND FOUND ACCEPTABLE.

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RFW-103

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RFW(11)-4  
 DESCRIPTION: REACTOR FEEDWATER

PAGE 001  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
		NO.	INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
RFW-178	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RFW-179	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
4RFW(11)A-1	VOL	1FWU-035		45			I.D. GEO 360 deg INTERMITTENT 90% DAC LIMITED SCAN ON BEAM DIRECTION A DUE TO TEE CONFIG. SEE NOTE 1
4RFW(11)A-2	SUR	1FWP-034	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-033			45		I.D. GEO 360 deg INTERMITTENT 135% DAC
4RFW(11)A-3	SUR	1FWP-035	ACC				NO RECORDABLE INDICATIONS
	VOL	1FWU-034		45			I.D. GEO 360 deg INTERMITTENT 85% DAC LIMITED SCAN INSIDE RADIUS OF ELBOW SEE NOTE 1
RFW-903N	SUR	1FWP-033	ACC				NO RECORDABLE INDICATIONS
RFW-186	VT3H	1HV-0053	ACC				NO RECORDABLE INDICATIONS
RFW-PB-103(L)	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS



WNP-02  
INTER : 31  
PERIOD : 01  
OUTAGE: R2  
DRAWING NO. RRC-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RRC(2)-4S  
DESCRIPTION: REACTOR RECIR LOOP A

PAGE 01  
DATE 08/26/87

IDENT. NO. --- RRC-SA-16	EXAM. MTH. ---	EXAM. DATA SHEET NO. ---	EXAMINATION RESULTS				REMARKS
			NO INDIC. ---	INSIGNIF INDIC. ---	SIGNIFICANT GEOMETRY	OTHER ---	
RRC-SA-66	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RRC-HA-7	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RRC-PB-101(L)	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
	VT-2	1VT2-87				ACC	RRC-V-23A LEAKS AT BONNET TO BODY FLANGE. REPAIRED BY MWR-AV1296 AND RETESTED WITH ACCEPTABLE RESULTS. SEE PAGE 14 OF 28 FOR ACCEPTABLE EXAMINE.

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RRC-102

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RRC(2)-4S  
DESCRIPTION: REACTOR RECIR LOOP B

PAGE 001  
DATE 08/26/87

<u>IDENT..NO.</u> <u>-----</u>	<u>EXAM.</u> <u>MTH.</u>	<u>EXAM.</u> <u>SHEET</u> <u>NO.</u>	<u>EXAMINATION RESULTS</u> <u>-----</u>				<u>REMARKS</u> <u>-----</u>
			<u>NO</u>	<u>INSIGNIF</u>	<u>SIGNIFICANT</u>		
			<u>INDIC.</u>	<u>INDIC.</u>	<u>GEOMETRY</u>	<u>OTHER</u>	
RRC-SB-12	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RRC-PB-102(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTER: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RRC-103

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RRC-P-1A  
 DESCRIPTION: RRC LOOP A PUMP

PA 01  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA	EXAMINATION RESULTS				REMARKS
		SHEET NO.	NO	INSIGNIF	SIGNIFICANT		
		NO.	INDIC.	INDIC.	GEOMETRY	OTHER	
RRC-HA-2	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RRC-HA-3	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RRC-P-1A-BLT	VOL	1RRU-083	0				NO RECORDABLE INDICATIONS. PSI EXAM OF BLACK FOX BOLTING INSTALLED IN RRC-P-1A. S/N 51 AND 59.
		1RRU-084	0				NO RECORDABLE INDICATIONS. PSI EXAM OF BLACK FOX BOLTING INSTALLED IN RRC-P-1A. S/N: 2,6,7, 8,9,11,20,22,28,30,31,34,35,36,37, 38,39,42,43,45,48,49,50,52,53,54, 55,61
	VT-1	1RRV-013	ACC				THIS EXAM COVERS THE PUMP BODY FLG SURFACE (ALL) & STUD HOLES ONLY NO RECORDABLE INDICATIONS
		1RRV-005		ACC			MINOR CORROSION IN THREADED AREA. S/N: 3,8,25,27,36,64 PSI OF NUTS FROM BLACK FOX INSTALL ED IN RRC-P-1A

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RRC-103

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RRC-P-1A  
DESCRIPTION: RRC LOOP A PUMP

PAGE 002  
DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
		1RRV-006	ACC				NO RECORDABLE INDICATIONS. PSI OF BLACK FOX NUTS. INSTALLED IN RRC-P-1A. S/N: 1,2,12,13,14,16, 19,21,23,26,38,40,42,44,48,53,57, 60,63
		1RRV-007		ACC			MINOR CORROSION IN THREADED AREAS. PSI OF BLACK FOX NUTS. INSTALLED IN RRC-P-1A. S/N: 5,9,20,22,33,37, 59
RRC-P-1A-BDY	VT-3	1RRV-014	ACC				NO RECORDABLE INDICATIONS
RRC-PB-103(L)	VT-2	1VT2-87	ACC				EXAM AREA IS COVERED ON DRAWINGS RRC-101 AND RRC-102

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RRC-104

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RRC(51)-4  
DESCRIPTION: RPV DRAIN

PAGE 01  
DATE 08/26/87

IDENT. NO. RRC-PB-104(L)	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RRC-105

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RRC(6)-4S  
 DESCRIPTION: RHR SHUTDN COOL SUCT

PAGE 001  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM.	EXAMINATION RESULTS				REMARKS
		DATA SHEET NO.	NO	INSIGNIF	SIGNIFICANT		
		NO.	INDIC.	INDIC.	GEOMETRY	OTHER	
20RRC(6)-3LUI	VOL	1RRU-090		45			I.D. GEO FROM CIRC WELD 20RRC(6)-3 55% DAC
20RRC(6)-3LUO	SUR	1RRP-026 ACC					NO RECORDABLE INDICATIONS
	VOL	1RRU-089		45			I.D. GEO FROM CIRC WELD 20RRC(6)-3 90% DAC
20RRC(6)-3	SUR	1RRP-025. ACC					NO RECORDABLE INDICATIONS
	VOL	1RRU-091		45			I.D. GEO. 360 deg INTERMITTENT 55- 90% DAC
20RRC(6)-3LD	SUR	1RRP-027 ACC					NO RECORDABLE INDICATIONS
	VOL	1RRU-092 45					NO RECORDABLE INDICATIONS. 3 INCHES OF REQUIRED EXAM VOLUME COVERED BY RRC-1
20RRC(6)-4LU	SUR	1RRP-020 ACC					NO RECORDABLE INDICATIONS. EXAM LIMITED TO 3" DUE TO PIPE CLAMP.
	VOL	1RRU-093		45			ID GEOMETRY 50% DAC. EXAM LIMITED TO 5" DUE TO PIPE CLAMP.

WNP-02  
 INT: 01  
 PERI: 01  
 CUTAGE: R2  
 DRAWING NO. RRC-105

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT: RRC(6)-4S  
 DESCRIPTION: RHR SHUTDN COOL SUCT

PA: 02  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM.	EXAMINATION RESULTS				REMARKS
		DATA SHEET NO.	NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
20RRC(6)-4	SUR	1RRP-019	ACC				NO RECORDABLE INDICATIONS. EXAM LIMITED TO 5" DUE TO PIPE CLAMP.
	VOL	1RRU-094		45			I.D. GEO. 360 deg INTERMITTENT 50-75% DAC
20RRC(6)-4LDI	SUR	1RRP-028	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-095		45			I.D. GEO. FROM CIRC WELD 20RRC(6)-4 55% DAC
20RRC(6)-4L00	SUR	1RRP-030	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-096	45				NO RECORDABLE INDICATIONS
20RRC(6)-5LUI	SUR	1RRP-029	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-097		45			I.D. GEO. FROM CIRC WELD 20RRC(6)-5 55% DAC
20RRC(6)-5LU0	SUR	1RRP-031	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-099	45				NO RECORDABLE INDICATIONS
20RRC(6)-5	SUR	1RRP-024	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-098		45			I.D. GEO. 360 deg INTERMITTENT 60-80% DAC

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RRC-105

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RRC(6)-4S  
 DESCRIPTION: RHR SHUTDN COOL SUCT

PAGE 003  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
20RRC(6)-5LD	SUR	1RRP-032	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-100	45				NO RECORDABLE INDICATIONS
20RRC(6)-6LU	SUR	1RRP-023	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-101	45				NO RECORDABLE INDICATIONS
20RRC(6)-6	SUR	1RRP-033	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-102		45			I.D. GEO. 360 deg INTERMITTENT 50-75% DAC
20RRC(6)-6LDI	SUR	1RRP-021	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-104		45			ID GEO. FROM CIRC. WELD 20RRC(6)-6 55% DAC
20RRC(6)-6LDO	SUR	1RRP-034	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-103	45				NO RECORDABLE INDICATIONS
RRC-PB-105(L)	SUR	1RRP-022	ACC				NO RECORDABLE INDICATIONS
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS



WNP-02  
 INTER: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RRC-106

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RRC(7)-4S  
 DESCRIPTION: SHUTDN COOL RETURN A

PA 001  
 DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET	EXAMINATION RESULTS				REMARKS
		NO.	NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
12RRC(7)A-1	VOL	1RRU-085	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-035	ACC				NO RECORDABLE INDICATIONS
12RRC(7)A-1LD	VOL	1RRU-086	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-037	ACC				NO RECORDABLE INDICATIONS
12RRC(7)A-2LU	VOL	1RRU-087	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-038	ACC				NO RECORDABLE INDICATIONS
12RRC(7)A-2	VOL	1RRU-088	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-036	ACC				NO RECORDABLE INDICATIONS
12RRC(7)A-2LDI	VOL	1RRU-106	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-041	ACC				NO RECORDABLE INDICATIONS
12RRC(7)A-2LDO	VOL	1RRU-105	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-039	ACC				NO RECORDABLE INDICATIONS
12RRC(7)A-3LUI	VOL	1RRU-107	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-042	ACC				NO RECORDABLE INDICATIONS
12RRC(7)A-3LUO	VOL	1RRU-108	45				NO RECORDABLE INDICATIONS

WNP-02  
 INTERVAL: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RRC-106

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RRC(7)-4S  
 DESCRIPTION: SHUTDN COOL RETURN A

PAGE 002  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
		NO.	INDIC.	INDIC.	GEOMETRY	OTHER	
12RRC(7)A-3	SUR	1RRP-040	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-109	45				NO RECORDABLE INDICATIONS
12RRC(7)A-3LD	SUR	1RRP-043	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-110	45				NO RECORDABLE INDICATIONS
12RRC(7)A-4LU	SUR	1RRP-044	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-111	45				NO RECORDABLE INDICATIONS
12RRC(7)A-4	SUR	1RRP-045	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-112		45			I.D. GEO. 360 deg INTERMITTENT 65% DAC
12RRC(7)A-4LDI	SUR	1RRP-046	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-113	45				NO RECORDABLE INDICATIONS
12RRC(7)A-4LDO	SUR	1RRP-048	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-114	45				NO RECORDABLE INDICATIONS
RRC-PB-106(L)	SUR	1RRP-047	ACC				NO RECORDABLE INDICATIONS
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTER: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. RRC-107

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RRC(7)-4S  
 DESCRIPTION: SHUTDOWN COOL RETURN B

PAGE 01  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
RRC-10	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RHR-SB-31	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
12RRC(7)B-4LU	VOL	1RRU-115	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-049	ACC				NO RECORDABLE INDICATIONS
12RRC(7)B-4	VOL	1RRU-116			45		I.D. GEO. 125% DAC
	SUR	1RRP-050	ACC				NO RECORDABLE INDICATIONS
12RRC(7)B-4LDI	VOL	1RRU-117	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-051	ACC				NO RECORDABLE INDICATIONS
12RRC(7)B-4LDO	VOL	1RRU-119	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-052	ACC				NO RECORDABLE INDICATIONS
12RRC(7)B-5LUI	VOL	1RRU-118	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-054	ACC				NO RECORDABLE INDICATIONS
12RRC(7)B-5LUO	VOL	1RRU-120	45				NO RECORDABLE INDICATIONS
	SUR	1RRP-053	ACC				NO RECORDABLE INDICATIONS
12RRC(7)B-5	VOL	1RRU-121		45			I.D. GEO. 90% DAC

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RRC-107

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RRC(7)-4S  
DESCRIPTION: SHUTDN COOL RETURN B

PAGE 002  
DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. DATA SHEET NO.---	EXAMINATION RESULTS				REMARKS-----
			NO INDIC.---	INSIGNIF INDIC.---	SIGNIFICANT GEOMETRY OTHER---		
12RRC(7)B-5LD	SUR	1RRP-055	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-122	45				NO RECORDABLE INDICATIONS
12RRC(7)B-6LU	SUR	1RRP-056	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-123	45				NO RECORDABLE INDICATIONS
12RRC(7)B-6	SUR	1RRP-057	ACC				NO RECORDABLE INDICATIONS
	VOL	1RRU-124	45				NO RECORDABLE INDICATIONS
RRC-PB-107(L)	SUR	1RRP-058	ACC				NO RECORDABLE INDICATIONS
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTER: 01  
PERI: 01  
OUTAGE: R2  
DRAWING NO. RRC-108

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RRC(4)-4S  
DESCRIPTION: RWCU INTERTIE RRC A

PA 01  
DATE 06/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
RRC-2	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RRC-PB-108(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RRC-109

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RRC(4)-4S  
DESCRIPTION: RWCU INTERTIE RRC B

PAGE 001  
DATE 08/26/87

<u>IDENT..NO.</u> RRC-PB-109(L)	EXAM. MTH.	EXAM. SHEET NO.	<u>EXAMINATION RESULTS</u>				<u>REMARKS</u>
			<u>NO</u>	<u>INSIGNIF</u>	<u>SIGNIFICANT</u>		
		<u>NO.</u>	<u>INDIC.</u>	<u>INDIC.</u>	<u>GEOMETRY</u>	<u>OTHER</u>	
	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTER: G1  
 PERIOD: 701  
 OUTAGE: R2  
 DRAWING NO. RRC-110

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RRC(6)-4S  
 DESCRIPTION: RRC LOOP A DRAIN

PA 01  
 DATE 58726/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
2RRC(6)A-1	SUR	1RRP-059	ACC				NO RECORDABLE INDICATIONS REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
2RRC(6)A-2	SUR	1RRP-018	ACC				NO RECORDABLE INDICATIONS REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
2RRC(6)A-3	SUR	1RRP-018	ACC				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
2RRC(6)A-3A	SUR	1RRP-018	ACC				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
2RRC(6)A-4	SUR	1RRP-018	ACC				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
2RRC(6)A-5	SUR	1RRP-018	ACC				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
2RRC(6)A-6	SUR	1RRP-018	ACC				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
RRC-PB-110(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTERVAL: G1  
 PERIOD: G1  
 OUTAGE: R2  
 DRAWING NO. RRC-111

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT RRC(6)-4S  
 DESCRIPTION: RRC LOOP B DRAIN

PAGE 001  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
2RRC(6)B-1	SUR	1RRP-061	ACC				THIS LINE REPLACED R2. PSI EXAM. NO RECORDABLE INDICATIONS
2RRC(6)B-2	SUR	1RRP-060	ACC				NO RECORDABLE INDICATIONS REPLACEMENT LINE INSTALLED AT R2. PSI EXAM
2RRC(6)B-3	SUR	1RRP-060	ACC				NO RECORDABLE INDICATIONS REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
2RRC(6)B-4	SUR	1RRP-060	ACC				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
2RRC(6)B-5	SUR	1RRP-060	ACC				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2. PSI EXAM
2RRC(6)B-6	SUR	1RRP-060	ACC				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
2RRC(6)B-7	SUR	1RRP-060	ACC.				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2 PSI EXAM.



WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RRC-111

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RRC(6)-4S  
DESCRIPTION: RRC LOOP B DRAIN

PA 02  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			INDIC.	INSIGNIF	SIGNIFICANT	GEOMETRY OTHER	
2RRC(6)B-8	SUR	1RRP-060	ACC				NO RECORDABLE INDICATIONS. REPLACEMENT LINE INSTALLED AT R2. PSI EXAM.
RRC-PB-111(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: C1  
OUTAGE: R2  
DRAWING NO. RWCU-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RWCU(4)-4  
DESCRIPTION: RPV DRAIN TO RWCU

PAGE 001  
DATE 08/26/87

IDENT..NO.-----	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS-----				REMARKS-----
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
RWCU-142	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RWCU-141	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RWCU-PB-101(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RWCU-301

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RWCU(3)-4  
DESCRIPTION: RWCU PUMP SUCTION

PA 001  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
6RWCU(3)-29	VOL	1RTU-006		45		I.D. GEO. 360 deg INTERMITTERN 50-60% DAC	
6RWCU(3)-30	VOL	1RTU-008	45			NO SCAN DIRECTION B DUE TO CLAMP NO RECORDABLE INDICATIONS	
6RWCU(3)-31	VOL	1RTU-007	45			NO SCAN DIRECTION A DUE TO CLAMP NO RECORDABLE INDICATIONS	

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. SW-301

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT SW(1)-2  
DESCRIPTION: SW LOOP A SUPPLY

PAGE 001  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
SW-78(W)			INDIC.	INDIC.	GEOMETRY	OTHER	
	VT-3	1SWV-007		ACC			LIGHT SURFACE RUST ON PIPE & WELD
SW-121(W)	VT-3	1SWV-006		ACC			LIGHT SURFACE RUST ON PIPE & WELD

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. SW-303

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT SW(23)-2  
DESCRIPTION: RETURN RHR-HX-1A

PA: 01  
DATE 08/26/87

IDENT. NO.	EXAM. METHOD	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
SW-151(W)	VT-3	1SWV-002	ACC				NO RECORDABLE INDICATIONS
SW-212(W)	VT-3	1SWV-003		ACC			LIGHT RUST ON PIPE & WELD
SW-149(W)	VT-3	1SWV-004		ACC			LIGHT RUST ON PIPE & WELD
SW-150(W)	VT-3	1SWV-005		ACC			LIGHT SURFACE RUST ON PIPE & WELD
SW-227	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
SW-315	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
SW-127	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
SW-127(W)	VT-3	1SWV-008	ACC				NO RECORDABLE INDICATIONS

WNP-G2  
INTERVAL: G1  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. SW-305

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT SW(2)-2  
DESCRIPTION: SW LOOP B SUPPLY

PAGE 001  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			INDIC.	INSIGNIF	SIGNIFICANT	GEOMETRY OTHER	
SW-198(W)	VT-3	1SWV-009		ACC			LIGHT COAT OF RUST ON PIPE & TOE OF WELDS

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. SW-308

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT SW(38)-2  
DESCRIPTION: SW LOOP B RETURN

PAGE 01  
DATE 08/26/87

IDENT. NO.	EXAM. SHEET	EXAM. NO.	EXAMINATION RESULTS				REMARKS
			INDIC.	INDIC.	GEOMETRY	OTHER	
SW-251(W)	VT-3	1SWV-010	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. SW-313

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT SW(12)-2  
DESCRIPTION: RETURN TO RHR-HX-1A

PAGE 001  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
SW-960N(W)	VT-3	1SWV-001		ACC			LIGHT SURFACE RUST ON PIPE & WELD
SW-956N	VT3H	1HV-0057	ACC				NO RECORDABLE INDICATIONS
SW-955N	VT3H	1HV-0056	ACC				NO RECORDABLE INDICATIONS
SW-1022N	VT3H	1HV-0052				REJ	PSI EXAM. SOUTH STRUT LOCKING NUT LOOSE. NORTH WALL PLATE, TOP SOUTH BOLT LOOSE. ALL BOLTING RETORQUED PER MWR AU-8960. REEXAM 1HV-0055 WAS ACCEPTABLE
		1HV-0055	ACC				REEXAM AFTER REPAIR. SEE REPORT 1HV-0052
SW-1032N	VT3H	1HV-0051	ACC				NO RECORDABLE INDICATIONS



WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. FPC-302

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT FPC(2)-1  
DESCRIPTION: FPC-P-1A TO DM-1A&1B

PA 001  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
FPC-184	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
FPC-182	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
FPC-185	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
FPC-186	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. FPC-305

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT FPC(3)-1  
DESCRIPTION: FPC-DM-1A RETURN

PAGE 001  
DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. DATA SHEET NO.---	EXAMINATION RESULTS-----				REMARKS-----
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
FPC-69	VT3H	1HV-0054 ACC					NO RECORDABLE INDICATIONS
FPC-70	VT3H	1HV-0054 ACC					NO RECORDABLE INDICATIONS
FPC-67	VT3H	1HV-0054 ACC					NO RECORDABLE INDICATIONS
FPC-66	VT3H	1HV-0054 ACC					NO RECORDABLE INDICATIONS
FPC-168	VT3H	1HV-0054 ACC					NO RECORDABLE INDICATIONS

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. FPC-307

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT FPC(8)-1  
DESCRIPTION: FPC-P-3 DISCHARGE

PA 01  
DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. SHEET NO.---	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
FPC-914N	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. RCC-301

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RCC(3)-2  
DESCRIPTION: RCC SUPPLY TO P-1A/B

PAGE 001  
DATE 08/26/87

IDENT..NO.-----	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS-----			REMARKS-----
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER	
RCC-434(W)	VT-3	1RCV-001 ACC				NO RECORDABLE INDICATIONS
RCC-440(W)	VT-3	1RCV-001 ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTE : 01  
PERI 01  
OUTAGE: R2  
DRAWING NO. RCC-302

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT RCC(36)-1  
DESCRIPTION: RCC RETURN HEADER

PAGE 01  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. SHEET NO.	EXAMINATION RESULTS				REMARKS
			INDIC.	INSIGNIF	SIGNIFICANT		
					GEOMETRY	OTHER	
RCC-308	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCC-309	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCC-472	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCC-312	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCC-311	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCC-475	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
RCC-327(W)	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
	VT-3	1RCV-002	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-301

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(18)-2-1  
DESCRIPTION: MS-RV-1A DISCHARGE

PAGE 001  
DATE 08/26/87

<u>IDENT..NO.</u>	<u>EXAM.</u> <u>MTH.</u>	<u>EXAM.</u> <u>DATA</u> <u>SHEET</u> <u>NO.</u>	<u>EXAMINATION RESULTS</u>				<u>REMARKS</u>
			<u>NO</u>	<u>INSIGNIF</u>	<u>SIGNIFICANT</u>		
			<u>INDIC.</u>	<u>INDIC.</u>	<u>GEOMETRY</u>	<u>OTHER</u>	
MSRV-1A-3(W)	VT-3	1MSV-009	ACC				NO RECORDABLE INDICATIONS
MSRV-1A-4(W)	VT-3	1MSV-009	ACC				NO RECORDABLE INDICATIONS
MSRV-1A-2(W)	VT-3	1MSV-009	ACC				NO RECORDABLE INDICATIONS
MS-267(W)	VT-3	1MSV-010	ACC				NO RECORDABLE INDICATIONS
MSRV-1A-6(W)	VT-3	1MSV-010	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTEGRITY: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-302

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(18)-2-2  
DESCRIPTION: MS-RV-2A DISCHARGE

PAGE 01  
DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			INDIC.	INSIGNIF INDIC.	SIGNIFICANT		
					GEOMETRY	OTHER	
MSRV-2A-2(W)	VT-3	1MSV-004	ACC				NO RECORDABLE INDICATIONS
MSRV-2A-3(W)	VT-3	1MSV-004	ACC				NO RECORDABLE INDICATIONS
MSRV-2A-1(W)	VT-3	1MSV-004	ACC				NO RECORDABLE INDICATIONS
MSRV-2A-5(W)	VT-3	1MSV-005	ACC				NO RECORDABLE INDICATIONS
MS-270(W)	VT-3	1MSV-005	ACC				NO RECORDABLE INDICATIONS
MS-271(W)	VT-3	1MSV-006	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-303

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT: MS(18)-2-3  
DESCRIPTION: MS-RV-3A DISCHARGE

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DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
MSRV-3A-2(W)	VT-3	1MSV-007	ACC				NO RECORDABLE INDICATIONS
MSRV-3A-3(W)	VT-3	1MSV-007	ACC				NO RECORDABLE INDICATIONS
MSRV-3A-1(W)	VT-3	1MSV-007	ACC				NO RECORDABLE INDICATIONS
MSRV-3A-4(W)	VT-3	1MSV-008	ACC				NO RECORDABLE INDICATIONS
MSRV-3A-5(W)	VT-3	1MSV-008	ACC				NO RECORDABLE INDICATIONS



WNP-02  
INTER 01  
PERIOD 01  
OUTAGE: R2  
DRAWING NO. MS-306

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(18)2-11  
DESCRIPTION: MS-RV-2B DISCHARGE

PA 01  
DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. SHEET NO.---	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
MSRV-2B-5	VT3H	1HV-0073	ACC				NO RECORDABLE INDICATIONS.

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-307

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(18)2-12  
DESCRIPTION: MS-RV-3B DISCHARGE

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DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
MS-283	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-2	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-2(W)	VT-3	1MSV-011	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-3	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-1	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-284	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-284(W)	VT-3	1MSV-012	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-5	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-5(W)	VT-3	1MSV-012	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-4	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-4(W)	VT-3	1MSV-012	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-6	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-6(W)	VT-3	1MSV-012	ACC				NO RECORDABLE INDICATIONS
MS-285	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-3B-7	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-307

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(18)2-12  
DESCRIPTION: MS-RV-3B DISCHARGE

PAGE 02  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY	OTHER	
MSRV-3B-7(W)	VT-3	1MSV-013	ACC				NO RECORDABLE INDICATIONS
MS-286	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-286(W)	VT-3	1MSV-013	ACC				NO RECORDABLE INDICATIONS
MS-335	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-311

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(18)-2-8  
DESCRIPTION: MS-RV-2C DISCHARGE

PAGE 001  
DATE 08/26/87

IDENT..NO.-----	EXAM. MTH.	EXAM. DATA SHEET NO.-----	EXAMINATION RESULTS-----				REMARKS-----
			NO INDIC.---	INSIGNIF INDIC.---	SIGNIFICANT GEOMETRY OTHER---		
MS-296	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-2	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-2(W)	VT-3	1MSV-016	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-1	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-3	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-3(W)	VT-3	1MSV-016	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-8	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-9	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-9(W)	VT-3	1MSV-015	ACC				NO RECORDABLE INDICATIONS
MS-297	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-297(W)	VT-3	1MSV-015	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-5	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-5(W)	VT-3	1MSV-015	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-4	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-4(W)	VT-3	1MSV-015	ACC				NO RECORDABLE INDICATIONS

WNP-02  
 INTER: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. MS-311

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT MS(18)-2-8  
 DESCRIPTION: MS-RV-2C DISCHARGE

PA: 02  
 DATE 08/26/87

IDENT..NO. -----	EXAM. MTH. -----	EXAM. DATA SHEET NO. -----	EXAMINATION RESULTS-----				REMARKS-----
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT		
					GEOMETRY	OTHER	
MSRV-2C-6	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-6(W)	VT-3	1MSV-015	ACC				NO RECORDABLE INDICATIONS
MS-298	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-298(W)	VT-3	1MSV-015	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-7	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-299	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-299(W)	VT-3	1MSV-014	ACC				NO RECORDABLE INDICATIONS
MS-337	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2C-10PS	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-312

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(18)-2-7  
DESCRIPTION: MS-RV-3C DISCHARGE

PAGE 001  
DATE 08/26/87

<u>IDENT..NO.</u>	<u>EXAM.</u> <u>MTH.</u>	<u>DATA</u> <u>SHEET</u> <u>NO.</u>	<u>EXAMINATION RESULTS</u>				<u>REMARKS</u>
			<u>NO</u>	<u>INSIGNIF</u>	<u>SIGNIFICANT</u>		
			<u>INDIC.</u>	<u>INDIC.</u>	<u>GEOMETRY</u>	<u>OTHER</u>	
MSRV-3C-4	VT3H	1HV-0064	ACC				NO RECORDABLE INDICATIONS.

WNP-92  
INTER: G1  
PERIOD: G1  
OUTAGE: R2  
DRAWING NO. MS-313

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(18)-2-6  
DESCRIPTION: MS-RV-4C DISCHARGE

PAGE 01  
DATE 08/26/87

IDENT. NO.	EXAM. SHEET	EXAM. NO.	EXAMINATION RESULTS				REMARKS
			NO	INDIC.	INSIGNIF	SIGNIFICANT	
MSRV-4C-4	MTM.	NO.	INDIC.	INDIC.	GEOMETRY	OTHER	
	VT3H	1HV-0063	ACC				NO RECORDABLE INDICATIONS.

WNP-02  
 INTERVAL: 01  
 PERIOD: G1  
 GUTAGE: R2  
 DRAWING NO. MS-316

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT MS(18)2-17  
 DESCRIPTION: MS-RV-2D DISCHARGE

PAGE 001  
 DATE 08/26/87

IDENT..NO.-----	EXAM. MTH.	EXAM. DATA SHEET NO.-----	EXAMINATION RESULTS-----				REMARKS-----
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.---	INDIC.---	GEOMETRY	OTHER---	
MS-311	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-2	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-2(W)	VT-3	1MSV-018	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-3	VT3H	1HV-0054	AAC				NO RECORDABLE INDICATIONS
MSRV-2D-3(W)	VT-3	1MSV-018	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-1	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-1(W)	VT-3	1MSV-018	ACC				NO RECORDABLE INDICATIONS
MS-312	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-312(W)	VT-3	1MSV-017	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-5	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-5(W)	VT-3	1MSV-017	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-4	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-4(W)	VT-3	1MSV-017	ACC				NO RECORDABLE INDICATIONS
MS-313	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-313(W)	VT-3	1MSV-019	ACC				NO RECORDABLE INDICATIONS



WNP-02  
INTER: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. MS-316

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT MS(18)2  
DESCRIPTION: MS-RV-20 DISCHARGE

PAGE 02  
DATE 08/26/87

IDENT. NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO	INSIGNIF	SIGNIFICANT		
			INDIC.	INDIC.	GEOMETRY	OTHER	
MS-341	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
MS-341(W)	VT-3	1MSV-019	ACC				NO RECORDABLE INDICATIONS
MSRV-2D-6PS	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. CRD-201

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT CRD(12)-3  
DESCRIPTION: CRD SCRAM DISCHARGE

PAGE 001  
DATE 08/26/87

<u>IDENT..NO.</u>	<u>EXAM.</u> <u>MTH.</u>	<u>EXAM.</u> <u>SHEET</u> <u>NO.</u>	<u>EXAMINATION RESULTS</u>			<u>REMARKS</u>
			<u>NO</u> <u>INDIC.</u>	<u>INSIGNIF</u> <u>INDIC.</u>	<u>SIGNIFICANT</u> <u>GEOMETRY OTHER</u>	
6CRD(12)A-3	VOL	1CRU-002	46			I.D. GEO 360 deg INTERMITTENT 6G-85% DAC
6CRD(12)A-18	VOL	1CRU-001 46				NO RECORDABLE INDICATIONS

WNP-02  
 INTER: 01  
 PERIOD: 01  
 OUTAGE: R2  
 DRAWING NO. SLC-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
 NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
 SYSTEM OR COMPONENT SLC(2)-4S  
 DESCRIPTION: SLC PUMP DISCHARGE

PA 01  
 DATE 08/26/87

IDENT..NO.	EXAM. MTH.	EXAM. DATA SHEET NO.	EXAMINATION RESULTS				REMARKS
			NO INDIC.	INSIGNIF INDIC.	SIGNIFICANT GEOMETRY OTHER		
SLC-PB-101(L)	VT-2	1VT2-87	ACC				NO RECORDABLE INDICATIONS
SLC-4475-12	VT3H	1HV-0072	ACC				NO RECORDABLE INDICATIONS. EXAM OF ENTIRE SUPPORT.
SLC-4475-120	VT3H	1HV-0071	ACC				NO RECORDABLE INDICATIONS. PSI OF NEW STRUT ONLY.
SLC-4475-122	VT3H	1HV-0070	ACC				NO RECORDABLE INDICATIONS. PSI OF NEW STRUT ONLY.
SLC-4475-25	VT3H	1HV-0061	ACC				NO RECORDABLE INDICATIONS. PSI OF NEW HANGER INSTALLED AT R2.
SLC-4475-24	VT3H	1HV-0060	ACC				NO RECORDABLE INDICATIONS. PSI OF NEW HANGER INSTALLED AT R2.
SLC-4475-21	VT3H	1HV-0058	ACC				NO RECORDABLE INDICATIONS. PSI OF NEW HANGER INSTALLED AT R2.
SLC-4475-22	VT3H	1HV-0062	ACC				NO RECORDABLE INDICATIONS. PSI OF NEW HANGER INSTALLED AT R2.
SLC-4475-19	VT3H	1HV-0066	ACC				NO RECORDABLE INDICATIONS. PSI OF NEW STRUT ONLY.
SLC-4475-112	VT3H	1HV-0067	ACC				NO RECORDABLE INDICATIONS PSI OF NEW STRUT ONLY.

WNP-02  
INTERVAL: 01  
PERIOD: 01  
OUTAGE: R2  
DRAWING NO. SLC-101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NON-DESTRUCTIVE EXAMINATION SUMMARY TABLE  
SYSTEM OR COMPONENT SLC(2)-4S  
DESCRIPTION: SLC PUMP DISCHARGE

PAGE 002  
DATE 08/26/87

IDENT..NO.---	EXAM. MTH.	EXAM. DATA SHEET NO.-----	EXAMINATION RESULTS-----				REMARKS-----
			NO INDIC.---	INSIGNIF INDIC.---	SIGNIFICANT GEOMETRY	OTHER	
		1HV-0054	ACC				NO RECORDABLE INDICATIONS THIS SUPPORT CHANGED TO STRUT AT R2. PSI OF ENTIRE HANGER
SLC-4475-113	VT3H	1HV-0054	ACC				NO RECORDABLE INDICATIONS
SLC-4475-114	VT3H	1HV-0068	ACC				NO RECORDABLE INDICATIONS PSI OF NEW STRUT ONLY.
		1HV-0054	ACC				NO RECORDABLE INDICATIONS THIS SUPPORT CHANGED TO STRUT AT R2. PSI OF ENTIRE HANGER
SLC-4475-117	VT3H	1HV-0069	ACC				NO RECORDABLE INDICATIONS. PSI OF NEW STRUT ONLY.

## APPENDIX C

### Repair/Replacement Listing NIS-2 Owner's Report

The following listing summarizes all ASME Section XI repairs or replacements performed between June 12, 1987 and June 24, 1987. For each repair or replacement the status of the NIS-2 Owner's Report is stated. For repairs and replacements undergoing review, a brief summary of the work performed is provided in place of the NIS-2 Owner's Report. After the review is complete NIS-2 Owner's Reports will be issued.



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WNP-2  
REPAIR/REPLACEMENT LISTING

PLAN, MWR OR PPM NO	COMPONENT NO.	DESCRIPTION	NIS-2 REPORT IN SUMMARY REPORT
** 2-0178	X-77Aa	PENETRATION	RF87A
** 2-0218	SW(1)-2, SW(2)-2, SW(21)-2	PIPING	RF87A
** 2-0255	FPC-V-149	PIPING	RF87A
** 2-0258R1	PI(1)-4S-X77AC	PIPING	RF87A
** 2-0263	PI(1)-ST-(IR-67)-10*	PIPING	RF87A
2-0273	HPCS-RV-14	PIPING	Not complete
** 2-0282	PI-V-X29b1, f1, -X30a1, f1	PIPING	RF87A
** 2-0286	SW(21)-2, SW(22)-2	COMPONENT SUPPORT	RF87A
** 2-0289	RCIC(13)4CL2	PIPING	RF87A
** 2-0290	RCC(36)-1	PIPING	RF87A
** 2-0291	RHR(1)-2B, RHR(1)-4B	PIPING	RF87A
** 2-0298	RCIC(1)-4CL1	COMPONENT SUPPORT	RF87A
** 2-0300	RRC-V-19	VALVE	RF87A
2-0301R1	RRC-V-20	PIPING	Not complete
2-0303	MS(1)-4C	COMPONENT SUPPORT	Not complete
** 2-0305	MS(1)-4C	PIPING	RF87A
** 2-0307	CAC(1)-1	PIPING	RF87A
** 2-0308	LPCS(3)-1	PIPING	RF87A
** 2-0313	SW-V-2B	VALVE	RF87A
2-0315	RHR-P-2B	PUMP	RF87A
2-0317	X-51	HATCH	Not complete
2-0319	MS-TK-3M, N, P, R, S, U, V	TANKS	Not complete
2-0322	EDR(48)-1, FDR(48)-1	PIPING	Not complete
2-0324	MS(1)-4C	PIPING	Not complete

PI(1)-ST-(IR-68)-9, PI(1)-ST-IR-69)-16, PI(1)-ST-(IR-71)-12  
Reported in ISI Summary Report RF86A as not complete.

WNP-2  
REPAIR/REPLACEMENT LISTING

PLAN, MWR OR PPM NO.	COMPONENT NO.	DESCRIPTION	NIS-2 REPAIR IN SUMMARY REPORT
2-0325	LPCS-RV-18	RELIEF VALVE	Not complete
2-0325R1	LPCS-RV-18	RELIEF VALVE	Not complete
2-0326	RHR-RV-1A	RELIEF VALVE	Not complete
2-0326R1	RHR-RV-1A	RELIEF VALVE	Not complete
2-0327	HPCS-RV-14	RELIEF VALVE	Not complete
2-0327R1	HPCS-RV-14	RELIEF VALVE	Not complete
2-0328	RHR-RV-25A	RELIEF VALVE	Not complete
2-0328R1	RHR-RV-25A	RELIEF VALVE	Not complete
2-0332	RRC(1)-54	PIPING	Not complete
2-0334	X-106C,D	CONTAINMENT	RF87A
2-0335	TIP PURGE LINE	PIPING	Not complete
2-0336	SW(1)-2, SW(2)-2, SW(21)-2*	PIPING	Not complete
2-0337	SW(1)-2, SW(2)-2, SW(21)-2*	PIPING	Not complete
2-0338	SW(21)-2UG, SW(22)-2UG	PIPING	Not complete
2-0339	SW(1)-2, SW(2)-2, SW(21)-2*	PIPING	Not complete
2-0340	SW(21)-2, SW(22)-2**	CHAMBERS	Not complete
2-0341	SW(21)-2, SW(22)-2**	PIPING/TUBING	Not complete
2-0342	8" SW(101)-2	PIPING	Not complete
2-0343	LPCS-DPI-10	PIPING/TUBING	Not complete
2-0348	3/4" RRC(51)-1	PIPING	Not complete
2-0349	4" RCC(37)-1	PIPING	Not complete
2-0350	1 1/2" RCC(25)-1	PIPING	Not complete
2-0351	RCC(36)-1	PIPING	RF87A
2-0352	RRC-P-1A	PIPING	RF87A

\*SW(22)-2, SW(1)-2UG, SW(2)-2UG

\*\*PI(1)-ST-(SW-SR-42)A,B

PI(1)-ST-(SW-SR-43)A,B



WNP-2  
REPAIR/REPLACEMENT LISTING

PLAN, MWR OR PPM NO	COMPONENT NO.	DESCRIPTION	NIS-2 REPORT IN SUMMARY REPORT
2-0353	4" RCC(24)-1	PIPING	Not complete
2-0354	SLC MODIFICATION	PIPING	Not complete
2-0356	RRC-P-1A	PUMP	RF87A
2-0357	RRC-P-1B	PUMP	RF87A
2-0358	PI(1)-4S-X80b	PIPING	Not complete
2-0361	MS(1)-4A	PIPING	RF87A
2-0363	SW(1)-2UG	PIPING	RF87A
2-0365	MS-V-37E,G,38E,G	VALVES	Not complete
2-0366	CIA-V-21	VALVE	RF87A
2-0368	CIA-V-31B	VALVE	RF87A
2-0369	CONTAINMENT VESSEL	CONTAINMENT	RF87A
2-0370	SLC	COMPONENT SUPPORTS	Not complete
2-0371	RHR-441	COMPONENT SUPPORTS	Not complete
2-0372	DMA-CC-51	COOLING COILS	RF87A
2-0375	RHR-RV-88A	RELIEF VALVE	Not complete
2-0378	LPCS-RV-31	RELIEF VALVE	Not complete
2-0379	SLC-V-4A	VALVE	RF87A
2-0380R1	MS-V-20	VALVE	RF87A
2-0381	MSRV-2B-5,-3C-4,-4C-4	COMPONENT SUPPORTS	Not complete
2-0382	CONTAINMENT VESSEL	CONTAINMENT	RF87A
2-0383	MS(18)-2-11	PIPING	RF87A
2-0384R2	MS-V-67B	VALVE	RF87A
2-0385-1	RCC-P-1A	PIPING	RF87A
2-0385-2	RRC(5)-4S-A	PIPING	RF87A

WNP-2  
REPAIR/REPLACEMENT LISTING

PLAN, MWR OR PPM NO	COMPONENT NO.	DESCRIPTION	NIS-2 REF IN SUMMARY REPORT
2-0386	HGR-794-31	COMPONENT SUPPORT	Not complete
2-0388	B35-G001B	PIPING	RF87A
2-0389	SLC-4475-12, -120	COMPONENT SUPPORTS	Not complete
2-0390	RHR-RV-5	RELIEF VALVE	RF87A
2-0392	RHR(1)-2B	VALVE	RF87A
2-0394	RCIC-RV-17	RELIEF VALVE	RF87A
AT0314	RCC(36)-1	COMPONENT SUPPORTS	RF87A
AU5141	RPV	VESSEL	RF87A
AU5141	RCIC(1)-4(CL1)	PIPING	RF87A
AU8961	B22-G001A	COMPONENT SUPPORTS	RF87A
AU8961	MS(18)-2-11	COMPONENT SUPPORTS	RF87A
AU8961	RHR(1)-2A	COMPONENT SUPPORTS	RF87A
AU8961	MS(9)-4	COMPONENT SUPPORTS	RF87A
AU8961	MSRV(18)-2-11	COMPONENT SUPPORTS	RF87A
AU8961	RRC(51)-4	COMPONENT SUPPORTS	RF87A
AU8961	RRC(5)-4S-A	COMPONENT SUPPORTS	RF87A
AU8961	FPC(5)-2	COMPONENT SUPPORTS	RF87A
PPM 10.5.3	CRD	VESSEL	RF87A

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 7/29/87  
3000 George Washington Way, Richland, WA. 99352 Sheet 1 of 1  
 (Address)
2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA. 99352  
 (Address)
3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way Richland, WA. Repair Organization P.O. No., Job No., etc.
4. Identification of System Containment Vessel Penetration X77Aa
5. (a) Applicable Construction Code ASME III 71 Edition, S72 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N 308 & N 236
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Cont. Vessel	PDM	12764	790	N/A	N/A	1976	Repaired	Yes, Class MC

Description of Work Repaired leaking sleeve to pipe weld on penetration X77Aa. The repair work was performed as follows:

1. PT examined the sleeve to pipe weld. PT examination results unacceptable.
2. Removed unacceptable PT indications by grinding.
3. PT examined the ground out area. PT examination results acceptable.
4. Repaired excavated area by welding.
5. PT examined the weld repaired area. PT examination results acceptable.
6. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ PCILRT  
 Test Pressure 35.3 psig Test Temp Amb of Component Design Pressure 45 psia Temp. 340 F
9. Remarks None  
 (Applicable Manufacturer's Data Reports to be attached)

PCILRT - Primary Containment Integrated Leak Test  
 WPPSS - Washington Public Power Supply System

# CERTIFICATE OF COMPLIANCE

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

Signed R. L. Clark Plant Tech. Manager 7/28 .19 87  
(Owner or Owner's Designee) title (Date)  
7/21/87

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermen's Mutual Casualty Co. of Illinois have inspected the repair described in this Report on 7-29 .19 87  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-29-87 Ann H. Hagan Commissions 9556 W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 1/10/87  
3000 George Washington Way, Richland, WA Sheet 1 of 2  
 2. Plant WNP-2 Unit N/A  
Hanford, Benton  
 3. Work Performed by Bechtel Construction, Inc. C20069  
P.O. Box 600, Richland, WA Repair Organization P.O. No., Job No., etc.  
 4. Identification of System Service Water (SW) System  
 5. (a) Applicable Construction Code ASMEIII 19 71 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308  
 6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
SW(1)-2	WPPSS	*	N/A	N/A	N/A	1983	Modified	Yes, Class 3
SW(2)-2	WPPSS	*	N/A	N/A	N/A	1982	Modified	Yes, Class 3
SW(21)-2	WPPSS	*	N/A	N/A	N/A	1983	Modified	Yes, Class 3
SW(22)-2	WPPSS	*	N/A	N/A	N/A	1983	Modified	Yes, Class 3

7. Description of Work Modified (rerouted) service water piping to and from fan coil units RRA-FC-19 and RRA-FC-20. The modification work was performed as follows:  
 1) Cut existing piping  
 2) Installed new piping material, valves and fan coil units  
 3) Made required welds.  
 4) Performed hydrostatic test to confirm pressure boundary integrity. No evidence of leakage during the hydrostatic test.

8. Tests Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☐  
 Test Pressure 288 psig Test Temp 70 °F Component Design Pressure 262 psig Temp. 150 °F  
 9. Remarks See attached supplementary sheet 2 of 2  
 (Applicable Manufacturer's Data Reports to be attached)

\*SW(1)-2-P2, SW(2)-2-P2, SW(21)-2-P2, SW(22)-2-P2

# CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this modification conforms to Section XI of the ASME Code.

Signed R. C. Wilkin Plant Technical Manager 11/26 .19 86  
(Owner or Owner's Designee) Title (Date)  
L. E. Smith  
12/10/86

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the modification described in this Report on 11/24 .19 86  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1/5/87 David L. Vance Commissions 7447W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT  
As Required by the Provisions of ASME Code Section XI

1. Owner Washington Public Power Supply System Date 11/01/87  
3000 George Washington Way, Richland, WA Sheet 2 of 2  
 (Name) (Address)  
 2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
 (Name) (Address)  
 3. Work Performed by Bechtel Construction, Inc. C20069  
P.O. Box 600, Richland, WA Repair Organization P.O. No., Job No., etc.  
 (Name) (Address)  
 4. Identification of System Service Water (SW) System  
 (Name) (Address)

9. Remarks (continued from page 1). The following code stamped components were installed during modification of service water piping to and from fan coil units RRA-FC-19 and RRA-FC-20. The Code Data Reports pertaining to these components are included in ASME Section XI Plan No. 2-0218.

Valves

<u>Valve Tag No.</u>	<u>Serial No.</u>	<u>Valve Tag No.</u>	<u>Serial No.</u>
SW-V-190	16736 (Existing)	SW-V-192	16753 (Existing)
SW-V-184B	14025	SW-V-184A	13986
SW-V-764B	73407	SW-V-764A	13849
SW-V-155Y	17014	SW-V-155Z	17049
SW-V-153Y	71410	SW-V-153Z	13752
SW-V-800A	A7559	SW-V-799A	A7551
SW-V-800B	A7553	SW-V-799B	22456
SW-V-189	16748 (Existing)	SW-V-191	16735 (Existing)
SW-V-185	14026	SW-V-193	16744
SW-V-154Y	17022	SW-V-154Z	17025
SW-V-156Y	17030	SW-V-156Z	17068

Fan Coil Units

<u>Unit No.</u>	<u>Serial No.</u>
RRA-FC-19	821018
RRA-FC-20	821019

*Lulaip Smith*  
12/10/87

11/5/87

*R. L. Chance* 7447W





WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT  
As Required by the Provisions of ASME Code Section XI

1. Owner Washington Public Power Supply System Date 1/30/87  
3000 George Washington Way, Richland, WA 99352 Sheet 1 of 1  
 (Address)  
 2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
 (Address)  
 3. Work Performed by WPPSS WPPSS  
3000 George Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.  
 (Address)  
 4. Identification of System Fuel Pool Cooling (FPC) System  
 5. (a) Applicable Construction Code ASME III 19 71 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308  
 6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
FPC(7)-1	WPPSS	*	N/A	N/A	N/A	1983	Replacement	Yes, Class 2 & 3

Description of Work Replaced existing manual operated FPC-V-149 valve with motor operated valve. The Replacement work was performed as follows:

- 1) Cut existing valve.
- 2) Beveled pipe ends for rewelding. Performed PT examination on the beveled ends. PT examination results acceptable.
- 3) Installed new motor operated valve.
- 4) Made circumferential butt welds.
- 5) Performed RT examination on the final circumferential butt welds. RT examination results acceptable.
- 6) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test.

8. Tests Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☐  
 Test Pressure 145 psig Test Temp 83 °F Component Design Pressure 150 psig Temp. 175 °F

9. Remarks See attached NPV-1 code data report for new valve installed.  
 (Applicable Manufacturer's Data Reports to be attached)

EPN No. FPC-V-149 Serial No. N0177A

FPC was previously tagged as 4DHR-V-63A.

\* FPC(7)-1-P2  
 WPPSS - Washington Public Power Supply System

# CERTIFICATE OF COMPLIANCE

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

Signed Rene R. Williams Plant Technical Manager 6/25 .19 86  
 (Owner or Owner's Designee) Title (Date)  
K. Smith  
6/19/86

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington employed by Lumbermen's Mutual Casualty Co. of Illinois have inspected the replacement described in this Report on DEC. 18 .19 85  
 (Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date: 7/3/86 A. L. Vance Commissions 7447W  
 (Inspector) (State or Province, National Board)  
1/30/87 A. L. Vance

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.

Plan No. 2-0255

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES\*

As Required by the Provisions of the ASME Code, Section III, Div. 1

DR-C177-A

1. Manufactured by Hirata Valve Industry Co., Ltd. 15 Hisamoto, Takatsu-Ku, Kawasaki, Japan  
(Name and Address of N Certificate Holder)
2. Manufactured for Washington Public Power Supply System, Richland, Washington  
(Name and Address of Purchaser or Owner)
3. Location of Installation WPPSS WNP-4, Richland, Washington, U.S.A.  
(Name and Address)
4. Pump or Valve Gate Valve Nominal Inlet Size 6 (inch) Outlet Size 6 (inch)

(a) Model No. (b) N Certificate Holder's (c) Canadian  
Series No. Serial Registration (d) Drawing (f) Nat'l. (g) Year  
or Type No. No. No. (e) Class Bd. No. Built

(1)	Gate	N0177A	N/A	NT80005 Rev. 4	2	1696	1980
(2)	- No Other Items -						
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. Decay Heat Removal System of Pressurized Water Reactor Type Nuclear Power  
(Brief description of service for which equipment was designed)  
Generating Station

6. Design Conditions 680 psi 350 °F or Valve Pressure Class 600 psi (1)
7. Operating Pressure 1235 psi at 100°F
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Body	ASME SA-351, Gr. CF8	Nippon S. Steel	
Bonnet	ASME SA-351, Gr. CF8	Nippon S. Steel	
Disc	ASME SA-351, Gr. CF8	Nippon S. Steel	
- No Other Items -			
(b) Forgings			
N/A			

For manually operated valves only.

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

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
Bonnet Bolt	ASME SA-453, Gr. 660	Takenaka Seisakusho	
Bonnet Nut	ASME SA-194, Gr. 3	Takenaka Seisakusho	
	- No Other Items -		
(d) Other Parts			
Leak Off Connection	ASME SA-376, Gr. TP304	Teledyne	
	- No Other Items -		

9. Hydrostatic test 1875 psi. Disk Differential test pressure 1360 psi.

### CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1974

Addenda Winter 1975 Code Case No. N/A Date N/A

Signed Hirata Valve Industry Co., Ltd. by J. Idemitsu Mar 14, 1980  
(or Certificate Holder) Vice President, Kawasaki Division

Our ASME Certificate of Authorization No. 1192 to use the N symbol expires Aug. 4, 81  
(Date)

### CERTIFICATION OF DESIGN

Design information on file at Washington Public Power Supply System, Richland, Washington

Stress analysis report (Class 1 only) on file at N/A

Design specifications certified by (1) Rathin Basu

PE State Washington Reg. No. 15049

Stress analysis certified by (1) N/A

PE State N/A Reg. No. N/A

(1) Signature not required. List name only.

### CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Maryland and employed by The H.S.B.I. and I. Co. of Hartford, Connecticut have inspected the pump, or valve, described in this Data Report on 3-14 19 80 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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

Date 3-14 19 80

James W. Gurganus  
(Inspector)

Commissions

NBS752

(Natl Bd., State, Prov. and No.)

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 8/6/86  
3000 George Washington Way, Richland, WA, 99352 Sheet 1 of 1  
 2. Plant WNP-2 (Address) Unit N/A  
Hanford, Benton County, WA, 99352  
 3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA. Repair Organization P.O. No., Job No., etc.  
 4. Identification of System Instrument Line PI(1)-4S-X77AC  
 5. (a) Applicable Construction Code ASME III 19 74 Edition. W75 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 19 80, W80 Addenda, Code Cases N308  
 6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
*	JCI	*	N/A	N/A	N/A	1983	Repaired	Yes, Class 1

7. Description of Work Repaired a gouge on instrument line PI(1)-4S-X77AC. The repair work was performed as follows:

1. Prepped the gouge for weld repair.
2. Performed PT examination on the prepped area. PT examination results acceptable.
3. Built up the gouge (cavity) by welding. Ground the weld built up area flush with the adjacent base metal.
4. Performed PT and RT examination. PT and RT examination results acceptable.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_  
 9. Remarks None  
 (Applicable Manufacturer's Data Reports to be attached)

\* - PI(1)-4S-X77AC  
 JCI - Johnson Control, Inc.

## CERTIFICATE OF COMPLIANCE

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

Signed: R. L. Weber Plant Technical Manager 7/16, 19 86  
(Owner or Owner's Designee) Title (Date)

KS  
7/15/86

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the repair described in this Report on 8/16, 19 86  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 8/16/86 C. D. Roberts Commissions 5470 W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 1/10/87  
3000 George Washington Way, Richland, WA Sheet 1 of 1  
(Name)  
(Address)
2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
(Name)  
(Address)
3. Work Performed by WPPSS WPPSS  
3000 George Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.  
(Name)  
(Address)
4. Identification of System Instrument Lines
5. (a) Applicable Construction Code ASMEIII 19 74 Edition, W75 Addenda, Code Cases None.  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
*	JCI	*	N/A	N/A	N/A	1983	Modified	Yes, Class 2

7. Description of Work Modified instrument lines by installing flange connections for relief valves REA-RV-T, REA-RV-2, ROA-RV-1 and ROA-RV-2. The modification work was performed as follows:

- 1) Cut existing piping to accomodate flange connections.
- 2) Installed piping material and flanges.
- 3) Made required welds.
- 4) Performed PT examinations on the final welds. PT examination results acceptable
- 5) Installed bolting material for the new flange connections and torqued the bolting material to the required torque values.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

\* PI(1)-ST-(IR-67)-10

\* PI(1)-ST-(IR-68)-9

\* PI(1)-ST-(IR-69)-16

\* PI(1)-ST-(IR-71)-12

JCI-Johnson Control, Inc.

# CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this modification conforms to Section XI of the ASME Code.

Signed [Signature] Plant Technical Manager 12/26/ 19 86  
(Owner or Owner's Designee) Title (Date)  
[Signature]  
12/10/86

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co of Illinois have inspected the modification described in this Report on 12/2 19 86  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1/5/87 [Signature] Commissions 7447W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.



Plan No. 2-0273

HPCS(2)-1

Installed lap flange joints for HPCS-RV-14. Made required socket welds.  
Performed PT on completed welds with acceptable results.

[illegible]

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 1/10/87  
3000 George Washington Way, Richland, WA 99352 Sheet 1 of 1  
(Name)  
(Address)
2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
(Name)  
(Address)
3. Work Performed by WPPSS WPPSS  
3000 George Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.  
(Name)  
(Address)
4. Identification of System Instrument Lines PI(1)-4S-X29b, X29f, X30a and X30f  
(Address)
5. (a) Applicable Construction Code ASMEIII 19 74 Edition, W75 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements — 1980, W80 Addenda, Code Cases N308
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
*	JCI	*	N/A	N/A	N/A	1983	Modification	Yes, Class 2

7. Description of Work Modified instrument lines PI(1)-4S-X29b, X29f, X30a and X30f. The modification field work was performed as follows:

- 1) Cut existing instrument tubing.
- 2) Prepped valve and fitting cut socket ends for rewelding.
- 3) Installed required material and valves.
- 4) Made required socket welds.
- 5) Performed PT examination on final socket welds. PT examination results acceptable.
- 6) Installed required supports.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

9. Remarks See attached NPV-1 Code Data Reports for new valves installed.

(Applicable Manufacturer's Data Reports to be attached)

EPN No.	Serial No.
PI-V-X29b1	PB1003
PI-V-X29f1	PB1005
PI-V-X30a1	PB1004
PI-V-X30f1	PB1007

\*PI(1)-4S-X29b, X29f, X30a and X30f  
 JCI-Johnson Control, Inc.

# CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this modification conforms to Section XI of the ASME Code.

Signed R. C. Weikert Plant Technical Manager 12/26, 19 86  
(Owner or Owner's Designee) Title (Date)  
V. S. Smith  
12/10/86

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the modification described in this Report on 11/22, 19 86  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1/5/87 David L. Vance Commissions 7447W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8 1/2 in. X 11 in., (2) information in items 1 through 4 on this data 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.

# CORRECTED DATA REPORT

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES 1 of 2

As Required by the Provisions of the ASME Code, Section III, Div. 1

1 Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA 90450  
 (Name and Address of N Certificate Holder)  
 2 Manufactured for VPSS, 3600 George Washington Way, Richmond, VA 99352-0968  
 (Name and Address of Purchaser or Owner)  
 3 Location of Installation VPN-2 Plant, Richmond, VA 99352  
 (Name and Address)  
 4 Pump or Valve Valve, Nominal Inlet Size 1/2 Inlet, Outlet Size 1/2 Inlet  
 (a) Model No. (b) N Certificate Holder's (c) Canadian  
 Serial No. Registration No. (d) Drawing No. (e) Class (f) No. (g) Year  
 or Type Built  
 (1) 507FV0575W07 PB1003 None 13353 2 None 1983  
 (2) thru  
 (3) PB1027  
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D Lamey

Plan No. 2-0286

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT  
As Required by the Provisions of ASME Code Section XI

1. Owner Washington Public Power Supply System Date 10/28/86  
3000 George Washington Way, Richland, WA Sheet 1 of 1  
(Name) (Address)
2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
(Name) (Address)
3. Work Performed by Bechtel Power Corp. C-250  
P.O. Box 600, Richland, WA Repair Organization P.O. No., Job No., etc.  
(Name) (Address)
4. Identification of System Service Water (SW) System
5. (a) Applicable Construction Code ASME III 1974 Edition, W76 Addenda, Code Cases None  
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W 80 Addenda, Code Cases N308
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
SW-21-2	BFS	N/A	N/A	N/A	N/A	1978	Modification	Yes, Class 3
SW-22-2	BFS	N/A	N/A	N/A	N/A	1978	Modification	Yes, Class 3

Description of Work Modified support SW-939II in the Service Water (SW) System. The modification work was performed as follows -

1. Installed new bracing plate by welding

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

BFS - BF Shaw

# CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this modification conforms to Section XI of the ASME Code.

Signed *[Signature]* Plant Technical Manager 10/22/ 19 86  
 (Owner or Owner's Designee) Title (Date)

# CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington . employed by Lumbermens Mutual Casualty Co of Illinois have inspected the modification described in this Report on OCT. 15 19 86  
 (Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 10/28/86 *[Signature]* Commissions 7447-W  
 (Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.



WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT  
As Required by the Provisions of ASME Code Section XI

1. Owner Washington Public Power Supply System Date 10/28/86  
3000 George Wash. Way, Richland, Washington Sheet 1 of 1  
 (Name) (Address)
2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
 (Name) (Address)
3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.  
 (Name) (Address)
4. Identification of System Reactor Core Injection Cooling (RCIC) System  
 (Address)
5. (a) Applicable Construction Code ASME III 1971 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RCIC(13)4CL2	WPPSS	*	N/A	N/A	N/A	1983	Replacement	Yes, Class 2

Description of Work Replaced level switch RCIC-LS-N010 in the Reactor Core Injection Cooling (RCIC) System. The replacement work was performed as follows -

1. Cut welds and removed existing level switch.
2. Preped pipe ends for rewelding.
3. Installed new level switch
4. Made required socket welds
5. Performed PT examination on the final socket welds. PT examination results acceptable.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

### CERTIFICATE OF COMPLIANCE

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

Signed *R. L. Luehr* Plant Technical Manager 10/22/86 1986  
(Owner or Owner's Designee) Title (Date)

### CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the replacement described in this Report on OCT. 6, 1986  
(Repair's) or Replacement(s)

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 10/28/86 *A. L. Vance* Commissions 7447-W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 10/29/86  
3000 George Wash. Way, Richland, Washington Sheet 1 of 1  
 (Name) (Address)
2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
 (Name) (Address)
3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.  
 (Name) (Address)
4. Identification of System Reactor Building Closed Cooling (RCC) System  
 (Address)
5. (a) Applicable Construction Code ASME III 1971 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RCC(36)-1	WPPSS	*	N/A	N/A	N/A	1983	Modification	Yes, Class 3

- Description of Work Modified Reactor Building Closed Cooling (RCC) line by installing coupling. The modification work was performed as follows -
1. Cut piping at locations for installation of couplings
  2. Prepiped pipe ends for rewelding.
  3. Installed couplings and made required socket welds

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_
9. Remarks None  
 (Applicable Manufacturer's Data Reports to be attached)

# CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this modification conforms to Section XI of the ASME Code.

Signed [Signature] Plant Technical Manager 10/22 19 86  
 (Owner) or Owner's Designee Title (Date)

# CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the modification described in this Report on OCT. 6 19 86  
 (Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 10/28/86 [Signature] Commissions 7447-W  
 (Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8 1/2 in. X 11 in., (2) information in items 1 through 4 on this data 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.

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 1/10/87  
3000 George Washington Way, Richland, WA Sheet 1 of 1  
(Name)  
(Address)
2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
(Name)  
(Address)
3. Work Performed by WPPSS WPPSS  
3000 George Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.  
(Name)  
(Address)
4. Identification of System Residual Heat Removal (RHR) System
5. (a) Applicable Construction Code ASMEIII 19 71 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RHR(1)-2B	WPPSS	*	N/A	N/A	N/A	1984	Modification	Yes, Class 2
RHR(1)-4B	WPPSS	*	N/A	N/A	N/A	1983	Modification	Yes, Class 2

7. Description of Work Modified two (2) drain lines connected to 6" RHR line. The modification work was performed as follows:

- 1) Cut drain lines at the sock-o-lets (S.O.C.)
- 2) Preped sock-o-let end for rewelding.
- 3) Performed PT examination on the sock-o-let preped end PT examination results acceptable.
- 4) Short coupled RHR-V-184 drain line and plugged the RHR-V-61 drain line.
- 5) Made required welds.
- 6) Performed PT examination on the final welds. PT examination results acceptable.
- 7) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

\*RHR(1)-2B-P1

\*RHR(1)-4B-P1

WPPSS-Washington Public Power Supply System

# CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this modification conforms to Section XI of the ASME Code.

Signed *L. L. Luchman* Plant Technical Manager 12/26, 19 86  
(Owner or Owner's Designee) Title (Date)  
*Y. Smith*  
12/10/86

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the modification described in this Report on 11/22, 19 86  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1/5/87 *David L. Vance* Commissions 7447W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 10/28/86  
3000 George Wash. Way, Richland, Washington Sheet 1 of 1  
 2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
 3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.  
 4. Identification of System Reactor Core Injection Cooling (RCIC) System  
 5. (a) Applicable Construction Code ASME III, 71 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308  
 6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RCIC(1)-4CL1	WPPSS	*	N/A	N/A	N/A	1984	Repair	Yes, Class 1

Description of Work Repaired support RCIC-129 in Reactor Core Injection Cooling (RCIC) System.  
 The repair work was performed as follows -

1. Removed broken hanger rod from the beam bracket
2. Welded new hanger rod to the beam bracket
3. Installed fabricated piece in support RCIC-129

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

WPPSS - Washington Public Power Supply System  
 \* RCIC(1)-4CL1-P1

# CERTIFICATE OF COMPLIANCE

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

Signed R. L. Lumbermen Plant Technical Manager 10/22 .19 86  
 (Owner or Owner's Designee) Title (Date)  
10/22/86

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the repair described in this Report on OCT. 15 .19 86  
 (Repair's) or Replacement(s)

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 10/28/86 D. L. Vance Commissions 7447-W  
 (Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8 1/2 in. X 11 in., (2) information in items 1 through 4 on this data 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.



**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 7/29/87  
3000 George Washington Way, Richland, WA Sheet 1 of 1
2. Plant WNP-2 (Name) Hanford, Benton County, WA Unit N/A  
 (Address)
3. Work Performed by WPPSS (Name) WPPSS  
 (Address) 3000 Geo. Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.
4. Identification of System Reactor Recirculation Cooling (RRC) System
5. (a) Applicable Construction Code ASME III 1974 Edition, W75 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RRC-V-19	TR	7	N/A	N/A	N/A	1983	Repair	Yes, Class 1

Description of Work Repaired valve RRC-V-19 in the Reactor Recirculation Cooling (RRC) System.

The repair work was performed as follows -

1. Cut body to bonnet seal weld
2. Removed valve internals and performed rework.
3. Prepped body and bonnet seal weld areas for rewelding
4. Performed PT examination on the prepped areas. PT examination results acceptable.
5. Reassembled valve internals
6. Installed bonnet into the valve body and torqued it to the required torque value..
7. Made body to bonnet seal weld
8. Performed PT examination on the final seal weld. PT examination results acceptable.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

TR - Target Rock Corp.  
 WPPSS - Washington Public Power Supply System

## CERTIFICATE OF COMPLIANCE

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

Signed R. L. Wink Plant Technical Manager 7/28/ 19 87  
(Owner or Owner's Designee) Title (Date)  
K. Smith  
7/21/87

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the repair described in this Report on 7-29, 19 87  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-29-87 A. N. Haggard Commissions 9531W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.

Plan No. 2-0301  
2-0301R1

RRC(51)-4

Replaced valve RRC-V-20, associated piping and fittings. PT examined final welds with acceptable results.

2012 12 1

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 9/5/86.  
3000 George Washington Way, Richland, WA 99352 Sheet 1 of 1  
 (Name) (Address)  
 2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA 99352  
 (Address)  
 3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA. Repair Organization P.O. No., Job No., etc.  
 (Name) (Address)  
 4. Identification of System Main Steam (MS) System  
 (Address)  
 5. (a) Applicable Construction Code ASME III 19 71 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 19 80 W80 Addenda, Code Cases N308  
 6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
MS(1)-4C	WPPSS	*	N/A	N/A	N/A	1983	Modified	Yes, Class 2

Description of Work Modified drain line MS(1)-4C downstream of valve MS-V-177B. The modification work was performed as follows:

1. Removed threaded coupling and threaded piping.
2. Installed new threaded cap.
3. Made cap to pipe seal weld.
4. Performed PT examination on the seal weld. PT examination results acceptable.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_  
 9. Remarks None  
 (Applicable Manufacturer's Data Reports to be attached)

\* - MS(1)-4C-P3  
 WPPSS - Washington Public Power Supply System

# CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this modification conforms to Section XI of the ASME Code.

Signed *[Signature]* 9/1/86 Plant Technical Manager .19  
(Owner or Owner's Designee) Title (Date)  
*K. Smith*  
*8/29/86*

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co of Illinois have inspected the modification described in this Report on 8/26/86.19  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9/5/86 *James M Brent* Commissions 6265W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 2/4/87  
3000 George Washington Way, Richland, WA Sheet 1 of 1  
 2. Plant WNP-2 (Name) Unit N/A  
Hanford, Benton County, WA (Address)  
 3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.  
 4. Identification of System Containment Atmosphere Control (CAC) System  
 5. (a) Applicable Construction Code ASME III 19 71 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 19 80, W80 Addenda, Code Cases N308

## 6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
CAC(1)-1	WPPSS	*	N/A	N/A	N/A	1983	Replacement	Yes, Class 2

Description of Work Replaced valve CAC-V-4 in the Containment Atmosphere Control (CAC) System.  
The replacement work was performed as follows -

1. Cut piping and removed existing valve
2. Beveled pipe ends for rewelding
3. Performed PT examination on the beveled ends. PT examination results acceptable.
4. Installed new valve CAC-V-4, Serial Number N 0195A
5. Made circumferential butt welds
6. Performed RT examination on the final circumferential butt welds, RT examination results acceptable.
7. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Other ☐  
 Test Pressure 50 psig Test Temp Amb. °F Component Design Pressure 45 PSIG Temp. 340 °F

9. Remarks See attached NPV-1 Code Data Report for new replacement valve CAC-V-4,  
(Applicable Manufacturer's Data Reports to be attached)

Serial Number N 0195A

WPPSS - Washington Public Power Supply System  
 \* CAC(1)-1-P1

## CERTIFICATE OF COMPLIANCE

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

Signed *R. L. Wilson* Plant Technical Manager 2/4 .19 87  
(Owner or Owner's Designee) title (Date)  
*R. L. Wilson*  
2/4/87

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the replacement described in this Report on 10/2 .19 86  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2/4/87 *A. L. Vance* Commissions 7447 W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.



PLAN NO. 2-0307

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

1. Manufactured by Hirata Valve Industry Co. Ltd. 15 Hisamori Takatsu-Ku, Kawasaki, Japan  
(Name and Address of N Certificate Holder)  
2. Manufactured for Washington Public Power Supply System, Richland, Washington  
(Name and Address of Purchaser or Owner)  
3. Location of Installation WPPSS WNP-4, Richland, Washington, U.S.A.  
(Name and Address)  
4. Pump or Valve Gate Valve Nominal Inlet Size 4 (inch) Outlet Size 4 (inch)

(a) Model No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1) <u>Gate</u>	<u>N0195A</u>	<u>N/A</u>	<u>NK30003 Rev. 4</u>	<u>2</u>	<u>1690</u>	<u>1980</u>
(2)	<u>- No Other Items -</u>					
(3)						
(4)						
(5)						
(6)						
(7)						
(8)						
(9)						
(10)						

5. Heating Steam System of Pressurized Water Reactor Type Nuclear Power  
(Brief description of service for which equipment was designed)  
Generating Station  
6. Design Conditions 100 (Pressure) 350 (Temperature) °F or Valve Pressure Class 150 psi (1)  
7. Cold Working Pressure 285 (Pressure) 100°F (Temperature)  
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
<u>Body</u>	<u>ASME SA-216, Gr. WCB</u>	<u>Mitsubishi Steel</u>	
<u>Bonnet</u>	<u>ASME SA-216, Gr. WCB</u>	<u>Mitsubishi Steel</u>	
	<u>- No Other Items -</u>		
(b) Forgings			
<u>Disc</u>	<u>ASME SA-105</u>	<u>Sumida Kogyo</u>	
	<u>- No Other Items -</u>		

(1) For manually operated valves only.

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

(10/77)

This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

[illegible]

9. Hydrostatic test 450 psi. Burst differential test pressure 315 psi.

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1974.

Addenda Winter 1975, Code Case No. N/A, Date N/A.

Signed Hirata Valve Industry Co., Ltd. by Y. Ichimura Mar. 19, 1980.  
(In Certificate holder) Vice President, Kawasaki Division

Our ASME Certificate of Authorization No. 1192 to use the N symbol expires Aug. 4, '81.

Design information on file at Washington Public Power Supply System, Richland, Washington  
Stress analysis report (Class 1 only) on file at N/A  
Design specifications certified by (1) Bethir Basu  
PE State Washington Reg. No. 15049  
Stress analysis certified by (1) N/A  
PE State N/A Reg. No. N/A  
(1) Signature not required. List name only.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Maryland and employed by The H.S.B.I. and I. Co. of Hartford, Connecticut have inspected the pump, or valve, described in this Data Report on March 17 19 80, and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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

Date March 14 1980

(Inspector) C. H. Garrison

## Commissions

**NB5271**

(Natl BG, State, Prov, and No.)

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 9/5/86  
3000 George Washington Way, Richland, WA. 99352 Sheet 1 of 1  
 (Address)
2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA. 99352  
 (Address)
3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.
4. Identification of System Low Pressure Core Spray (LPCS) System  
 (Address)
5. (a) Applicable Construction Code ASME III 19 71 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 19 80, W80 Addenda, Code Cases N308
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
LPCS(3)-1	WPPSS	*	N/A	N/A	N/A	1983	Modification	Yes, Class 2

Description of Work Modified drain line (with valve LPCS-V-58) connected to 12" LPCS(3)-1.  
The modification work was performed as follows:

1. Removed the pipe piece from the SOL.
2. Prepped SOL socket weld end for rewelding.
3. Performed PT examination on the prepped areas of the SOL. PT examination results acceptable.
4. Shortened the pipe piece welded to valve LPCS-V-58 in order to short couple the drain connection.
5. Made SOL to pipe socket weld.
6. Performed PT examination on the final weld. PT examination results acceptable.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

\* - LPCS(3)1

WPPSS - Washington Public Power Supply System

# CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this modification conforms to Section XI of the ASME Code.

Signed [Signature] 9/1/86 Plant Technical Manager .19 \_\_\_\_\_  
 (Owner or Owner's Designee) Title (Date)

[Signature]  
9/1/86

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the modification described in this Report on 8/26, 1986  
 (Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9/5/86 James M. Brent Commissions 62654  
 (Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8 1/2 in. X 11 in., (2) information in items 1 through 4 on this data 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.

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 7/29/87  
3000 George Wash. Way, Richland, Washington Sheet 1 of 1  
 2. Plant WNP-2 (Address) Unit N/A  
Hanford, Benton County, WA  
 3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA Repair Organization P.O. No., Job No., etc.

4. Identification of System Service Water (SW) System  
 5. (a) Applicable Construction Code ASME III, 74 Edition, S74 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308  
 6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
SW-V-2B	BIF	N40297-2	N/A	N/A	N/A	1977	repair	Yes, Class 3

7. Description of Work Repaired valve SW-V-2B in the Service Water (SW) System. The repair work was performed as follows -

1. Machined pitted areas on the valve ID surfaces
2. Performed MT examination on the machined surfaces. MT examination results acceptable.
3. Weld built up the machined areas
4. Machined the weld built up areas to the original valve ID configuration
5. Performed MT examination on the machined areas. MT examination results acceptable.
6. Performed RT examination on the machined areas. RT examination results were evaluated by fracture mechanics and were found acceptable.
7. Rewelded actuator support feet
8. Performed MT examination on the final welds. MT examination results acceptable

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

# CERTIFICATE OF COMPLIANCE

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

Signed RL Weber Plant Technical Manager 7/28 .19 87  
(Owner or Owner's Designee) title (Date)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co of Illinois have inspected the repair described in this Report on 7-29 .19 87  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-29-87 Don Hoggart Commissions 9556 W  
(Inspector) (State or Province, National Board)

Notes: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8 1/2 in. X 11 in., (2) information in items 1 through 4 on this data 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.

**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 10/28/86  
3000 George Wash. Way, Richland, Washington Sheet 1 of 1  
 (Name) (Address)
2. Plant WNP-2 Unit N/A  
Hanford, Benton County, WA  
 (Name) (Address)
3. Work Performed by WPPSS WPPSS  
 Repair Organization P.O. No., Job No.: etc.  
3000 Geo. Wash. Way, Richland, WA  
 (Name) (Address)
4. Identification of System Residual Heat Removal (RHR) System
5. (a) Applicable Construction Code ASME III 1971 Edition, S71 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308
6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RHR-P-2B	I-R	0473111	47	N/A	N/A	1974	Replacement	Yes, Class 2

Description of Work Replaced seal cooling piping to RHR-P-2B gland seal plate. The replacement work was performed as follows -

1. Removed existing piping to pump gland seal plate
2. Installed replacement piping material and made required welds.
3. Performed PT examination on the final welds. PT examination results acceptable.
4. Torqued the flange joint bolting to the required torque values.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psi Test Temp \_\_\_\_\_ °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

WPPSS - Washington Public Power Supply System  
 I-R - Ingersoll-Rand Co.

# CERTIFICATE OF COMPLIANCE

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

Signed R. L. Lueck Plant Technical Manager 10/27 .19 86  
(Owner or Owner's Designee) title (Date)  
10/27/86

# CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the replacement described in this Report on OCT. 6 .19 86  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 10/28/86 R. L. Lueck Commissions 7447-W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.



Plan No. 2-0317

Penetration X-51

Repaired yoke roller mounts for suppression chamber access hatch by welding. MT examined final welds. Results acceptable.

Plan No. 2-0319

MS-TK-3M, N, P, R, S, U, V

Added test connections and new valves. Made required welds. PT examination acceptable. Pressure test acceptable.

Plan No. 2-0322

EDR(48)-1, FDR(48)-1

Installed new valves and piping material. Performed PT with acceptable results.

Plan No. 2-0324

MS(1)-4C

Replaced MS-V-177B. Made required welds. PT results acceptable.

Plan No. 2-0325  
2-0325R1

LPCS-RV-18

Modified LPCS-RV-18 flange joint and added test port. PT examination results acceptable. Pressure test acceptable.

Plan No. 2-0326  
2-0326R1

RHR-RV-1A

Modified RHR-RV-1A flange and pipe flange. Added test port. PT examination results acceptable. RT of butt welds acceptable. Pressure test acceptable.



Plan No. 2-0327  
2-0327R1

HPCS-RV-14

Modified HPCS-RV-14 flange and pipe flange. Added test port. PT of final welds acceptable. Butt weld RT acceptable. Pressure test acceptable.

Plan No. 2-0328  
2-0328R1

RHR-RV-25A

Modified RHR-RV-25A flange joint and added test port. PT examination results acceptable. Pressure test acceptable.

Plan No. 2-0332

RRC(1)-54

Line RRC(1)-54. Replaced RRC Loop A and B drain lines. Installed new piping, fittings and valves. PT and RT results acceptable. Hydrostatic test acceptable.

1111



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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA WPPSS  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Containment Vessel  
(a) Applicable Construction Code ASME Section III 19 71 Edition, S72 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I. D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
Cont. Vessel	PDM	12764	790	N/A	1976	Replacement	Yes, Class MC

7. Description of Work:

Installed Wide Range Neutron Monitoring (WRNM) penetration assemblies in containment penetrations X-106C and X-106D. The installation work was performed as follows:

1. Installed mounting ring on each of the penetration pipe by welding.
2. Removed closure plate from the penetration pipe and beveled pipe end. MT examination results acceptable.
3. Installed new penetration assemblies and made circumferential butt welds.
4. Performed MT and UT examination on final circumferential butt welds. MT and UT examination results acceptable.
5. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test.

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0334

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Other ☐  
Test Pressure 57 psig, Test Temp. Ambient °F  
Component Design Pressure 45 psig, Temp. 340 °F

9. Remarks

See attached N-2 code data reports for new penetration assemblies.

<u>Penetration No.</u>	<u>Serial No.</u>
X-106C	2871
X-106D	2872

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee.  
Date 8/20/87 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 5-1-87 to 8-19-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements  
Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

FORM N-2 N OR NPT CERTIFICATE HOLDERS DATA REPORT ON IDENTICAL PARTS  
NUCLEAR PARTS AND APPURTENANCES\*

As Required by the Provisions of the ASME Code, Section III, Division 1  
Not To Exceed One Day's Production

Pg. 1 of 1

1. Manufactured and certified by Conax Buffalo Corporation, Cheektowaga, New York 14225  
(name and address of certificate holder)

2. Manufactured for Washington Public Power Supply, PO Box 968, Richland, WA. 99352-0968  
(name and address of purchaser)

3. Location of installation Washington Public Power Supply WNP-2 Site Richland, WA. 99352-0968  
Header Extension Ring SA 333 GR6 60KSI (name and address)

4. Type 7X07-20010 SA 240 304L SST 70KSI NA 1987  
(drawing no.) (nat'l. spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III: 1971 S72 MC NA  
(edition) (addenda) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision NA Date NA  
(No.)

7. Remarks: Electrical Penetration Assembly for Reactor Primary Containment

PENETRATION X-106C, S/N 2871 AND X-106D, S/N 2872

Pneumatic Pressure Test 51 PSI

8. Nom. thickness (in.) 2.50" Min. design thickness (in.) 2.50" Dia. ID (ft. & in.) 12.75" Length overall (ft. & in.) 6.37"

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

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board Number In Numerical Order
2871	2871	(26)	
2872	2872	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

Sign pressure 45 psi Temp. 340 °F. Hydro. test pressure See Remarks at temp. °F.  
(when applicable)

\*Supplemental information in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 X 11, (2) information in items 2 and 3 on this data report is included on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of this form, and (4) each additional sheet shall be signed by the Certificate Holder and the ANI.

(6/83)

This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

## FORM N-2 (back)

PLAN NO. 2-0334 <sup>Richard</sup> 8/4/87

## CERTIFICATE OF DESIGN

Design specifications certified by Harold W. Stivers P. E. state WA. Reg. no. 06521  
 Design report\* certified by Francis J. Domino P. E. state NY. Reg. no. 36832  
(when applicable)

## CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Electrical Penetration Assembly conform to the rules of construction of the ASME Code, Section III.

ASME Certificate of Authorization no. N-1850 Expires Sept. 2, 1989  
 Date 3-31-87 Name Conax Buffalo Corporation Signed Richard E. Dulski  
(NPT Certificate Holder) (authorized representative)  
Richard E. Dulski

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of New York and employed by Lumbermens Mutual Casualty Co. of Long Grove, IL. have inspected these items described in this data report on 3/31/87, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 3/31/87 Signed J. A. Thomas Commissions OHIO COMMISSIONER NB7710 PA2534 NY2705  
(Authorized Inspector) (Nat'l Bd. (incl. endorsements) state or prov. and no.)



Plan No. 2-0335

Tip Purge Line

Modified tip purge line. Installed new pipe and valves. Made required socket welds. PT results acceptable. Pressure test acceptable.

Plan No. 2-0336  
2-0337  
2-0339

SW(1)-2, SW(2)-2, SW(21)-2, SW(22)-2, SW(1)-2UG, SW(2)-2UG

Fabricated R0 plates for SW-R0-10A and B and SW-R0-11A, B. Installed plates. Fabricated spacer rings for SW-V-2A and 2B. Installed spacer rings. Pressure test acceptable.

Plan No. 2-0338

SW(21)-2UG, SW(22)-2UG

Modified and rerouted SW keepfull system. Installed new valves and made required welds. Hydrostatic test satisfactory.

Plan No. 2-0340  
2-0341

SW(21)-2, SW(22)-2, PI(1)-ST-(SW-SR-42)A, B, PI(1)-ST-(SW-SR-43)A, B

Fabricated radiation detector chamber for SW-SR-42, 43, by welding. Installed radiation chamber by replacing piping and tubing for SW-SR-42, 43. Hydrostatic test acceptable.

Plan No. 2-0342

8" SW(101)-2

Removed dented pipe. Installed new pipe. Made required butt welds. MT examination results acceptable. Hydrostatic test acceptable.

Plan No. 2-0343

LPCS-DPI-10

Spared piping and tubing by capping lines. PT examination of welds made during capping acceptable.



Plan No. 2-0348

3/4" RRC(51)-1

Installed flanges. Made required welds. PT examination acceptable.

Plan No. 2-0349

4RRC(37)-1

Installed new flanges. Hydrostatic test acceptable.

Plan No. 2-0350

1 1/2 RRC(25)-1

Installed new flanges. Hydrostatic test acceptable.



10-10  
10-10  
10-10  
10-10  
10-10



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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA WPPSS  
Repair Organization P.O. No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 George Wash. Way, Richland, WA

Identification of System Reactor Building Closed Cooling (RCC) System

(a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, None Code Case

(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
RCC(36)-1	WPPSS	*	N/A	N/A	1983	Modification	Yes, Class 3

7. Description of Work:

Modified reactor building closed cooling (RCC) piping system RCC(36)-1. The modification field work was performed as follows:

- 1) Removed existing vent connections.
- 2) Installed and socket welded 3/4" caps on each one of the connections.

Notes:

\*RCC(36)-1-P1



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

## FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
 Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not ApplicableCertificate Authorization No. Not Applicable Expiration Date Not ApplicableSigned [Signature] Title Plant Technical Manager  
Owner or Owner's Designee.Date 8/20 19 87

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 4-17-87 to 8-12-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W.  
Inspector's Signature National Board, State, and Endorsements

Date 8/21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 George Wash. Way, Richland, WA  
Identification of System Reactor Recirculation (RRC) System  
(a) Applicable Construction Code ASME Section III 1971 Edition, None Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 1980 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
RRC-P-1A	B-W	B-2-1034	134	N/A	1974	Replacement	Yes, Class 1

7. Description of Work:

Replaced existing flanges with "R-Con" flanges for piping connecting to reactor recirculation pump RRC-P-1A stuffing box. The replacement work was performed as follows -

- 1) Cut and removed existing "Graylock" type flanges.
- 2) Installed "R-Con" type flanges.
- 3) Made required socket welds.
- 4) Performed PT examination on the final socket welds. PT examination results acceptable.
- 5) Installed and torqued the new bolting material to the required torque value.

Notes:

B-W - Bingham-Willamette Company



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

## FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
 Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

## 9. Remarks

None

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate Authorization No. Not Applicable Expiration Date Not Applicable

Signed [Signature]  
Owner or Owner's Representative

Title Plant Technical Manager

Date 8/20/87 19 87

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 5-19-87 to 8-12-87, and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



Plan No. 2-0353

4RRC(24)-1

Installed new flanges. Hydrostatic test acceptable.

Plan No. 2-0354

#### Standby Liquid Control System Modification

Rerouted SLC discharge line from bottom of Reactor Pressure Vessel to HPCS discharge line. Made required welds. PT examined butt and socket welds. RT examined butt welds. NDE results acceptable. Hydrostatic test acceptable.

100-100000  
100-100000  
100-100000

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

Owner (Name) Washington Public Power Supply System Date 8/21/87

Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1

Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2

Plant (Address) Hanford, Benton County, WA WPPSS

Work Performed by (Name) WPPSS

Work Performed by (Address) 3000 George Wash. Way, Richland, WA

Identification of System Reactor Recirculation (RRC) System

(a) Applicable Construction Code ASME Section III 19 71 Edition, None Addenda, None Code Case

(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition. W80

Addenda. N308 Code Case

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I. D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
RRC-P-1A	B-W	B-2-1034	134	N/A	1974	Replacement	Yes, Class 1

### 7. Description of Work:

Replaced the stuffing box, mechanical seal, studs and nuts for reactor recirculation pump RRC-P-1A. The replacement work was performed in accordance with the WNP-2 plant procedures and operating and maintenance manual furnished by the pump manufacturer Bingham-Willamette Company for pump RRC-P-1A. The replacement of ASME pressure boundary stuffing box, mechanical seal and bolting material was performed as follows:

- 1) Disassembled and removed the pump internals.
- 2) Performed VT-1 and VT-3 examination on pump bowl, flange surfaces, new studs and nuts. VT examination results acceptable.
- 3) Performed UT examination on new studs. UT examination results acceptable.
- 4) Installed new stuffing box, mechanical seal, and other internal pump parts.
- 5) Installed new bolting material and torqued to the required torque values.
- 6) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test VT-2 examination.

**Notes:**

B-W = Bingham-Willamette Company


**WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM**
**FORM NIS-2 (Back)**

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ \_\_\_\_\_  
 Test Pressure 970 psig, Test Temp. 545 °F  
 Component Design Pressure 1650 psig, Temp. 575 °F

**9. Remarks**

See attached N-2 code data report for the stuffing box and the mechanical seal.

o Stuffing box, S/N 1958984-2.

o Mechanical seal, S/N 11N92-2

**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate Authorization No. Not Applicable Expiration Date Not Applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee

Date 8/20 19 87

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 4-20-87 to 7-29-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

PLAN NO. 2-0356  
Rudolph Surph  
7/30/87.

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

As Required by the Provisions of the ASME Code Rules, Section III, Div. 1

CERTIFIED BY  
1. (a) Manufactured by Bingham-Willamette Company Portland, OR 97210  
(Name and address of NPT Certificate holder)  
(b) Manufactured for Washington Public Power Supply System  
(Name and address of N Certificate holder for completed nuclear component)  
2. Identification-Certificate Holder's Serial No. Part 1958984-2 Nat'l Bd. No. 1177 CRN No. \_\_\_\_\_  
(a) Constructed According to Drawing No. E21045 Rev B Drawing Prepared by Bingham-Willamette Co  
(b) Description of Part Inspected Stuffing Box  
(c) Applicable ASME Code Section III, Edition 1971, Addenda date 1971 Summ. Ess. No. N/A Class 1  
3. Remarks: Closure Head on Reactor Recirculation Pump  
(Brief description of service for which component was designed.)  
\*Cooling Jacket is Class III Part

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

4. Shell: Material ASTM-A240-316L 79,800 .375 Nom. Thk. in. Corr. Allow. in. Diam. ft. in. Length ft. in.  
(Kling & Spool No.) (Min. or range specification)  
5. Seams: Long Butt Weld H.T.' None R.T. None Efficiency 70 %  
Girth None H.T.' None R.T. None No. of Courses \_\_\_\_\_  
6. Heads: (a) Material None T.S. \_\_\_\_\_ (b) Material T.S. \_\_\_\_\_  
Location (top, bottom, ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diam. Side to Pressure (convex or concave)  
(a) \_\_\_\_\_  
(b) \_\_\_\_\_  
If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)  
7. Jacket Closure: Full Fillet Weld  
(Describe as edge and weld, bar, etc. If bar, give dimensions, if bolted, describe or sketch)  
8. (a) Design Pressure 150 psi at 575 °F (b) Min. Pressure-Test Temp. 230 °F 75

Items 9 and 10 to be completed for tube sections.

9. Tube Sheet Stationary: Material \_\_\_\_\_ Diam. \_\_\_\_\_ in. Thk. \_\_\_\_\_ in. Attachment \_\_\_\_\_  
(Kling & Spool No.) (Subject to spec.) (Welded, bolted)  
Flanging: Material \_\_\_\_\_ Diam. \_\_\_\_\_ in. Thk. \_\_\_\_\_ in. Attachment \_\_\_\_\_  
10. Tubes: Material \_\_\_\_\_ O.D. \_\_\_\_\_ in. Thk. \_\_\_\_\_ in. or gage Number \_\_\_\_\_ Type \_\_\_\_\_  
(Straight or U)

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

11. Shell: Material SA351 CF8M T.S. 91,650 2.25 Nom. Thk. in. Corr. Allow. in. Diam. ft. in. Length ft. in.  
(Kling & Spool No.) (Min. or range specification)  
12. Seams: Long None H.T.' None R.T. None Efficiency \_\_\_\_\_ %  
Girth None H.T.' None R.T. None No. of Courses \_\_\_\_\_  
13. Heads: (a) Material None T.S. \_\_\_\_\_ (b) Material T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diam. Side to Pressure (convex or concave)  
(a) Top, bottom, ends \_\_\_\_\_  
(b) Channel \_\_\_\_\_  
If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)  
14. (a) Design Pressure 1650 psi at 575 °F (b) Min. Pressure-Test Temp. 2580 °F 75

\*If post-weld heat-treated. \*List other internal or external pressures with coincident temperature when applicable.

\*Supplemental sheets in form of HTR, sketches, or drawings may be used provided: (1) size is 8 1/2 in. x 11 in.; (2) information in items 1 and 2 of this Data Report is included on each sheet; and (3) each sheet is numbered and number of sheets is recorded in item 3, Remarks.

(12/80)

This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

S.O. 13N53  
ITEM CODE DATA REPORT  
PAGE 2

PLAN NO. 2-0356

Kuldip Singh  
7/30/87

FORM N-2 (Back)

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlet: Number None Size        Location       

16. Nozzles:

Portion (Inlet, outlet, drain)	Number	Dim. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Outlet	4	1"		316L	.250		Full Pen Weld
Inlet	2	1"		316L	.250		Full Pen Weld

17. Inspection Manholes: No. None Size        Location       

Connection Manholes: No.        Size        Location       

Threaded: No.        Size        Location       

18. Support Skirt: None Lugs        (Number) Legs        (Number) Other        (Describe) Attached        (Where & how)

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code, Section III.

[The applicable Design Specification and Design Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenance is responsible for furnishing a separate Design Specification and Design Report if the appurtenance is not included in the component Design Specification and Design Report.]

Date 3/31, 1986 Signed Bingham-Willamette Co J. L. Faulkner  
(NPT Certificate Holder)

Certificate of Authorization Expires Feb 28, 1989 Certificate of Authorization No. 81655

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at       

Stress analysis report on file at       

Design specifications certified by        Prof. Eng. Stamp        Reg. No.       

Stress analysis report certified by        Prof. Eng. Stamp        Reg. No.       

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Oregon and employed by The Department of Commerce

have inspected the part of a pressure vessel described in this Partial Data Report on 7/30/87, 1986, and state that, to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code, Section III.

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

Date 3/31, 1986

[Signature]  
Inspector's Signature

[Signature]  
Commissioner  
National Board, State, Province and City

PLAN NO. 2-0356  
Richland Supp  
7/30/87

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

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by Bingham-Willamette Company, Portland, OR  
(Name and address of Manufacturer of part)  
(b) Manufactured for Washington Public Power Supply System, Richland, WA  
(Name and address of Manufacturer of completed nuclear component)  
2. Identification-Manufacturer's Serial No. of Part 11N92 - 2 Nat'l Bd. No. 1079  
(a) Constructed According to Drawing No. J1756 Drawing Prepared by Bingham-Willamette Company  
(b) Description of Part Inspected Mechanical Seal Type RV875B-2  
(c) Applicable ASME Code: Section III, Edition 1971, Addenda date 1971, Case No. NONE Class 1  
3. Remarks: To prevent liquids from escaping from pump, PB Parts consist of:  
(Brief description of service for which component was designed)  
a.) Seal Holder SN 149285-2b.) Gland-Upper Seal SN 1495293-2  
Seal Hydrotested at 2575 PSI.

Notes: Items 4-18 not applicable.

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

Date NOV 21 1983 Signed BINGHAM-WILLAMETTE COMPANY By George M. M. M.  
(Name of Manufacturer)  
Certificate of Authorization Expires February 28, 1986 Certificate of Authorization No. N-16-55

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file as N/A.  
Stress analysis report on file as N/A.  
Design specifications certified by N/A. Prof. Eng. State Reg. No.  
Stress analysis report certified by N/A. Prof. Eng. State Reg. No.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of Oregon and employed by Department of Commerce

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on NOV 21 1983 and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date NOV 21 1983  
Inspector's Signature [Signature] Commission NB 8336 over  
National Board, State, Province and No.

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

S.O. 11N92-2  
ITEM 1 N-2 Code Data Report  
PAGE 2

PLAN NO: 2-0356  
Kudip  
7/3/87

S/N 11N92-2

VSwp  
4/18/87

FORM N-2 (back)

Items 4-6 last, to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

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

5. Seams Long H.T. R.T. Efficiency %  
Girth H.T. R.T. No. of Courses

6. Heads (a) Material T.S. (b) Material T.S.  
Location Thickness Crown Radius Elliptical Ratio Contour Apex Angle Nonisothermal Radius Flat Diameter Side to Process (Cover or Conn.)  
(a) \_\_\_\_\_  
(b) \_\_\_\_\_  
If removable, bolts used (Describe or attach sketch) (Describe or attach sketch)

7. Jacket Clearance (Describe as open and void, per, etc. If bar give dimensions, if banded, eccentricity sketch)

8. Design pressure 1650 psi at 575 °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

10. Tubes Material O.D. in. Thickness in. Attachment (Welded, Bolted)  
(Kind & Spec. No.) (Subject to pressure)

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

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

12. Seams Long H.T. R.T. Efficiency %  
Girth H.T. R.T. No. of Courses

13. Heads (a) Material T.S. (b) Material T.S.  
Location Thickness Crown Radius Elliptical Ratio Contour Apex Angle Nonisothermal Radius Flat Diameter Side to Process (Cover or Conn.)  
(a) Top, bottom, ends \_\_\_\_\_  
(b) Channel \_\_\_\_\_  
If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other (attach sketch) (Describe or attach sketch)

14. Design pressure \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Certificates Number Size Location

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

17. Inspection Manholes, No. Size Location  
Opening Manholes, No. Size Location  
Threaded, No. Size Location

18. Support Stiff Lugs (Type or No.) Lugs (Number) Other (Describe) Attached (Describe or attach sketch)

Sd. 11N92-2  
ITEM 1H2 Code Data Report  
PAGE 3





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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Reactor Recirculation (RRC) System  
(a) Applicable Construction Code ASME Section III 19 71 Edition, None Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
RRC-P-1B	B-W	B-2-1035	135	N/A	1974	Replacement	Yes, Class 1

7. Description of Work:

Replaced the stuffing box and mechanical seal for reactor recirculation pump RRC-P-1B. The replacement work was performed in accordance with the WNP-2 plant procedures and operating and maintenance manual furnished by the pump manufacturer Bingham-Willamette Company for pump RRC-P-1B. The replacement of ASME pressure boundary stuffing box and mechanical seal was performed as follows:

1. Disassembled and removed the pump internals.
2. Installed new stuffing box, mechanical seal, and other internal pump parts.
3. Installed existing bolting material and torqued to the required torque value.
4. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test VT-2 examination.

Notes:

B-W - Bingham-Willamette Company



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0357

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐  
Test Pressure 970 psig, Test Temp. 545 °F  
Component Design Pressure 1650 psig, Temp. 575 °F

9. Remarks

See attached N-2 code data report for the stuffing box.  
S/N 1958984-1

Note: Mechanical seal S/N N01-1 was from Black Fox pump S/N 00N04.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee

Date 8/20 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 4-20-87 to 7-29-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 8/21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

PLAN NO. 2-0357

Kudrip. Ewpb  
7/30/87.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PARTS AND APPURTENANCES\*  
As Required by the Provisions of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by Bingham-Willamette Company Portland, OR 97210  
(Name and address of NPT Certificate Holder)  
(b) Manufactured for Washington Public Power Supply System  
(Name and address of NPT Certificate Holder for certified nuclear component)  
2. Identification-Certificate Holder's Serial No. Part 1958984-1 Next Ed. No. 1176 CRN No. N/A  
(a) Constructed According to Drawing No. 221045 Rev B Drawing Prepared by Bingham-Willamette Co.  
(b) Description of Part Inspected Stuffing Box  
(c) Applicable ASME Code Section III, Edition 1971; Addenda does 1971 Survey Case No. N/A Case 1  
3. Remarks Closure Head on Reactor Recirculation Pump  
(Brief description of service for which component was designed.)

\*Cooling Jacket is a Class III Part

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

4. Shell: Material A240-316L T.S. 79,800 Nom. Thk. .375 in. Corr. Allow. in. Diam. ft. in. Length ft. in.  
(Kind & Spec. No.) (Min. of range specified)  
5. Seams: Long Butt Weld H.T.<sup>1</sup> None R.T. None Efficiency 70 %  
Girth None H.T.<sup>1</sup> None R.T. None No. of Courses  
6. Heads: (a) Material None T.S. None (b) Material None T.S. None  
Location (top, bottom, ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Cham. Side to Pressure (outside or inside)  
(c) None  
(d) None  
If removable, bolts used (a) None (b) None (c) None Other fastening None (Describe or attach sketch)

7. Jacket Closure Full Fillet Weld  
(Describe as open and weld, bar, etc. If bar, give dimensions, if bolted, describe or attach)  
8. (a) Design Pressure<sup>2</sup> 150 psi at 575 °F (b) Min. Pressure-Test Temp. 230 °F 75

Items 9 and 10 to be completed for tube sections.

9. Tube Sheet Stationary: Material None Diam. None in. Thk. None in. Attachment None  
(Kind & Spec. No.) (Subject to pres.) (Welded, bolted)  
Flange: Material None Diam. None in. Thk. None in. Attachment None  
10. Tubes: Material None O.D. None in. Thk. None in. or gage Number None Type None  
(Straight or U)

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

11. Shell: Material SA192 T.S. 93,370 Nom. Thk. 2.25 in. Corr. Allow. in. Diam. ft. in. Length ft. in.  
(Kind & Spec. No.) (Min. of range specified)  
12. Seams: Long None H.T.<sup>1</sup> None R.T. None Efficiency None %  
Girth None H.T.<sup>1</sup> None R.T. None No. of Courses  
13. Heads: (a) Material None T.S. None (b) Material None T.S. None  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Cham. Side to Pressure (outside or inside)  
(c) Top, bottom, ends None  
(d) Channel None  
If removable, bolts used (a) None (b) None (c) None Other fastening None (Describe or attach sketch)  
14. (a) Design Pressure<sup>2</sup> 1650 psi at 575 °F (b) Min. Pressure-Test Temp. 2580 °F 75

<sup>1</sup> If postweld heat-treated. <sup>2</sup> List other internal or external pressures with coincident temperature when applicable.

\*Supplemental sheets in form of sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in.; (2) information in Items 1 and 2 of this Data Report is included on each sheet; and (3) each sheet is numbered and number of sheets is recorded in Item 3, Remarks.

(12/80)

This form (EG0040) may be obtained from the Order Dept., ASME, 346 E. 47th St., New York, N.Y. 10017

S.O. 13N47  
ITEM CODE DATA REPORT  
PAGE 2

PLAN NO. 2-0357  
*Build Up Sw86*  
 7/30/87

FORM N-2 (Back)

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number None Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

Purpose (Inlet, outlet, drain)	Number	Class. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Outlet	3	1"		316L	.250		Full Pen Weld
Inlet	1	1"		316L	.250		Full Pen Weld
*Inlet/Outlet	2	1 1/2"		316L	100001/.200		Full Pen Weld

17. Inspection Manholes: No. None Size \_\_\_\_\_ Location \_\_\_\_\_

Coverings: Handholes: No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Thrusts: No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

18. Supporter: No. None Legs: \_\_\_\_\_ (Number) \_\_\_\_\_ (Number) \_\_\_\_\_ (Number) Other: \_\_\_\_\_ Attached: \_\_\_\_\_ (Where is from)

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code, Section III.

(The applicable Design Specification and Design Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Design Report if the appurtenance is not included in the component Design Specification and Design Report.)

Date 9/9 19 86 Signed Bingham-Willigette Co. Bob Faulkner  
 (NPT Certificate Holder)

Certificate of Authorization Expires Feb 28, 1989 Certificate of Authorization No. N1655

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at \_\_\_\_\_

Stress analysis reports on file at \_\_\_\_\_

Design specifications certified by \_\_\_\_\_ Prof. Eng. Stamp \_\_\_\_\_ Reg. No. \_\_\_\_\_

Stress analysis report certified by \_\_\_\_\_ Prof. Eng. Stamp \_\_\_\_\_ Reg. No. \_\_\_\_\_

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Oregon and employed by LUMBERTHINE MUTUAL Casualty Co. of Illinois have inspected the part of a pressure vessel described in this Partial Data Report on SEPT 9 1986 19 86 and state that, to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code, Section III.

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

Date SEPT. 17 19 86  
Jama Y. Brent Commission NB 6765 OR 682  
 Inspector's Signature National Board, State, Province and Fed.

Plan No. 2-0358

PI(1)-4S-X80b

Rerouted line. Made required welds. PT of welds acceptable.



100-10  
100-10  
100-10  
100-10

100-10  
100-10  
100-10



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0361

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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 George Wash. Way, Richland, WA

Identification of System Main Steam (MS) System

(a) Applicable Construction Code ASME Section III 1971 Edition, W73 Addenda, None Code Case

(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 1980 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I. D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
MS(1)-4A	WPPSS	*	N/A	N/A	1983	Replacement	Yes, Class 1

7. Description of Work:

Replaced studs and nuts for flanged connection in the RPV head vent line to main steam (MS) system. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test.

Notes:

\*MS(1)-4A-P2



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

## FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐  
 Test Pressure 1002 psig, Test Temp. 545 °F  
 Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

## 9. Remarks

None

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not ApplicableCertificate Authorization No. Not Applicable Expiration Date Not ApplicableSigned [Signature] Title Plant Technical Manager  
Owner or Owner's DesigneeDate 8/20 19 87

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 4-30-87 to 8-3-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this





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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA C-20069  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) Bechtel Power Corporation  
Work Performed by (Address) P.O. Box 600, Richland, WA  
Identification of System Service Water (SW) System  
(a) Applicable Construction Code ASME Section III 1971 Edition, W73 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
SW(1)-2UG	WPPSS	*	N/A	N/A	1983	Repaired	Yes, Class 3

7. Description of Work:

Repaired pits on the ID surfaces of the flange and elbow in the Service Water System. The repair work was performed as follows -

- 1) Prepped the flange and elbow surfaces for weld repair.
- 2) Filled all pits with weld metal.
- 3) Ground all welded areas flush with the contour of inside surfaces.
- 4) Performed MT and RT examination on the repaired areas. MT and RT examination results acceptable.

Notes:

\*SW(1)-2UG-P1



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

## FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
 Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

## 9. Remarks

None

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate Authorization No. Not Applicable Expiration Date Not Applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee.

Date 8/20/87 19 87

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 4-30-87 to 8-10-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

Plan No. 2-0365

MS-V-37E, MS-V-37G, MS-V-38E, MS-V-38G

Installed new valve parts by drilling and tapping 2 1/2" holes in valve bodies.





WASHINGTON PUBLIC POWER

SUPPLY SYSTEM

PLAN NO. 2-0366

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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O. No., Job No., etc.  
Work Performed by (Address) 3000 George Wash. Way, Richland, WA  
Identification of System Containment Instrument Air (CIA) System  
(a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
CIA-V-21	B-W	24558	N/A	N/A	1977	Repaired	Yes, Class 2

**7. Description of Work:**

Repaired containment instrument air (CIA) valve CIA-V-21. The repair work was performed as follows:

- 1) Cut body to bonnet seal weld.
- 2) Removed valve internals and performed rework.
- 3) Reassembled valve internals.
- 4) Installed bonnet into valve body and torqued it to the required torque value.
- 5) Made body to bonnet seal weld.
- 6) Performed PT examination on the final seal weld. PT examination results acceptable.

**Notes:**

B-W = Borg Warner



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

## FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☒ None  
 Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
 Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

## 9. Remarks

None

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate Authorization No. Not Applicable Expiration Date Not Applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee

Date 8/20 19 87

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 5-5-87 to 8-3-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



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

Owner (Name) Washington Public Power Supply System Date 8/27/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 George Wash. Way, Richland, WA

Identification of System Containment Instrument Air (CIA) System  
(a) Applicable Construction Code ASME Section III 1974 Edition, S75 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
CIA-V-31B	B-W	25886	N/A	N/A	1978	Repaired	Yes, Class 2

7. Description of Work:

Repaired containment instrument air (CIA) valve CIA-V-31B. The repair work was performed as follows:

- 1) Cut body to bonnet seal weld.
- 2) Removed valve internals and performed rework.
- 3) Reassembled valve internals.
- 4) Installed bonnet into valve body and torqued it to the required torque value.
- 5) Made body to bonnet seal weld.
- 6) Performed PT examination on the final seal weld. PT examination results acceptable.

Notes:

B-W = Borg Warner



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

## FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
 Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate Authorization No. Not Applicable Expiration Date Not Applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee.

Date 8/26/87 19 87

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 5-11-87 to 8-24-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 95512 W  
Inspector's Signature National Board, State, and Endorsements

Date 8-27 19 87





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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.

Work Performed by (Address) 3000 George Wash. Way, Richland, WA

Identification of System Containment Vessel

(a) Applicable Construction Code ASME Section III 19 71 Edition, S72 Addenda, None Code Case

(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case and N236

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I. D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
Cont. Vessel	PDM	12764	790	N/A	1976	Repaired	Yes, Class MC

7. Description of Work:

Repaired gauges in the drywell head flange. The repair work was performed as follows -

- 1) Prepared gauged area for weld repair
- 2) Performed MT examination on the prepared area. MT examination results acceptable.
- 3) Repaired gauges by welding, blended the repaired area.
- 4) Performed MT examination on the repaired area. MT examination results acceptable.

Notes:

None



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

## FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
 Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

## 9. Remarks

None

## CERTIFICATE OF COMPLIANCE

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

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

Signed

Owner or Owner's Designee

Title Plant Technical Mgr.

Date

19 87

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 5-18-87 to 7-31-87 and state that 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.

Inspector's Signature

Commissions

9556 W  
 National Board, State, and Endorsements

Date

8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

Plan No. 2-0370

SLC Component Supports

Fabricated and installed new component supports for SLC rerouting (Plan 2-0354).

Plan No. 2-0371

RHR-441

Fabricated new rigid strut. Replaced existing snubber with new strut. Visual examination acceptable.





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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 George Wash. Way, Richland, WA  
Identification of System Service Water System (SW)  
(a) Applicable Construction Code ASME Section III 19 71 Edition, S72 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
**DMA-CC-51	*	03-A097	235	N/A	1975	Repaired	Yes, Class 3

7. Description of Work:

Cooling coil for DMA-CC-51 was ruptured. The ruptured cooling coil (return bend) was repaired as follows:

- 1) Prepped split return bend for butt brazing.
- 2) Repaired split for return bend by brazing.
- 3) Visually examined repaired return bend. Visual examination results acceptable.

Notes:

\*CVI Corporation  
\*\*Also tagged as DMA-AH-51  
WPPSS-Washington Public Power Supply System


**WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM**
**FORM NIS-2 (Back)**

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
 Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
 Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

**9. Remarks**

None

**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate Authorization No. Not Applicable Expiration Date Not Applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee.  
 Date 8-20-87 19 87

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 5-11-87 to 8-4-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature NATIONAL BOARD, STATE, AND ENDORSEMENTS  
 Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

Plan No. 2-0375

RHR-RV-88A

Modified relief valve flange and pipe flange to allow LLRT. Added test port. PT results acceptable. RT of butt weld acceptable. Pressure test acceptable.

Plan No. 2-0378

LPCS-RV-31

Modified relief valve flange and pipe flange to allow LLRT. Added test port. PT results acceptable. RT of butt weld acceptable. Pressure test acceptable.



14

1

1





WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0379

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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, Washington WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Standby Liquid Control (SLC) System  
(a) Applicable Construction Code ASME Section III 1971 Edition, W72 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 1980 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
SLC-V-4A	CC	N/A	91	N/A	1975	Replaced	Yes, Class 1

7. Description of Work:

Replaced parts for explosive actuated valve for standby liquid control system valve SLC-V-4A. The replacement work was performed as follows:

1. Removed trigger assembly and inlet fitting from valve.
2. Installed new trigger assembly and inlet fitting.
3. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test.

Notes:

CC - Conax Corporation



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0379

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐  
\* - outlet side flanged joint  
\*\* - inlet side flanged joint  
Test Pressure 1220\*\* psig, Test Temp. Amb. °F  
Component Design Pressure 1400 psig, Temp. 150 °F

9. Remarks

See attached N-2 Code Data Report for new trigger assembly and inlet fitting.

Valve EPN

Trigger Assembly S/N

Inlet Fitting S/N

SLC-V-4A

2703

2728

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate Authorization No. Not Applicable Expiration Date Not Applicable

Signed [Signature]  
Owner or Owner's Representative

Title Plant Technical Manager

Date 8/20/87 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 6-4-87 to 8-3-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Enclosures

Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

**FOR N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\***

As Required by the Provisions of the ASME Code, Section III, Division 1  
Not To Exceed One Day's Production

PLAN NO. 2-0379

*Rudolph Engle 8/3/8*

Pg 1 of 1

1. Manufactured and certified by Conax Buffalo Corporation, 2300 Walden Ave. Cheektowaga, N.Y. 14225  
(Name and address of certificate holder)

2. Manufactured for Washington Public Power System Station, P.O. Box 968, Richland, WA 99352-  
(Name and address of purchaser)

3. Location of installation Washington Public Power Supply Sys. North Power Plant Loop, Richland, WA  
(Name and address)

4. Type N-20000 304SS SA479 75KSI NA 1986  
(Item type) (Mat. Spec. No.) (Nominal strength) (ICAN) (Year built)

5. ASME Code, Section III, 77 S77 1 NA  
(Section) (Subsection) (Class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision        Date         
(Inc.)

7. Remarks Trigger body sub-assembly for explosive actuated valve replacement kit  
for standby liquid control system. Pressure tested at 2800 psi for 10 minutes  
Para. NB-2121(b) is applicable to ram.

\*See

Remarks

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

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

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board Number in Numerical Order
2699	2699	(26)	
2700	2700	(27)	
2701	2701	(28)	
2702	2702	(29)	
2703	2703	(30)	
2704	2704	(31)	
2705	2705	(32)	
2706	2706	(33)	
2707	2707	(34)	
2708	2708	(35)	
		(36)	
		(37)	
		(38)	
		(39)	
		(40)	
		(41)	
		(42)	
		(43)	
		(44)	
		(45)	
		(46)	
		(47)	
		(48)	
		(49)	
		(50)	

Hydro test pressure 2800 at temp        \*See Remarks

PLAN No. 2-0379

Quadrup Sup's

8/3/87

## CERTIFICATE OF DESIGN

Design specifications certified by Clyde T. Nieh P. E. state CA Reg. no. 15587Design report\* certified by Francis J. Domino P. E. state NY Reg. no. 36832  
(when applicable)

## CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these): Trigger Body Sub-assembly  
conform to the rules of construction of the ASME Code, Section III.ASME Certificate of Authorization no. N-1850 Expires September 2, 1986Date 5/23/86 Name Conax Buffalo Corporation Signed N. E. Doherty  
(NPT Certificate Number) (Authorized representative)

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of New York and employed by Lumbermens Mutual Casualty Co.  
of Long Grove, IL have inspected these items described in this data report on 5/23/86 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 5/27/86 Signed J. A. Thomas Commissions OHIO COMMISSIONER NB7710 PA2534 NY270  
(Authorized Inspector) (N.B. & C. (incl. endorsements), state or prov. and no.)

## FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL

## NUCLEAR PARTS AND APPURTENANCES\*

As Required by the Provisions of the ASME Code, Section III, Division 1

Not To Exceed One Day's Production

PLAN NO 2-0379

Buialy Singh

Pg. 1 of 1

Manufactured and certified by Conax Buffalo Corporation, 2300 Walden Avenue, Cheektowaga, N.Y. 14225

(name and address of certificate holder)

2. Manufactured for Washington Public Power Supply Station, P.O. Box 968, Richmond, WA. 99352

(name and address of purchaser)

3. Location of installation Washington Public Power Supply Svs. North Power Loop, Richmond, WA.

(name and address)

4. Type N-38017 SS SA479 75ESI NA 1986

(iteming no.)

(spec no.)

(nominal strength)

(CRN)

(year built)

5. ASME Code, Section III: 77 S77 1 NA

(edition)

(addenda)

(class)

(Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision NA Date NA

(no.)

7. Remarks: Inlet fitting for explosive actuated valve replacement kitStandby liquid control systemPressure tested at 2800 psi for 10 minutes8. Nom. thickness (in.) .040 Min. design thickness (in.) .031 Dia. ID (ft. & in.) NA Length overall (ft. & in.) NA

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

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board Number in Numerical Order
2723	2723	(26)	
2724	2724	(27)	
(3) 2725	2725	(28)	
(4) 2726	2726	(29)	
(5) 2727	2727	(30)	
(6) 2728	2728	(31)	
(7) 2729	2729	(32)	
(8) 2730	2730	(33)	
(9) 2731	2731	(34)	
(10) 2732	2732	(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

Design pressure 1400 psi Temp 150 °F. Hydro test pressure See Remarks at temp °F

## FORM N-2 (back)

(PLAN No. 2-0379  
Kulchip Sup's  
8/3/82)

## CERTIFICATE OF DESIGN

Design specifications certified by CJ de T. Nieh P. E. state CA Reg. no. 15587  
Design report certified by Francis J. Domino P. E. state NY Reg. no. 36832  
(When 2004C8040)

## CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Toler Fitting  
conform to the rules of construction of the ASME Code, Section III.

ASME Certificate of Authorization no. N-1850 Expires Sept 2, 1980  
Date 5/23/86 Name Conax Buffalo Corporation Signed McDermott  
(NPT Certificate number) (Authorized representative)

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of New York and employed by Lumbermens Mutual Casualty Co.

at Long Grove, IL. have inspected these items described in this data report on 5/23/86 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 5/25/86 Signed J. A. Thomas Commissions OHIO COMMISSIONED  
NB7710 PA2534 NY2705  
(Authorized Inspector) (Nat'l Bd (incl. endorsements), state or prov. and no.)



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0380 R1

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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) WPP SS  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Main Steam (MS) System  
(a) Applicable Construction Code ASME Section III 19 71 Edition, W72 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
MS-V-20	A/D	2N-347	N/A	N/A	1975	Replacement	Yes, Class 2

7. Description of Work:

Replaced 1/4" NPT size pipe plug with larger size pipe plug for leak off connection for valve MS-V-20. The replacement work was performed as follows:

1. Removed existing 1/4" NPT size pipe plug and prepared the leak off connection for welding.
2. Installed new 1/2" NPT size pipe plug by welding.
3. Performed PT examination on the final weld. PT examination results acceptable.

Notes:

A/D - Anchor Darling



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0380 R

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee.

Date 8/20 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 10-3-87 to 8-19-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



Plan No. 2-0381

MSRV-2B-5, MSRV-3C-4, MSRV-4C-4

Fabricated new rigid struts. Replaced existing snubbers with new struts.  
Visual examination acceptable.





WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0382

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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.

Identification of System Containment Vessel  
(a) Applicable Construction Code ASME Section III 19 71 Edition, S72 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
Containment Vessel	PDM	12764	790	N/A	1976	Replacement	Yes, Class MC

**7. Description of Work:**

Replaced bolt and nuts for drywell head flange. Performed local leak rate test.

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0382

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ LLRT  
Test Pressure 35 psig, Test Temp. Amb. °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature]  
Owner or Owner's Designee

Title Plant Technical Manager

Date 8/20 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co of Illinois have inspected the components described in this Owner's Report during the period 6-2-87 to 8-4-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions 9556 W  
National Board, State, and Endorsements

Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Main Steam (MS) System  
(a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
MS(18)-2-11	WPPSS	*	N/A	N/A	1983	Modification	Yes, Class. 3

7. Description of Work:

Modified main steam relief valve discharge line to eliminate low point water trap.  
The modification work was performed as follows:

1. Cut piping and beveled cut pipe ends for welding.
2. Made circumferential butt weld. Performed MT examination on the final butt welds. MT examination results acceptable.
3. Performed RT examination on the final butt weld. RT examination identified unacceptable indication.
4. Removed unacceptable RT indication by grinding and prepped the cavity for MT examination. Performed MT examination of the cavity. MT examination results acceptable.
5. Built up the cavity by welding, blended the repaired area and performed MT and RT examination of the repaired area. MT and RT examination results acceptable.

Note: RT examination of the final butt weld was a substitute for pneumatic test.

Notes:

\* - MS(18)-2-11-P1



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0383

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ See Remarks  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

RT examination of the final butt weld was a substitute for pneumatic test.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee.  
Date 8/20/87 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 5-27-87 to 8-4-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9552 W  
Inspector's Signature National Board, State, and Endorsements  
Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Main Steam (MS) System  
(a) Applicable Construction Code ASME Section III 19 74 Edition, S75 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
MS-V-67B	B-W	20219	N/A	N/A	1978	Replacement	Yes, Class 1

7. Description of Work:

Replaced gate for valve MS-V-67B. The replacement work was performed as follows:

1. Removed existing gate.
2. Final finished the seating surfaces on the new gate. performed PT examination on the seating surfaces. PT examination results acceptable.
3. Installed new gate and other valve parts.
4. Made body to bonnet seal weld.
5. Performed PT examination on the final seal weld. PT examination results acceptable.
6. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test.

Notes:

B-W - Borg Warner



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0384 R2

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐  
Test Pressure 1002 psig, Test Temp. 545 °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee  
Date 8/20 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 6-13-87 to 7-31-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements  
Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this





WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0385-1

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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 George Washington Way, Richland, Wa.  
Identification of System Reactor Recirculation (RRC) System  
(a) Applicable Construction Code ASME Section III 19 71 Edition, None Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
RCC-P-1A	B-W	B-2-1034	134	N/A	1974	Replacement	Yes, Class 1

7. Description of Work:

Replaced studs and nuts for graylock clamps for connections A<sub>1</sub> and B<sub>1</sub> to provide higher torque value. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test.

Notes:

B-W - Bingham-Willamette Company



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0385-1

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐  
Test Pressure 970 psig, Test Temp. 545 °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature]  
Owner or Owner's Designee.  
Date 8/20/87 19 87

Title Plant Technical Manager

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 5-28-87 to 8-19-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements  
Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Repair Organization P.O. No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Instrument Lines and RRC System  
(a) Applicable Construction Code ASME Section III 19 \* Edition, \* Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I. D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
PI(1)-4S-X40e	JCI	**	N/A	N/A	1983	Replacement	Yes, Class 2
PI(1)-4S-X40f	JCI	**	N/A	N/A	1983	Replacement	Yes, Class 2
RRC(5)-4S-A	WPPSS	***	N/A	N/A	1983	Replacement	Yes, Class 3

7. Description of Work:

Replaced studs and nuts for flanged connections P<sub>1</sub>, P<sub>2</sub> and X. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test.

Notes: \* - PI(1)-4S-X40e and 40f, 1974 Edition, Winter 75 Addenda.  
\* - RRC(5)-4S-A, 1971 Edition, Winter 73 Addenda.  
\*\* - PI(1)-4S-40e and PI(1)-4S-X40f.  
\*\*\* - RRC(5)-4S-A-P1

JCI - Johnson Controls, Inc.



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0385-2

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐  
Test Pressure 970 psig, Test Temp. 545 °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee

Date 8/20 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 5-28-87 to 8-4-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

Plan No. 2-0386

HGR-794-31

Replaced u-bolt on component support.





WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0388

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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, Washington WPPSS  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Reactor Recirculation (RRC) System  
(a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I. D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
B35-G001B	WPPSS	*	N/A	N/A	1983	Replacement	Yes, Class 1

7. Description of Work:

Replaced gauged studs and nuts for one 4" RRC decontamination flange connection on RRC Loop B pump discharge side. Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test.

Notes:

\* - B35-G001B-P1



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0388

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☐  
Test Pressure 1145 psig, Test Temp. 86 °F  
Component Design Pressure 1650 psig, Temp. 575 °F

9. Remarks

Performed hydrostatic test on the flanged connection in conjunction with the hydrostatic test on 2" RRC drain lines replaced under ASME Section XI Plan 2-0332.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee  
Date 8/20 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 6-4-87 to 8-4-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements  
Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



Plan No. 2-0389

SLC-4475-12, SLC-4475-120

Modified struts. Made required welds. PT examination of welds acceptable.



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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O. No., Job No., etc.  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Residual Heat Removal (RHR) System  
(a) Applicable Construction Code ASME Section III 1974 Edition, W74 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
RHR-RV-5	JEL	*	N/A	N/A	1979	Replacement	Yes, Class 2

7. Description of Work:

Replaced disc for relief valve RHR-RV-5. The replacement work was performed as follows:

1. Removed existing disc.
2. Installed new replacement disc identical to the existing disc.
3. Retested the valve to the required set pressure.
4. Performed local leak rate test on the discharge flange joints.

Notes:

\* - Serial No. 509258-86-1  
JEL - J.E. Lonergan Co.



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0390

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ IERT  
Test Pressure 35 psig, Test Temp. Amb. °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed Cowa  
Owner or Owner's Designee.  
Date 8/20/87 19 87

Title Plant Technical Manager

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 6-18-87 to 8-20-87 and state that 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.

Don Horgan  
Inspector's Signature Commissions 9556 W  
National Board, State, and Endorsements  
Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Residual Heat Removal (RHR) System  
(a) Applicable Construction Code ASME Section III 1971 Edition, W73 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 1980 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
RHR(1)-2B	WPPSS	*	N/A	N/A	1984	Repaired and Modified	Yes, Class 2

7. Description of Work:

Repaired failed weld in residual heat removal (RHR) system drain connection.  
The failed weld was repaired as follows:

1. Cut out the weld at the sock-o-let.
2. Prepped sock-o-let and pipe ends for rewelding.
3. Made required socket weld.
4. Performed PT examination on the final weld. PT examination results acceptable.

In addition, the drain connection was modified. The modification work was performed as follows:

1. Installed gussets by welding.
2. Performed PT examination on the final welds. PT examination results acceptable.

Notes:

\* - RHR(1)-2B-P1



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0392

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee.  
Date 8/20/87 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 7-10-87 to 7-31-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9550 W  
Inspector's Signature National Board, State, and Endorsements  
Date 8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0394

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

Owner (Name) Washington Public Power Supply System Date 8/21/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA. WPPSS.  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 George Washington Way, Richland, WA.  
Identification of System Reactor Core Injection Cooling (RCIC) System  
(a) Applicable Construction Code ASME Section III 19 74 Edition, W74 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
RCIC-RV-17	JEL	*	N/A	N/A	1979	Modified	Yes, Class 2

7. Description of Work:

Increased set point on relief valve RCIC-RV-17 from 97 psig to 122 psig. No pressure boundary parts were changed or replaced to increase set point. Upon accomplishing the correct setting, the relief valve was reinstalled in the system.

Notes:

\* - Serial No. 509258-67-1  
JEL - J.E. Honerigan Co.



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. 2-0394

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

None.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed

Kenneth Spojer

Owner or Owner's Designee

Title Plant Technical Manager

Date

8/20 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 7-15-87 to 8-3-87 and state that 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.

DM Howard  
Inspector's Signature

Commissions

9556 W  
National Board, State, and Endorsements

Date

8-21 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this





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

Owner (Name) Washington Public Power Supply System Date June 24, 1987  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA. 99352 N/A  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 Geo. Wash. Way, Richland, WA. 99352  
Identification of System Reactor Closed Cooling W 73 8/27/87  
(a) Applicable Construction Code ASME Section III 19 71 Edition, W75 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
RCC(36)-1	WPPSS	N/A	N/A	N/A	1983	Replacement	Yes, Class 3

7. Description of Work:

Replaced snubber on hangers RCC-341, RCC-344, and RCC-964N with new snubbers.  
Replacement snubber information is as follows:

RCC-341	PSA-1/2	S/N 113
RCC-344(T)	PSA-1/4	S/N 20009
RCC-344(B)	PSA-1/4	S/N 20011
RCC-964N	PSA-1/4	S/N 20012

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ Operability Test  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

See attached document for replacement snubbers.

Reference document MWR AT-0314.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate Authorization No. N/A Expiration Date N/A

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee,

Date 7/29/87 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period \_\_\_\_\_ to 7 29 87, and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 7-29 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

# FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS\*

As Required by the provisions of the ASME Code Rules, Section III, Division 1

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 92803

(Name and address of NPT Certificate Holder)

2. Manufacturer for Johnson Controls, Inc. P.O. Box 429, Richland, Washington 99352

(Name and address of purchaser or owner)

3. Location of Installation Unknown

## 4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) <u>20C06-20015</u>	<u>None</u>	<u>1801104-05-J</u>	<u>DR-1348-Rev. B</u>	<u>Linear</u>	<u>1</u>	<u>None</u>	<u>1981</u>
(2)							
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

## 5. Remarks:

## CERTIFICATE OF COMPLIANCE

I hereby certify that the statements made in this report are correct and that these components supports conform to the rules of construction

of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1974, Addenda Winter 1975

Code Case No. 1644-5

Date 4/17/81 Signed Pacific Scientific  
(NPT Certificate Holder)

by Ronnie R. Haver

Our ASME Certificate of Authorization No. 1198 to use the Component Supports  
(NPT)

Symbol expires AUG. 4, 1981  
(Date)

## CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at:

Pacific Scientific

Filed Per NA 3256

Design Specifications Certified by (1) Leo E. Ay PE State California

Reg. No. 13533

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg. No. 13533

(1) List name only, signature not required.

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



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Pacific

1346 SO STATE COLLEGE BLVD.  
ANAHEIM, CALIFORNIA 92803  
Telephone (714) 774-5217  
TELEX 65-5421

REFERENCE: NPS Industries, Inc.  
P.O. No. 75-2004-1  
PSCo P.O. No. 18042-03  
P/N 1801104-07 (PSA-1/2), S/Ns 100-124

SC/F  
REVIEWED  
DATE 8-9-82  
BY MES (GDF)  
156 3.21.2.21.5  
RETEL

TO WHOM IT MAY CONCERN:

We, Pacific Scientific Company, 1346 S. State College Blvd., Anaheim, California, certify that the materials supplied on the referenced order comply with all the requirements of ASME Section III, Subsection NF Article NF 2000-1074 edition, including the winter of 1975 addenda.

We also certify that the fabrication complies with the requirements of ASME Section III, Subsection NF, Article NF 4000-1974 edition including the winter of 1975 addenda.

Code Cases applicable: 1644 Rev. 4, 1651, 1685, 1686, 1706 and 1728

VERIFIED & ACCEPTED *[Signature]* 1/9/87  
For WBG  
Acceptance R.I. Inspector  
#2 WBG BK 215-47285  
E 47-3395

*[Signature]*  
B. A. Hadnagy, Q. A. Manager

Subscribed and sworn to before me  
this 13th day of AUGUST 1976

BROCK R. JOB 7215  
CHECKED BY *[Signature]* 9/27/77

WEG BR 410 17110

*[Signature]*  
(Notary)

OFFICIAL SEAL  
JEANNE R. COYKENDALL  
NOTARY PUBLIC-CALIFORNIA  
PRINCIPAL OFFICE IN  
ORANGE COUNTY  
My Commission Expires April 20, 1980  
1346 S. STATE COLLEGE BLVD., ANAHEIM, CA 92803

DOCUMENT  
REVIEWED  
1  
9/27-77



**WASHINGTON PUBLIC POWER SUPPLY SYSTEM**  
**FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT .**  
**As Required by the Provisions of ASME Code Section XI**

1. Owner Washington Public Power Supply System Date 11/10/86  
3000 George Washington Way, Richland, WA. Sheet 1 of 1  
 2. Plant WNP-2 (Address) Hanford, Benton County, WA Unit N/A  
 3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA. Repair Organization P.O. No., Job No., etc.  
 4. Identification of System Reactor Pressure Vessel (RPV) Nozzle N-8  
 5. (a) Applicable Construction Code ASME III, 71 Edition, S71 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308  
 6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RPV	CBIN	T45	8	N/A	N/A	1974	Replacement	Yes, Class 1

Description of Work Replaced one (1) damaged stud and two (2) nuts for RPV nozzle N-8 flanged joint. The replacement work was performed as follows:

1. Machined the stud down to the diameter required to convert 1-1/2"  $\emptyset$  stud to 1-1/8"  $\emptyset$  stud.
2. Threaded the full length of the stud to 1-1/8"  $\emptyset$  - 8UNC
3. Cut 9-1/2" long stud to the required length of 8" long.
4. Performed MT examination on the entire length of the stud. MT examination results acceptable.
5. Installed new stud and nuts in the flanged joint and torqued the bolting material to the required torque values.
6. Performed pressure test to confirm pressure boundary integrity of the flanged joints. No evidence of leakage during the pressure test.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐  
 Test Pressure 1005 psig Test Temp 545 °F Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_  
 9. Remarks None  
 (Applicable Manufacturer's Data Reports to be attached)

# CERTIFICATE OF COMPLIANCE

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

Signed K. C. Wilkin Plant Technical Manager 11/3 .1986  
(Owner or Owner's Designee) Title (Date)

V. B. Smith  
11/6/86

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington . employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the replacement described in this Report on JUNE 20 .19 86  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11/10/86 David L. Vance Commissions 7447-W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.



WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
FORM NIS-2 OWNER'S REPORT OF REPAIR OR REPLACEMENT  
As Required by the Provisions of ASME Code Section XI

1. Owner Washington Public Power Supply System Date 11/10/86  
3000 George Washington Way, Richland, WA. 99352 Sheet 1 of 1  
 2. Plant WNP-2 (Address) Unit N/A  
Hanford, Benton County, WA.  
 3. Work Performed by WPPSS WPPSS  
3000 Geo. Wash. Way, Richland, WA. Repair Organization P.O. No., Job No., etc.  
 4. Identification of System Reactor Core Injection Cooling (RCIC) System  
 5. (a) Applicable Construction Code ASME III 19 71 Edition, W73 Addenda, Code Cases None  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements - 1980, W80 Addenda, Code Cases N308

## 6. Identification of Components Repaired or Replaced, and Replacement Components

Name of Component	Name of Mfr.	Mfrs. Ser. No.	Nat'l. Bd. No.	CRN No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RCIC(1)-4(CL1)	WPPSS	*	N/A	N/A	N/A	1983	Replacement	Yes, Class 1

Description of Work Replaced one (1) damaged stud and two (2) nuts for the bulkhead penetration flanged joint in the RCIC system, isometric No. RCIC-659-27.28. The replacement work was performed as follows:

1. Machined the stud down to the diameter required to convert 1-1/2"  $\emptyset$  stud to 1-1/8"  $\emptyset$  stud.
2. Threaded the full length of the stud to 1-1/8"  $\emptyset$  - 8UNC.
3. Cut 9-1/2" long stud to the required length of 8" long.
4. Performed MT examination on the entire length of the stud. MT examination results acceptable.
5. Installed new stud and nuts in the flanged joint and torqued the bolting material to the required torque values.
6. Performed pressure test to confirm pressure boundary integrity of the flanged joint. No evidence of leakage during the pressure test.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐  
 Test Pressure 1005 psi g Test Temp 545 of Component Design Pressure \_\_\_\_\_ Temp. \_\_\_\_\_

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

\* RCIC(1)-4(CL1)-P1  
 WPPSS - Washington Public Power Supply System

# CERTIFICATE OF COMPLIANCE

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

Signed K. L. Smith Plant Technical Manager 11/6/ 19 86  
(Owner or Owner's Designee) Title (Date)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of Washington, employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the replacement described in this Report on JUNE 20 19 86  
(Repair(s) or Replacement(s))

and state that to the best of my knowledge and belief, this repair or replacement has been constructed in accordance with Section XI of the ASME Code. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair or replacement described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11/10/86 David L. Vance Commissions 7447-W  
(Inspector) (State or Province, National Board)

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size 8½ in. X 11 in., (2) information in items 1 through 4 on this data 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.



WASHINGTON PUBLIC POWER

SUPPLY SYSTEM

PLANNING MWR AU-8961

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

Owner (Name) Washington Public Power Supply System Date June 5, 1987  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA. 99352 N/A  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 Geo. Wash. Way, Richland, WA. 99352  
Identification of System Main Steam w 73 3/27/87  
(a) Applicable Construction Code ASME Section III 1971 Edition, 475 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 1980 Edition, W80  
Addenda, N308 Code Case

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

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
B22-G001A	WPPSS	N/A	N/A	N/A	1983	Replacement	Yes, Class 1

**7. Description of Work:**

Replaced snubber on hanger MS-SA-1 with new snubber. Replacement snubber information is as follows:

MS-SA-1      PSA-100      S/N 1474

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ Operability Test  
Test Pressure \_\_\_\_\_ psig., Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

See attached document for replacement snubber.

Reference document MWR AU-8961

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate Authorization No. N/A

Expiration Date N/A

Signed [Signature]  
Owner or Owner's Designee

Title Plant Technical Manager

Date 11 28 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co of Illinois have inspected the components described in this Owner's Report during the period \_\_\_\_\_ to 7 29 87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions 9556W  
National Board, State, and Endorsements

Date 7 29 19 87

24  
8:23/87 \*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

Kin-Tech Division

DATE June 24, 1982



CERTIFICATE OF CONFORMANCE

WSH/BOECON/GERI

Customer

215-20763Q REQ 17175, 17179

Customer P.O.

MK#s: RFW-911N , RFW-913N

1801119-13 PSA-100 snubbers

Part Number(s)

ANC 41208-03

PSCo ANC No.

2

Quantity Shipped

1474 - 1475

Serial Number(s)

We, Pacific Scientific, certify that the materials supplied on the referenced order comply with all the requirements of ASME Section III, Subsection NF.

Assemblies/Parts/Materials manufactured/supplied in accordance with Pacific Scientific NPT Certificate N-1198. (Expires 8/4/84) We also certify that materials and fabrication comply with the requirements of ASME Section III, Subsection NF with Code Case(s), Code Edition and Addenda as listed below:

Code Cases applicable: 1644-5 & 1686

Edition: 1974 Addenda: Winter '76 (Note)

NOTE: Current manufacturing complies with the 1974 Edition and all of the mandatory addenda through the Winter of 1976. We certify that the addenda required after the 1974 Edition does not degrade the product below the level of requirements stated in the applicable drawings and/or specifications.

Documentation packages are being sent in shipment/by mail/special freight to the attention of:

WSH/BOECON/GERI

WPPSS HANFORD JOBSITE #2

RICHLAND, WASHINGTON 99352

ATTN: Q.A. MANAGER

P.A. Madnag, Q.A. Manager

N-Stamping not required and third party inspection not required.

Form #215 9/9/81





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

Owner (Name) Washington Public Power Supply System Date June 5, 1987  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA. 99352 N/A  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 Geo. Wash. Way, Richland, WA. 99352  
Identification of System Main Steam w73 2/27/87  
(a) Applicable Construction Code ASME Section III 1971 Edition, W75 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 1980 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
MS(18)-2-11	WPPSS	N/A	N/A	N/A	1983	Replacement	Yes, Class 3

7. Description of Work:

Replaced snubber on hanger MSRV-2B-7 with new snubber. Replacement snubber information is as follows:

MSRV-2B-7      PSA-10      S/N 17365

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ Operability Test  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

See attached document for replacement snubber.

Reference documents NCR 2-87-122 and MWR AU-8961.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate Authorization No. N/A Expiration Date N/A

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee

Date 7/28 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co of Illinois have inspected the components described in this Owner's Report during the period \_\_\_\_\_ to 7-29-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 7556-W  
Inspector's Signature National Board, State, and Endorsements

Date 7-29 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



## Pacific Scientific, Kin-Tech Division

1. Manufactured by 1346 South State College Blvd., Anaheim, California 92803  
(Name and address of NPT Certificate holder)
2. Manufacturer for PUBLIC  
(Name and address of purchaser or owner)
- Location of Installation WASHINGTON POWER SUPPLY SYSTEM, WNP-2 OPS WARE COMPLEX, WHS #1, NORTH POOL PLANT LOOP, RICHLAND, WASHINGTON 99352
4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) 17360	None	1801103-07-J	DR 1544 REV. O	Linear	1	None	1986
(2) THRU							
(3) 17374	"	"	"	"	"	"	"
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. Remarks:

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1980, Addenda Summer '82.

Case No. N71-7 & N247, N108, N249-2, N 1644-5 & N71 thru N71-8 (Date)

Date 7-15-86 Signed Pacific Scientific by John Chen  
(NPT Certificate Holder)

Our ASME Certificate of Authorization No. N-1198 to use the "NPT"  
(NPT)

Symbol expires Aug. 4, 1987  
(Date)

## CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at: Pacific Scientific  
Filed Per NCA 3256

Design Specifications Certified by (1) ALBERTO CRIVELLO PE State CaliforniaReg. No. M20600

(Design Report) (Design Report Summary Sheet)

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. AyPE State California Reg. No. 13533

(1) List name only, signature not required.

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





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

Owner (Name) Washington Public Power Supply System Date June 5, 1987  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP.2  
Plant (Address) Hanford, Benton County, WA. 99352 N/A  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 Geo. Wash. Way, Richland, WA. 99352  
Identification of System Residual Heat Removal W73 *3/27/87*  
(a) Applicable Construction Code ASME Section III 19 71 Edition, W75 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RHR(1)-2A	WPPSS	N/A	N/A	N/A	1983	Replacement	Yes, Class 2

7. Description of Work:

Replaced snubber on hanger RHR-244 with new snubber. Replacement snubber information is as follows:

RHR-244    PSA-35    S/N 12713

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ Operability Test  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

See attached document for replacement snubber.

Reference document MWR AU-8961

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate Authorization No. N/A Expiration Date N/A

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee

Date 7/28 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period \_\_\_\_\_ to 7-29-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 7-29 19 87

At 5/25/87 \*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

## FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS\*

As Required by the Provisions of the ASME Code Rules, Section III, Division 1

CERTIFIED BY Pacific Scientific Kin-Tech Division  
 1. Manufactured by 1346 South State College Blvd. Anaheim, California 92803  
 (Name and address of NPT Certificate Holder)  
 2. Manufacturer for Washington Public Power Supply System Attn: Accts. Payable M.D. 055  
P.O. BOX 968 Richland, Washington 99352-0968  
 (Name and address of purchaser or owner)  
 3. Location of Installation Washington Public Power Supply System WNP-2 OPS WHSE Complex, WHS #1  
North Power Plant Loop, Richland, Washington 99352  
 4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) <u>12712</u>	<u>None</u>	<u>1801112-11-F</u>	<u>DR-1544-Rev. 0</u>	<u>Linear</u>	<u>1</u>	<u>None</u>	<u>1986</u>
(2) <u>and</u>							
(3) <u>12713</u>							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. Remarks \_\_\_\_\_

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1980, Addenda Summer '82.

Case No. N71-7 & N-247

Date 6/10/86 Signed Pacific Scientific by Ramiro A. Navar  
 (NPT Certificate Holder) (Date)

Our ASME Certificate of Authorization No. N-1198 to use the "NPT"  
 (NPT)

Symbol expires Aug. 4, 1987  
 (Date)

## CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at Pacific Scientific  
Filed Per NC-3256

Design Specifications Certified by (1) Alejo Camacho PE State California

Reg. No. 13533

(Design Report) (Design Report Summary Sheet)

Stress Analysis Report or Load Capacity Data Sheets Certified by (1)

Leo E. Ay

PE State California Reg. No. 13533

(1) List name only, signature not required.

Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in. (2) information in items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.





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

Owner (Name) Washington Public Power Supply System Date June 5, 1987  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP-2  
Plant (Address) Hanford, Benton County, WA 99352 N/A  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 Geo. Wash. Way, Richland, WA  
Identification of System Main Steam  
(a) Applicable Construction Code ASME Section III 1971 Edition, W73 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 1980 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
MS(9)-4	WPPSS	N/A	N/A	N/A	1983	Modification	Yes, Class 1

7. Description of Work:

Deleted hanger MS-4448-411

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

Reference document MWR AU-8961 and NCR 2-87-157

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate Authorization No. N/A

Expiration Date N/A

Signed [Signature]

Owner or Owner's Designee.

Title Plant Technical Manager

Date 7-28

19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermen's Mutual Casualty Company of Illinois have inspected the components described in this Owner's Report during the period \_\_\_\_\_ to 7-29-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions

9556.1W  
National Board, State, and Endorsements

Date 7-29

19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this





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

Owner (Name) Washington Public Power Supply System Date June 5, 1987  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA 99352 N/A  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 Geo. Wash. Way, Richland, WA

Identification of System Main Steam  
(a) Applicable Construction Code ASME Section III 1971 Edition, W73 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 1980 Edition, None  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
MSRV(18)-2-11	WPPSS	N/A	N/A	N/A	1983	Replacement	Yes, Class 3

7. Description of Work:

Replace snubber on hanger MSRV-2B-4 with new snubber. Replacement snubber information is as follows:

MSRV-2B-4 PSA-10 S/N 17367

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ Operability Test  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

See attached document for replacement snubber

Reference documents NCR 2-87-122 and MWR AU-8961

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate Authorization No. N/A Expiration Date N/A

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee

Date 7/28 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermen's Mutual Casualty Company of Illinois have inspected the components described in this Owner's Report during the period \_\_\_\_\_ to 7-29-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements

Date 7-29 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

As Required by Provisions of the ASME Code Rules, Section III, Division 1

Pacific Scientific, Kin-Tech Division

1. Manufactured by 1346 South State College Blvd., Anaheim, California 92803

PUBLIC (Name and address of NPT Certificate Holder)  
WASHINGTON POWER SUPPLY SYSTEM, P. O. BOX 968, RICHLAND, WASHINGTON 99352-0968

Manufacturer for PUBLIC (Name and address of purchaser or owner)

Location of Installation WASHINGTON POWER SUPPLY SYSTEM, WNP-2 OPS WAREHOUSE COMPLEX, WMS #1, NORTH POWER PLANT LOOP, RICHLAND, WASHINGTON 99352

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) <u>17360</u>	<u>None</u>	<u>1801103-07-J</u>	<u>DR 1544 REV. O</u>	<u>Linear</u>	<u>1</u>	<u>None</u>	<u>1986</u>
(2) <u>THRU</u>							
(3) <u>17374</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. Remarks:

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction

of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1980, Addenda Summer '82

Case No. N71-7 & N247, N247, N108, N249-2, N 1644-5 & N71 thru N71-8 (Date)

Date 7-15-86 Signed Pacific Scientific by Peter Chen

(NPT Certificate Holder)

N-1198

Our ASME Certificate of Authorization No. \_\_\_\_\_ to use the \_\_\_\_\_

"NPT"

(NPT)

Symbol expires Aug. 4, 1987

(Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at: Pacific Scientific  
Filed Per NCA 3256

Design Specifications Certified by (1) ALEJO CAMACHO PE State California

Reg. No. M20600

(Design Report) (Design Report Summary Sheet)

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg. No. 13533

(1) List name only, signature not required.

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



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

Owner (Name) Washington Public Power Supply System Date June 5, 1987  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA 99352 N/A  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 Geo. Wash. Way, Richland, WA  
Identification of System Reactor Recirculation System  
(a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RRC(51)-4	WPPSS	N/A	N/A	N/A	1983	Modification	Yes, Class 1

7. Description of Work:

Deleted hanger no. RRC-1946-31

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
Test Pressure \_\_\_\_\_ psig. Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig. Temp. \_\_\_\_\_ °F

9. Remarks

Reference document NWR AU-8961 and NCR 2-87-157

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp \_\_\_\_\_ N/A

Certificate Authorization No. \_\_\_\_\_ N/A Expiration Date \_\_\_\_\_ N/A

Signed *[Signature]* Title Plant Technical Manager  
Owner or Owner's Designee

Date 7/28 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Company of Illinois have inspected the components described in this Owner's Report during the period \_\_\_\_\_ to 7 29 87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

*[Signature]* Commissions 9551.W  
Inspector's Signature National Board, State, and Endorsements

Date 7 29 19 87

528137

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this



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

Owner (Name) Washington Public Power Supply System Date June 5, 1987

Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1

Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2

Plant (Address) Hanford, Benton County, WA 99352 N/A

Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.

Work Performed by (Address) 3000 Geo. Wash. Way, Richland, WA 99352

Identification of System Reactor Recirculation System

(a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, None Code Case

(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RRC(5)-4S-A	WPPSS	N/A	N/A	N/A	1983	Modification	Yes, Class 2

7. Description of Work:

Deleted hanger no. RRC-1552-12

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

Reference document MWR AU-8961 and NCR 2-87-157

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate Authorization No. N/A Expiration Date N/A

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee

Date 7.28 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermen's Mutual Casualty Company of Illinois have inspected the components described in this Owner's Report during the period \_\_\_\_\_ to 7 27 87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556W  
Inspector's Signature National Board, State, and Endorsements

Date 7.29 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this





WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

XXXXXXXXXX MWR AU-8961  
PLAN NO.

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

Owner (Name) Washington Public Power Supply System Date June 5, 1987  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA. 99352 N/A  
Work Performed by (Name) WPPSS Repair Organization P.O No., Job No., etc.  
Work Performed by (Address) 3000 Geo. Wash. Way, Richland, WA. 99352  
Identification of System Fuel Pool Cooling  
(a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, None Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I.D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
FPC(5)-2	WPPSS	N/A	N/A	N/A	1983	Modification	Yes, Class 3

7. Description of Work:

Deleted hanger FPC-228 and FPC-229

Notes:



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None  
Test Pressure \_\_\_\_\_ psig, Test Temp. \_\_\_\_\_ °F  
Component Design Pressure \_\_\_\_\_ psig, Temp. \_\_\_\_\_ °F

9. Remarks

Reference document MWR AU-8961 and NCR 2-87-157

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate Authorization No. N/A Expiration Date N/A

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee

Date 7/28, 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co of Illinois have inspected the components described in this Owner's Report during the period \_\_\_\_\_ to 7 29 87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 955644  
Inspector's Signature National Board, State, and Endorsements

Date 7 29, 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

081  
8/28/87



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. Control Rod  
Drives (CRD's)

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS PPM 10.5.3, Rev. 4  
As Required by the Provisions of the ASME Code Section XI

Owner (Name) Washington Public Power Supply System Date 8/27/87  
Owner (Address) 3000 George Washington Way, Richland, WA Sheet 1 of 1  
Plant (Name) WPPSS Nuclear Power Plant (WNP) Unit WNP- 2  
Plant (Address) Hanford, Benton County, WA. WPPSS  
Repair Organization P.O No., Job No., etc.  
Work Performed by (Name) WPPSS  
Work Performed by (Address) 3000 George Washington Way, Richland, WA. 99352

Identification of System Control Rod Drives (CRD's)  
(a) Applicable Construction Code ASME Section III 19 \* Edition, \* Addenda, \* Code Case  
(b) Applicable Edition of ASME Section XI Utilized for Repairs or Replacements 19 80 Edition, W80  
Addenda, N308 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I. D.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No) Code Class
CRD's	GE	**	N/A	N/A	*	Replacement	Yes, Class 1

7. Description of Work:

Background, initial installation, M3 maintenance installation and R1 refueling outage installation of Control Rod Drives (CRD's) is provided in Attachments 1 and 2.

This NIS-2 form documents the replacement of twenty (20) CRD's during the R2 refueling outage. The replacement work was performed as follows:

1. Removed twenty (20) existing CRD's.
2. Installed replacement CRD's.
3. Performed visual (VT-1 examination) inspections on cap screws for replacement CRD's. Visual inspection results acceptable.
4. Torqued the bolting material for CRD flange connections to the required torque value.
5. Upon completion of the installation, all the flanged connections were subjected to pressure test and were visually (VT-2 examination) inspected for leakage. The leakage was found to be acceptable.

Notes:

- \* - See attached N-2 Code Data Reports for Code Edition and Addenda, year built, and Code Case.
- \*\* - See Remarks.



WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM

PLAN NO. CRD  
PPM 10.5.3, Rev

FORM NIS-2 (Back)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐  
Test Pressure 1000/750\* psig, Test Temp. 545\* °F Per IWA-5245  
(RPV) Component Design Pressure 1250 psig, Temp. 575 °F

9. Remarks

See attached N-2 Code Data Reports for the following CRD serial numbers.

5706, 5951, 6536, 6792, 6583, 6565, 6088, 6503, 6543, 6552, 6218, 7170,  
7045, 7048, 7040, 7200, 7053, 7166, 7377, and A4709.

\*Reactor Pressure Vessel (RPV) was pressurized to 1000 psig at approximately 540°F. The pressure was then lowered to 750 psig. VT-2 examinations were conducted after pressure reached 1000 psig but before it went below 750 psig.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not applicable

Certificate Authorization No. Not applicable Expiration Date Not applicable

Signed [Signature] Title Plant Technical Manager  
Owner or Owner's Designee.  
Date 8/26/87 19 87

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Lumbermens Mutual Casualty Co. of Illinois have inspected the components described in this Owner's Report during the period 4-28-87 to 8-26-87 and state that Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions 9556 W  
Inspector's Signature National Board, State, and Endorsements  
Date 8-27- 19 87

\*to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this

## ATTACHMENT 1 TO CRD NIS-2 FORM

### Background

Supply System installed (initial installation) one hundred eighty five (185) Control Rod Drives (CRDs). These GE furnished NPT stamped flanged CRD's are considered as appurtenance to the Reactor Pressure Vessel (RPV) and were bolted to the bottom of the RPV flanged nozzles using cap screws. Each one of the flanged connections were torqued to the required torque value. Upon completion of the installation, all the flanged connections were subjected to pressure test and were visually (VT-2 examination) inspected for leakage. Some flanged connections were found to have small leaks. These leaks were evaluated to be acceptable for plant operation.

The serial numbers of the CRD's which were initially installed are listed on Attachment 2.

Certain number of CRD's are systematically removed/replaced for inspections and refurbishment on a staggered ten (10) year maintenance/refueling schedule. The replacement CRD's are from a pool of spare CRD's also furnished by GE as NPT stamped appurtenances. All CRD's including the spares are of the same design and model and can be used at any core location. All the CRD's are fully interchangeable in its mechanical interfaces, fits and tolerances and are suitable for use for specified design and operation conditions.

Subsequent to initial installation, CRD's removed and replaced during M3 maintenance outage and R1 refueling outage are as follows:

M3 Outage Installation - Five (5) Control Rod Drives (CRD's) were replaced during M3 maintenance outage. The cap screws for these replacement CRD's were visually (VT-1 examination) inspected with acceptable results. The replacement NPT stamped CRD's are considered as appurtenance to the Reactor Pressure Vessel (RPV) and were bolted to the bottom of the RPV flanged nozzles. Each one of the flanged connections were torqued to the required torque value. Upon completion of the replacement work, the flanged connections were subjected to pressure test and were visually (VT-2 examination) inspected for leakage. There was no evidence of leakage during the pressure test.

The serial numbers of the five (5) CRD's installed during M3 maintenance outage are listed on Attachment 2.

R1 Outage Installation - Seven (7) Control Rod Drives (CRD's) were replaced during R1 refueling outage. The cap screws for the replacement CRD's were visually (VT-1 examination) inspected with acceptable results. The replacement NPT stamped CRD's are considered as appurtenance to the Reactor Pressure Vessel (RPV) and were bolted to the bottom of the RPV flanged nozzles. Each one of the flanged connections were torqued to the required torque value. Upon completion of the replacement work, the flanged connections were subjected to pressure test and were visually (VT-2 examination) inspected for leakage. Small leaks were evaluated to be acceptable for plant operation. The serial numbers of the seven (7) CRD's installed during R1 refueling outage are as listed on Attachment 2.

ATTACHMENT 1 TO CRD NIS-2 FORM

Washington State Variance on CRD Installation

- Reference - 1) Letter from Supply System to Washington State Chief Boiler Inspector, dated April 24, 1987 (attached).  
2) Letter from Washington State Chief Boiler Inspector to Supply System, dated June 15, 1987 (attached).

In the Reference 1 letter, the Supply System requested the Washington State Board of Boiler Rules for approval of variance on CRD installation. In the Reference 2 letter, the Washington State Board of Boiler Rules approved variance on CRD installation.

ATTACHMENT 2 TO CRD NIS-2 FORM

CRD Serial Numbers

1. The following are the serial numbers of the CRD's which were initially installed:

6519, 6021, 7079, 6706, 7185, A916, 7326, 7231, 6725, 6439, 7359,  
6492, 6255, 7684, 7492, 2989, 6625, 7151, 6306, 5934, 5374, 6687,  
6660, 7585A, 7408, 7227, 7091, 6108, 7028, 7084, 7364, 6456,  
6399, 6736, 6701, 7248, 7376, 7348, 7037, 6200, 5485, 7361, 7047,  
6346, 6778, 6404, 7043, 4970, 4608, 6671, 7294, 6178, 7339, 7388,  
5421, 7041, 6158, 7144, 6534, 6227, 6455, 7274, 5118, 6370, 2996,  
7234, 6588, 6651, 6717, 7078, 7179, 6502, 6447, 5414, 6396, 6091,  
7138, 5648, 7303, 7168, 7202, 5970, 7034, 6169, 6309, 6126, 5399,  
6433, 5249, 6291, 6511, 6401, 6654, 4703, 6672, 7081, 7157, 6817,  
7217, 6595, 6326, 6383, 5393, 6510, 7044, 6339, 7210, 6592, 7001,  
7279, 7346, 7212, 6246, 7195, 6727, 6343, 6006, 6431, 6303, 7338,  
7357, 7324, 6631, 7120, 6340, 6449, 7362, 6491, 6229, 7026, 6389,  
5106, 5491, 5982, 6697, 6542, 7143, 6597, 6723, 7272, 7479, 7330,  
7299, 6392, 6512, 5409, 6243, 6446, 7353, 6746, 6731, 6319, 7183,  
6505, 7560, 7367, 7165, 7108, 5812, 6578, 6638, 6690, 7113, 6299,  
7155, 6743, 6137, 7331, 6453, 6535, 4835, 6260, 7126, 6181, 7232,  
7320, 7305, 7177, 7000, 6680, 6190, 6410, 7327, 6709, 6282.

2. The following are the serial numbers of the five (5) CRD's installed during the M3 maintenance outage:

6340, 6536, 7040, 7303, 7479.

3. The following are serial numbers of the seven (7) CRD's installed during the R1 refueling outage:

5374, 5934, 6660, 6672, 7279, 7324, 7357.

4. The following are serial numbers of the twenty (20) CRD's installed during the R2 refueling outage:

5706, 5951, 6536, 6792, 6583, 6565, 6088, 6503, 6543, 6552, 6218,  
7170, 7045, 7048, 7040, 7200, 7053, 7166, 7377, A4709.

1. 王  
2. 李  
3. 张  
4. 赵  
5. 刘  
6. 陈  
7. 周  
8. 吴



NOTE: This letter is a re-write. Please discard previous letter issued 4/2/87 as it was inadvertently distributed.

April 9, 1987  
G02-87-0123

Mr. George E. Black  
Chief Boiler Inspector  
Department of Labor and Industries  
Building and Construction Safety Inspection Services  
Boiler Section  
P.O. Box 9004  
Olympia, Washington 98504-9004

KD Cowan	988U	T. Wyrick	988U
DS Feldman	956B	LTH/lb	981G
GM Foster	901B	TAS/lb	981B
PW Harness	981A	WNP-2 Files	964Y
TA Stanley	981B		

Subject: NUCLEAR PLANT NO. 2  
STATE SPECIAL

Reference: Numerous applicable references are attached

During the period of November 1982 to January 1983, the Washington Public Power Supply System installed 185 control rod drives (CRD's) in the lower reactor vessel head (see Attachment 1). At the time of installation, the Supply System did not have an ASME Certificate of Authorization to use the applicable N-type symbol or stamp permitting installation of the CRD's. A bolted flange is used to connect the CRD to the vessel head.

Although the CRD's were not installed by an ASME certificate holder, the procedure included all the planned and systematic actions necessary to assure that the CRD's were installed correctly and would perform satisfactorily in service (see Attachment 1).

In summary, the CRD's were installed and tested to a Quality Class I procedure and have operated successfully since installation.

It is the Supply System's position that the cost and risks of removing and reinstalling the 185 CRD's would have no real benefit or demonstrate any increased safety relating to the actual use of the CRD's. In fact, removal, reinstallation and repeat of the field hydro has the potential for affecting the pressure boundary integrity as well as undue radiation exposure to personnel. Additionally, during annual refueling outages, CRD's are systematically removed for inspection and refurbishment on a staggered ten year maintenance schedule.

The Supply System therefore requests a State Special acknowledging the deviation and accepting the installation as-is.

Your prompt attention to this matter is requested.

*original signed by*

L.T. Harrold  
Manager, Generation Engineering

LTH:TAS:bap

Attachments

AUT	TA Stanley	<i>TAS Stanley</i>	4/8/87	FOR SIGNATURE OF:	LT Harrold	<i>LTH</i>
SECTION						
FOR APPROVAL OF	CR Noves	KD Cowan	DS Feldman			
APPROVED	<i>CR Noves</i>	<i>Cowan</i>	<i>DS Feldman</i>			
DATE	4/8/87	4/8/87				

R A DAVIS  
Director



*Stacking*

STATE OF WASHINGTON  
DEPARTMENT OF LABOR AND INDUSTRIES  
805 Plum St. S.E., P.O. Box 9004 • Olympia, Washington 98504-9004

June 15, 1987

Mr. L. T. Harrold  
Manager, Generation Engineering  
Washington Public Power Supply System  
3000 George Washington Way, P.O. Box 968  
Richland, Washington 98352-0968

Re: Your letter G02-87-148 concerning control rod drives

Dear Mr. Harrold:

This is to confirm that the Washington State Board of Boiler Rules has approved your request for variance on control rod drive installation. The Energy Facility Site Evaluation Council has affirmed that approval.

Sincerely,

*George E. Black*  
George E. Black, Chief  
Boiler & Pressure Vessel Section

GEB:dla

c: Artie Robersen, Assistant Director  
Board of Boiler Rules  
EFSEC Council

al Distribution

KD Cowan	988U	TR Wyrick	988U
DS Feldman	956B	LTH/lb	981G
GM Foster	901B	TAS/lb	981B
PW Harness	981A	WNP-2 Files	964Y
TA Stanley	981B		

April 24, 1987  
G02-87-148

Mr. George E. Black  
Chief Boiler Inspector  
Department of Labor and Industries  
Building and Construction Safety Inspection Services  
Boiler Section  
P.O. Box 9004  
Olympia, Washington 98504-9004

Subject: NUCLEAR PLANT NO. 2  
INSTALLATION OF CONTROL ROD DRIVES

Reference: Letter G02-87-0123, L.T. Harrold to George E. Black,  
"State Special," dated April 9, 1987

The purpose of this letter is to formally petition the Board of Boiler Rules for a variance that would allow the Washington Public Power Supply System to operate the control rod drives as installed.

We appreciate your time and efforts in assisting us with the issue of our control rod drives. Enclosed you will find the following (in anticipation of the May 19, 1987 meeting):

1. A check for \$300.00 to cover the cost of appeal; and
2. A copy of our installation package, which was hand carried to you on April 10, 1987 (see reference).

We look forward to hearing from you as to the time and location of the meeting.

If you require any additional information, please contact T.A. Stanley at (509) 377-8495.

Original Signed by

L.T. Harrold  
Manager, Generation Engineering

LTH:TAS:bap

Enclosures

DATE	T.A. Stanley	4/22/87	FOR SIGNATURE OF:	L.T. Harrold
SECTION				
FOR APPROVAL OF	C. R. Inoves			
APPROVED	CD/VMS			
DATE				



RECEIVED

STATE OF WASHINGTON

DEPARTMENT OF LABOR AND INDUSTRIES

805 Pike St. SE, P.O. Box 9804 • Olympia, Washington 98504-9804

MAY 26 1987

ENERGY FACILITY SITE  
EVALUATION COUNCIL

May 26, 1987

Mr. Curtis Eschels, Chairman  
Energy Facility Site Evaluation Council  
4224 - 6th Avenue Southeast  
Building 1, PY-11  
Olympia, WA 98504-9811

Dear Mr. Eschels:

The Washington Board of Boiler Rules, in their public meeting on May 19, 1987, approved the variance requested by Washington Public Power Supply System letter G02-87-148 of April 24, 1987.

The five items listed in Washington Public Power Supply System letter G02-87-150 of April 27, 1987 have been reviewed and approval is recommended.

Sincerely,

  
George E. Black  
Chief Boiler Inspector

D4/22/GEB:lk

c Artie Robersen  
Board of Boiler Rules  
WPPSS

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

As required by the Provisions of the ASME Code Rules

Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.  
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 6536 Nat'l Ed. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E337G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1974, Addenda date None, Case No. \_\_\_\_\_ Class \_\_\_\_\_

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)

minimum

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

Date December 16, 1974 Signed GE, BWPSD - REM By [Signature]  
(Manufacturer)

Date of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWPSD-REM, Castle Hayne Rd. Wilmington

Stress analysis report on file at General Electric Co., BWPSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION FOR INFORMATION ONLY

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 12, 1974, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date December 16, 1974

[Signature] Commissions NC 779, PA, WC 2L60, Ohio  
Inspector's Signature National Board, State, Province and No.

PROJECT NAME HANFORD 2  
CUSTOMER ORDER NUMBER 3758-014  
ITEM NUMBER 1

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

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

5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) \_\_\_\_\_

(b) \_\_\_\_\_

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

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

8. Design pressure<sup>2</sup> 1250 psi at 575 °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

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

12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

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

14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

FOR INFORMATION ONLY  
FOR INFORMATION ONLY

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

<sup>1</sup> If Postweld Heat-Treated.

<sup>2</sup> List other internal or external pressure with coincident temperature when applicable.

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

As required by the Provisions of the ASME Code Rules

(a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 6792 Nat'l Bd. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)  
minimum.

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

July 31 1975 Signed GZ, BWRSD - REM By [Signature]  
(Manufacturer)

Certificate of Authorization Expires June 20, 1978 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on July 31 19 75, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date July 31 19 75

Inspector's Signature E. L. Hewitt Commissions NC 723 PA NC 1766, Ohio  
National Board, State, Province and No.

FOR INFORMATION ONLY

2X00366681

## FORM N-2 (Back)

761E387G2  
6792

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

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

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

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

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

(a) \_\_\_\_\_

(b) \_\_\_\_\_

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

7. Jacket Closure: \_\_\_\_\_  
(Describe as edge-weld, seam, etc. If barg give dimensions, if bolted, describe or sketch)8. Design pressure<sup>2</sup> 1250 psi at 575°F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft.-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

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

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

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

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

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

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

14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft.-lb  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ (Number) \_\_\_\_\_ Legs \_\_\_\_\_ (Number) \_\_\_\_\_ Other \_\_\_\_\_ Attached \_\_\_\_\_ (Where &amp; How)

If Postweld Heat-Treated.

ZX00366682



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

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.  
(Name and address of Manufacturer of part)
- Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part 6583 Nat'l Bd. No. \_\_\_\_\_
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date None, Case No. \_\_\_\_\_ Class \_\_\_\_\_
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)
- minimum

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

Date December 30 19 74 Signed GE, BW2SD - REM By [Signature]  
(Manufacturer)

of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BW2SD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BW2SD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 27, 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date December 30 19 74

[Signature]  
Inspector's Signature

Commissions NC 779, PA, WC 2160, Ohio  
National Board, State, Province and No.

FOR INFORMATION ONLY

PROJECT NAME— HANFORD 2  
CUSTOMER ORDER NUMBER— 3758-014  
ITEM NUMBER— 1

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

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

5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) \_\_\_\_\_

(b) \_\_\_\_\_

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

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

8. Design pressure<sup>2</sup> 1250 psi at 575 °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

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

12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

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

14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

- Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

<sup>1</sup> U Postweld Heat-Treated.

<sup>2</sup> List other internal or external pressure with coincident temperature when applicable.

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

As required by the Provisions of the ASME Code Rules

1. Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.  
(Name and address of Manufacturer of part)
- (b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part 6565 Nat'l Bd. No. \_\_\_\_\_
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date None, Case No. \_\_\_\_\_ Class \_\_\_\_\_
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)  
minimum

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

Date December 15, 1974 Signed GE, BWRSD - REM By A.E. [Signature]  
(Manufacturer)

Use of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd. Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

FOR INFORMATION ONLY

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 3, 1974, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date December 15, 1974

[Signature]  
Inspector's Signature

Commissions NC 779, PA. WC 2160, Ohio  
National Board, State, Province and No.

PROJECT NAME HANFORD 2  
CUSTOMER ORDER NUMBER 3758-014  
ITEM NUMBER 1

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

4. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft.  
(Kind & Spec. No.) (Min. of Range Specified)Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Top, bottom, ends) (Conv. or Conc.)

(a) \_\_\_\_\_

(b) \_\_\_\_\_

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: \_\_\_\_\_  
(Describe as ogee and weld, bar, etc. If bargive dimensions, if bolted, describe or sketch)8. Design pressure<sup>2</sup> 1250 psi at 575 °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

11. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft.  
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

13. Heads (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_

Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Conv. or Conc.)

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Other \_\_\_\_\_ Attached \_\_\_\_\_  
(Yes or No) (Number) (Number) (Describe) (Where & How)<sup>1</sup> U Postweld Heat-Treated.<sup>2</sup> List other internal or external pressure with design temperature when applicable.

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

As required by the Provisions of the ASME Code Rules

(a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

Identification-Manufacturer's Serial No. of Part 7170 Nat'l Bd. No.       

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 G1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-i Class 1

Remarks: Standard part for use with Reactor. Hydrostatically tested at 1625 psi  
(Brief description of service for which component was designed)  
minimum.

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

Date June 13 19 75 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)

Expiration of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor

of State of North Carolina have inspected the part of a pressure vessel described in this

Manufacturer's Partial Data Report on June 13 19 75, and state that to the best of my knowledge

and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date June 13 19 75

FOR INFORMATION ONLY

[Signature] Commissions NC 723, PA, NC 1766, Ohio  
Inspector's Signature National Board, State, Province and No.

7X00365903

## FORM No. 1 (Rev. 1)

1-5 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Top, bottom, ends) (Conv. or Conc.)

(a) \_\_\_\_\_

(b) \_\_\_\_\_

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: \_\_\_\_\_  
(Describe as ogee and weld, bar, etc. If bargive dimensions, if bolted, describe or sketch)8. Design pressure<sup>3</sup> 1250 psi at 575°F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ at temp. of \_\_\_\_\_

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

10. Tubes: Material \_\_\_\_\_ O.D. \_\_\_\_\_ in. Thickness \_\_\_\_\_ inches or gage. Number \_\_\_\_\_ Type \_\_\_\_\_  
(Std. or U)

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

11. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_13. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Top, bottom, ends) (Conv. or Conc.)

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ at temp. of \_\_\_\_\_

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

\_\_\_\_\_

\_\_\_\_\_

Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

7X00368904

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

As required by the Provisions of the ASME Code Rules

Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.  
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 5706 Nat'l Bd. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1974, Addenda date None, Case No. \_\_\_\_\_ Class \_\_\_\_\_

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)  
minimum

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

Date December 24, 1974 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd. Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

FOR INFORMATION ONLY

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 20, 1974, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date December 24, 1974

[Signature]  
Inspector's Signature

Commissions NC 779, PA, WC 2160, Ohio  
National Board, State, Province and No.

PROJECT NAME— HANFORD 2  
CUSTOMER ORDER NUMBER— 3758-014  
ITEM NUMBER—

Items 4-9 Incl. to be completed for single wall vessels; jackets of jacketed vessels, or shells of heat exchangers.

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

Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) \_\_\_\_\_  
(b) \_\_\_\_\_

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

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

8. Design pressure<sup>2</sup> 1250 psi at 575 °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

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

12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) Top, bottom, ends \_\_\_\_\_  
(b) Channel \_\_\_\_\_

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

14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

<sup>1</sup> If Postweld Heat-Treated.<sup>2</sup> List other factors if no pressure test.



# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES\*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

CORRECTED COPY

- (a) Manufactured by General Electric Co., Castle Hayne Rd., Wilmington, N.C.  
(Name and address of NPT Certificate Holder)
- (b) Manufactured for HANFORD  
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A4709 Nat'l Bd. No. \_\_\_\_\_
- (a) Constructed According to Drawing No. 919D258G003 Drawing Prepared by D. L. Paterson
- (b) Description of Part Inspected Cylinder Tube and Flange
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. 1361-2 Class 1
3. Remarks: Standard part for use with reactor  
(Brief description of service for which component was designed)  
Hydrostatically tested at 1825 psi.

CORRECTED COPY: ITEM 1. (b) ADDED SITE LOCATION

\* Number of sheets - 2

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

6/13 19 84 Signed GE-NEPD-WRD-EM By A. Estradum  
(NPT Certificate Holder)  
Certificate of Authorization Expires June 16, 1984 Certificate of Authorization No. E-1151

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GENERAL ELECTRIC CO., SAN JOSE, CALIF.

Stress analysis report on file at GENERAL ELECTRIC CO., SAN JOSE, CALIF.

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Dept of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/18 19 81 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

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

Date 6/13 19 84  
E. L. Sherrill  
Inspector's Signature  
Commissions NO-723, PA. WC1766, OHIO  
National Board, State, Province and No.

\*Supplemental sheets in form of data, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information is items 1-3 on this Data Report is included on each sheet, and (3) each sheet is properly and clearly labeled in Part 2, "Remarks".

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

4. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)
5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %  
Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_
6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location (Top, bottom, ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)  
(a) \_\_\_\_\_  
(b) \_\_\_\_\_  
If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)
7. Jacket Closure \_\_\_\_\_  
(Describe as egg and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)
8. Design pressure<sup>2</sup> \_\_\_\_\_ 1250 \_\_\_\_\_ psi at \_\_\_\_\_ 575 \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheet: Stationary. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_  
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)  
Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_
10. Tubes: Material \_\_\_\_\_ O.D. \_\_\_\_\_ in. Thickness \_\_\_\_\_ inches or gage. Number \_\_\_\_\_ Type \_\_\_\_\_  
(Str. or U)

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

11. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)
12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %  
Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_
13. Heads (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)  
(a) Top, bottom, ends \_\_\_\_\_  
(b) Channel \_\_\_\_\_  
If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)
14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlet: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_
16. Nozzles:
- | Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type  | Material | Thickness | Reinforcement Material | How Attached |
|--------------------------------|--------|--------------|-------|----------|-----------|------------------------|--------------|
| _____                          | _____  | _____        | _____ | _____    | _____     | _____                  | _____        |
| _____                          | _____  | _____        | _____ | _____    | _____     | _____                  | _____        |
| _____                          | _____  | _____        | _____ | _____    | _____     | _____                  | _____        |
17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_
18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Other \_\_\_\_\_ Attached \_\_\_\_\_  
(Yes or No) (Number) (Number) (Describe) (Where & How)

<sup>1</sup> If Postweld Heat-Treated.<sup>2</sup> List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

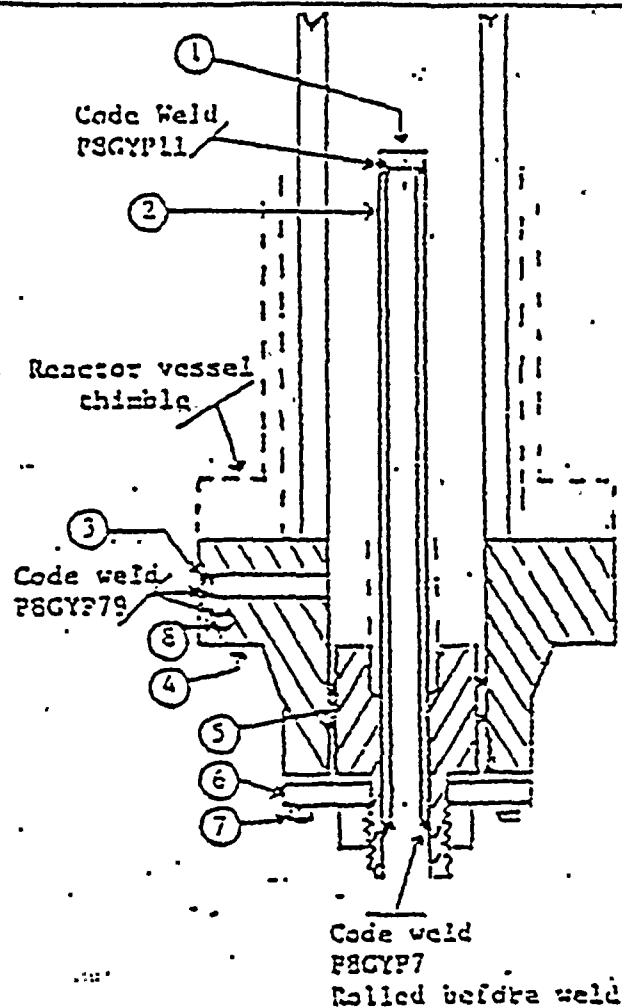
As required by the Provision of the ASME Code Rules, Section III, Div. I

CORRECTED COPY

1. Manufactured by General Electric Co., Casle Hayne Rd., Wilmington N.C.  
(Name and address of NPT Certificate Holder)
- (b) Manufactured for HANFORD  
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A4709 Nat'l Bd. No. \_\_\_\_\_
- (a) Constructed According to Drawing No. 919D258G003 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Cylinder Tube and Flange
- (c) Applicable ASME Code Section III, Edition 1974, Addenda W'75, Case No. 1351-2, Class 1
3. Remarks Standard part for use with reactor. Hydrostatically tested at 1825 psi.  
(Brief description of service for which component was designed)
- \* Number of sheets - 2

CORRECTED COPY: ITEM 1. (b) ADDED SITE LOCATION

1. Cap 167A2343P1  
(167A2343)  
SA182-F304  
3/8 thick x 1 1/16 OD
2. Indicator Tube 10431336P1  
SA112-TP316  
3/4 sch 40-seamless pipe  
0.113 wall thickness  
1.065 max. dia.
3. Plug 155A1176P1  
SA182-F304  
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)  
SA182-F304  
3.37 thick x 9 5/8 OD  
neck 1 1/16 thick x 5.0 OD  
2.875 ID
5. Band 129E3539P1  
SA182-F304  
7/8 thick x 2.875 Dia.
6. Ring Flange 11435122P2  
SA182-F304  
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2  
SA193-26  
6 ea 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1  
SA182-F304  
0.38 thick x 1.307 dia.



NOT FOR REPRODUCTION OR REUSE

Figure 1. The effect of the concentration of the *Ag* on the *Ag* adsorption capacity of the *Ag*-*Ag*2S-*Ag*2S2O3-*Ag*2S2O4-*Ag*2S2O6-*Ag*2S2O8-*Ag*2S2O10-*Ag*2S2O12-*Ag*2S2O14-*Ag*2S2O16-*Ag*2S2O18-*Ag*2S2O20-*Ag*2S2O22-*Ag*2S2O24-*Ag*2S2O26-*Ag*2S2O28-*Ag*2S2O30-*Ag*2S2O32-*Ag*2S2O34-*Ag*2S2O36-*Ag*2S2O38-*Ag*2S2O40-*Ag*2S2O42-*Ag*2S2O44-*Ag*2S2O46-*Ag*2S2O48-*Ag*2S2O50-*Ag*2S2O52-*Ag*2S2O54-*Ag*2S2O56-*Ag*2S2O58-*Ag*2S2O60-*Ag*2S2O62-*Ag*2S2O64-*Ag*2S2O66-*Ag*2S2O68-*Ag*2S2O70-*Ag*2S2O72-*Ag*2S2O74-*Ag*2S2O76-*Ag*2S2O78-*Ag*2S2O80-*Ag*2S2O82-*Ag*2S2O84-*Ag*2S2O86-*Ag*2S2O88-*Ag*2S2O90-*Ag*2S2O92-*Ag*2S2O94-*Ag*2S2O96-*Ag*2S2O98-*Ag*2S2O100-*Ag*2S2O102-*Ag*2S2O104-*Ag*2S2O106-*Ag*2S2O108-*Ag*2S2O110-*Ag*2S2O112-*Ag*2S2O114-*Ag*2S2O116-*Ag*2S2O118-*Ag*2S2O120-*Ag*2S2O122-*Ag*2S2O124-*Ag*2S2O126-*Ag*2S2O128-*Ag*2S2O130-*Ag*2S2O132-*Ag*2S2O134-*Ag*2S2O136-*Ag*2S2O138-*Ag*2S2O140-*Ag*2S2O142-*Ag*2S2O144-*Ag*2S2O146-*Ag*2S2O148-*Ag*2S2O150-*Ag*2S2O152-*Ag*2S2O154-*Ag*2S2O156-*Ag*2S2O158-*Ag*2S2O160-*Ag*2S2O162-*Ag*2S2O164-*Ag*2S2O166-*Ag*2S2O168-*Ag*2S2O170-*Ag*2S2O172-*Ag*2S2O174-*Ag*2S2O176-*Ag*2S2O178-*Ag*2S2O180-*Ag*2S2O182-*Ag*2S2O184-*Ag*2S2O186-*Ag*2S2O188-*Ag*2S2O190-*Ag*2S2O192-*Ag*2S2O194-*Ag*2S2O196-*Ag*2S2O198-*Ag*2S2O200-*Ag*2S2O202-*Ag*2S2O204-*Ag*2S2O206-*Ag*2S2O208-*Ag*2S2O210-*Ag*2S2O212-*Ag*2S2O214-*Ag*2S2O216-*Ag*2S2O218-*Ag*2S2O220-*Ag*2S2O222-*Ag*2S2O224-*Ag*2S2O226-*Ag*2S2O228-*Ag*2S2O230-*Ag*2S2O232-*Ag*2S2O234-*Ag*2S2O236-*Ag*2S2O238-*Ag*2S2O240-*Ag*2S2O242-*Ag*2S2O244-*Ag*2S2O246-*Ag*2S2O248-*Ag*2S2O250-*Ag*2S2O252-*Ag*2S2O254-*Ag*2S2O256-*Ag*2S2O258-*Ag*2S2O260-*Ag*2S2O262-*Ag*2S2O264-*Ag*2S2O266-*Ag*2S2O268-*Ag*2S2O270-*Ag*2S2O272-*Ag*2S2O274-*Ag*2S2O276-*Ag*2S2O278-*Ag*2S2O280-*Ag*2S2O282-*Ag*2S2O284-*Ag*2S2O286-*Ag*2S2O288-*Ag*2S2O290-*Ag*2S2O292-*Ag*2S2O294-*Ag*2S2O296-*Ag*2S2O298-*Ag*2S2O300-*Ag*2S2O302-*Ag*2S2O304-*Ag*2S2O306-*Ag*2S2O308-*Ag*2S2O310-*Ag*2S2O312-*Ag*2S2O314-*Ag*2S2O316-*Ag*2S2O318-*Ag*2S2O320-*Ag*2S2O322-*Ag*2S2O324-*Ag*2S2O326-*Ag*2S2O328-*Ag*2S2O330-*Ag*2S2O332-*Ag*2S2O334-*Ag*2S2O336-*Ag*2S2O338-*Ag*2S2O340-*Ag*2S2O342-*Ag*2S2O344-*Ag*2S2O346-*Ag*2S2O348-*Ag*2S2O350-*Ag*2S2O352-*Ag*2S2O354-*Ag*2S2O356-*Ag*2S2O358-*Ag*2S2O360-*Ag*2S2O362-*Ag*2S2O364-*Ag*2S2O366-*Ag*2S2O368-*Ag*2S2O370-*Ag*2S2O372-*Ag*2S2O374-*Ag*2S2O376-*Ag*2S2O378-*Ag*2S2O380-*Ag*2S2O382-*Ag*2S2O384-*Ag*2S2O386-*Ag*2S2O388-*Ag*2S2O390-*Ag*2S2O392-*Ag*2S2O394-*Ag*2S2O396-*Ag*2S2O398-*Ag*2S2O400-*Ag*2S2O402-*Ag*2S2O404-*Ag*2S2O406-*Ag*2S2O408-*Ag*2S2O410-*Ag*2S2O412-*Ag*2S2O414-*Ag*2S2O416-*Ag*2S2O418-*Ag*2S2O420-*Ag*2S2O422-*Ag*2S2O424-*Ag*2S2O426-*Ag*2S2O428-*Ag*2S2O430-*Ag*2S2O432-*Ag*2S2O434-*Ag*2S2O436-*Ag*2S2O438-*Ag*2S2O440-*Ag*2S2O442-*Ag*2S2O444-*Ag*2S2O446-*Ag*2S2O448-*Ag*2S2O450-*Ag*2S2O452-*Ag*2S2O454-*Ag*2S2O456-*Ag*2S2O458-*Ag*2S2O460-*Ag*2S2O462-*Ag*2S2O464-*Ag*2S2O466-*Ag*2S2O468-*Ag*2S2O470-*Ag*2S2O472-*Ag*2S2O474-*Ag*2S2O476-*Ag*2S2O478-*Ag*2S2O480-*Ag*2S2O482-*Ag*2S2O484-*Ag*2S2O486-*Ag*2S2O488-*Ag*2S2O490-*Ag*2S2O492-*Ag*2S2O494-*Ag*2S2O496-*Ag*2S2O498-*Ag*2S2O500-*Ag*2S2O502-*Ag*2S2O504-*Ag*2S2O506-*Ag*2S2O508-*Ag*2S2O510-*Ag*2S2O512-*Ag*2S2O514-*Ag*2S2O516-*Ag*2S2O518-*Ag*2S2O520-*Ag*2S2O522-*Ag*2S2O524-*Ag*2S2O526-*Ag*2S2O528-*Ag*2S2O530-*Ag*2S2O532-*Ag*2S2O534-*Ag*2S2O536-*Ag*2S2O538-*Ag*2S2O540-*Ag*2S2O542-*Ag*2S2O544-*Ag*2S2O546-

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

Figure 1 consists of two line graphs. The left graph shows the rate of polymerization ( $R_p$ ) versus temperature ( $^{\circ}\text{C}$ ) for a 10% solution. The right graph shows  $R_p$  versus temperature ( $^{\circ}\text{C}$ ) for a 20% solution. Both graphs show a sharp increase in  $R_p$  as temperature increases from 50°C to 70°C, followed by a decrease at higher temperatures.

5. **Answer:** **100%**

94

4.

6

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

As required by the Provisions of the ASME Code Rules

1. Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)
- Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part 6088 Nat'l Bd. No. \_\_\_\_\_
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1520 psi  
(Brief description of service for which component was designed)
- minimum.

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

Date December 17 19 74 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)  
Date of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington  
Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington  
Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14499  
Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14498

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 17 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.  
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date December 17 19 74

[Signature]  
Inspector's Signature

Commissions NC 723, PA, NC 1766, Ohio  
National Board, State, Province and No.

FOR INFORMATION ONLY

## FORM No. 1 (Rev. 10-1-63)

Items 1-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

1. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)5. Seams: Long \_\_\_\_\_ H.T. <sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T. <sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)  
(Top, bottom, ends)

(a) \_\_\_\_\_

(b) \_\_\_\_\_

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: \_\_\_\_\_  
(Describe as gage and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)8. Design pressure <sup>1</sup> 1250 psi at 575 °F Drop Weight \_\_\_\_\_ Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

10. Tubes: Material \_\_\_\_\_ O.D. \_\_\_\_\_ in. Thickness \_\_\_\_\_ inches or gage. Number \_\_\_\_\_ Type \_\_\_\_\_  
(Str. or C)

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

11. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long \_\_\_\_\_ H.T. <sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T. <sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_13. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)  
(a) Top, bottom, ends

(b) Channel \_\_\_\_\_

If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)Drop Weight \_\_\_\_\_ Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_14. Design pressure <sup>1</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

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

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.  
(Name and address of Manufacturer of part)
- Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part 7045 Nat'l Bd. No. \_\_\_\_\_
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7203144 C1
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date None, Case No. \_\_\_\_\_ Class \_\_\_\_\_
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)
- minimum

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

Date December 12, 1974 Signed GE, BWPSD - PEM By J. B. [Signature]  
(Manufacturer)

Date of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 452

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWPSD-PEM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWPSD-PEM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this

Manufacturer's Partial Data Report on December 10, 1974, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date December 12, 1974

FOR INFORMATION ONLY

Inspector's Signature

Commissions NC 779, PA, WC 215J, Ohio  
National Board, State, Province and No.

PROJECT NAME—HANFORD 2  
CUSTOMER ORDER NUMBER—3758  
ITEM NUMBER—1

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

4. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)
5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %  
Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_
6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location: (Top, bottom, ends) Thickness \_\_\_\_\_ Crown Radius \_\_\_\_\_ Knuckle Radius \_\_\_\_\_ Elliptical Ratio \_\_\_\_\_ Conical Apex Angle \_\_\_\_\_ Hemispherical Radius \_\_\_\_\_ Flat Diameter \_\_\_\_\_ Side to Press. (Conv. or Conc.)  
(a) \_\_\_\_\_  
(b) \_\_\_\_\_  
If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)
7. Jacket Closure: \_\_\_\_\_  
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)
8. Design pressure<sup>2</sup> 1250 psi at 575 °F Drop Weight \_\_\_\_\_ Charpy Impact \_\_\_\_\_ ft-lb at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_  
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)  
Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_
10. Tubes: Material \_\_\_\_\_ O.D. \_\_\_\_\_ in. Thickness \_\_\_\_\_ inches or gage. Number \_\_\_\_\_ Type \_\_\_\_\_  
(Str. or U)

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

11. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)
12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %  
Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_
13. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location: Thickness \_\_\_\_\_ Crown Radius \_\_\_\_\_ Knuckle Radius \_\_\_\_\_ Elliptical Ratio \_\_\_\_\_ Conical Apex Angle \_\_\_\_\_ Hemispherical Radius \_\_\_\_\_ Flat Diameter \_\_\_\_\_ Side to Press. (Conv. or Conc.)  
(a) Top, bottom, ends \_\_\_\_\_  
(b) Channel \_\_\_\_\_  
If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)
14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_ Charpy Impact \_\_\_\_\_ ft-lb at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_
16. Nozzles:
- | Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|--------------------------------|--------|--------------|------|----------|-----------|------------------------|--------------|
|                                |        |              |      |          |           |                        |              |
|                                |        |              |      |          |           |                        |              |
|                                |        |              |      |          |           |                        |              |
17. Inspection: Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_
18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Other \_\_\_\_\_ Attached \_\_\_\_\_  
(Yes or No) (Number) (Number) (Describe) (Where & How)

<sup>1</sup> U Postweld Heat-Treated.

<sup>2</sup> List other internal or external pressures with coincident temperature when applicable.



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

As required by the Provisions of the ASME Code Rules

1. Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.  
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 7048 Nat'l Bd. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1974, Addenda date None, Case No. \_\_\_\_\_ Class \_\_\_\_\_

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)

minimum

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

Date November 27, 1974 Signed GE, BWPSD - REM By A.E. Smith  
(Manufacturer)

Signature of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWPSD-REM, Castle Hayne Rd. Wilmington

Stress analysis report on file at General Electric Co., BWPSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on November 25, 1974, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date November 27, 1974

D. F. P. Inspector's Signature

Commissions NC 779, PA. NC 2160, Ohio  
National Board, State, Province and No.

FOR INFORMATION ONLY

PROJECT NAME— HANFORD 2  
CUSTOMER ORDER NUMBER— 3758-014  
ITEM NUMBER— 1

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

4. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft.  
(Kind & Spec. No.) (Min. of Range Specified)5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Knuckle Elliptical Conical Hemispherical Flat Side to Press.  
(Top, bottom, ends) Thickness Radius Radius Ratio Apex Angle Radius Diameter (Conv. or Conc.)

(a) \_\_\_\_\_

(b) \_\_\_\_\_

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: \_\_\_\_\_  
(Describe as ogee and weld, bar, etc. If bargive dimensions, if bolted, describe or sketch)8. Design pressure<sup>2</sup> 1250 psi at 575 °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

11. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft.  
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

13. Heads (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_

Location Thickness Crown Knuckle Elliptical Conical Hemispherical Flat Side to Press.  
Radius Radius Ratio Apex Angle Radius Diameter (Conv. or Conc.)

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

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

Drop Weight \_\_\_\_\_

14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

FOR INFORMATION ONLY

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

- Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Other \_\_\_\_\_ Attached \_\_\_\_\_  
(Yes or No) (Number) (Number) (Describe) (Where & How)<sup>1</sup> If Postweld Heat-Treated.<sup>2</sup> List other internal or external pressure with coincident temperature when applicable.

## FORM N-2 MANUFACTURER'S DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)  
(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part 7040 Nat'l Id. No. \_\_\_\_\_
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144 G1
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi  
(Brief description of service for which component was designed)  
minimum.

FOR INFORMATION ONLY

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

Date January 24 19 75 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)  
Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14438

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on January 24 19 75, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date January 24 19 75E. S. Sherrill  
Inspector's SignatureCommissions NC 723, PA, NC 1766, Ohio  
National Board, State, Province and No.

ZX00367144

## FORM No. 1 (back)

Items 1-10 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

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

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

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

6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_

| Location<br>(Top, bottom, ends) | Thickness | Crown<br>Radius | Knuckle<br>Radius | Elliptical<br>Ratio | Conical<br>Apex Angle | Hemispherical<br>Radius | Flat<br>Diameter | Side to Press.<br>(Conv. or Conc.) |
|---------------------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|
|---------------------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|

(a) \_\_\_\_\_

(b) \_\_\_\_\_

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: \_\_\_\_\_  
(Describe as jogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)8. Design pressure<sup>2</sup> 1250 psi at 575°F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft. lb.  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

10. Tubes: Material \_\_\_\_\_ O.D. \_\_\_\_\_ in. Thickness \_\_\_\_\_ inches or gage. Number \_\_\_\_\_ Type \_\_\_\_\_  
(Std. or U.S.)

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

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

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

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

13. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_

| Location | Thickness | Crown<br>Radius | Knuckle<br>Radius | Elliptical<br>Ratio | Conical<br>Apex Angle | Hemispherical<br>Radius | Flat<br>Diameter | Side to Press.<br>(Conv. or Conc.) |
|----------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|
|----------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft. lb.  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

ZX00367145

# FORM N-2 MANUFACTURE DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 6503 Nat'l Bd. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 G1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi  
(Brief description of service for which component was designed)  
minimum.

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

Date June 19 19 75 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)

of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor  
of State of North Carolina

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on June 19 19 75, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date June 19 19 75

[Signature]  
Inspector's Signature

Commissions NC 723, PA, NC 1766, Ohio  
National Board, State, Province and No.

2X00367489

## FORM N-2 (back)

761E387G2  
6503

Items 1-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Top, bottom, ends) (Conv. or Conc.)

(a) \_\_\_\_\_

(b) \_\_\_\_\_

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: \_\_\_\_\_  
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)8. Design pressure<sup>2</sup> 1250 psi at 575<sup>1</sup> °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft.-lb.  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating, Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_13. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Top, bottom, ends) (Conv. or Conc.)

(a) Channel \_\_\_\_\_

(b) Channel \_\_\_\_\_

If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft.-lb.  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles

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

Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Other \_\_\_\_\_ Attached \_\_\_\_\_  
(Yes or No) (Number) (Number) (Describe) (Where & How)<sup>1</sup> If Postweld Heat-Treated.<sup>2</sup> List other internal or external pressure with coincident temperature when applicable.

ZX00367490

# FORM N-2 MANUFACTURER'S DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

(a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.  
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 6543 Nat'l Id. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1974, Addenda date None, Case No. 1361-1 Class I

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)

minimum

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

Date December 10, 1974 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)

Indicate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14483

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14483

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 10, 1974, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date December 10, 1974

[Signature]  
Inspector's Signature

Commissions NC 723, PA. WC 1766, Ohio  
National Board, State, Province and No.

PROJECT NAME HANFORD 2  
CUSTOMER ORDER NUMBER 3758-014  
ITEM NUMBER 1

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

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

5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) \_\_\_\_\_

(b) \_\_\_\_\_

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

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

8. Design pressure<sup>2</sup> 1250 psi at 575 °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

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

12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

13. Heads (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)  
(a) Top, bottom, ends \_\_\_\_\_  
(b) Channel \_\_\_\_\_

(a) \_\_\_\_\_

(b) \_\_\_\_\_

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

Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ (Number) \_\_\_\_\_ Legs \_\_\_\_\_ (Number) \_\_\_\_\_ Other \_\_\_\_\_ (Describe) \_\_\_\_\_ Attached \_\_\_\_\_ (Where & How)

<sup>1</sup> If Postweld Heat-Treated.

<sup>2</sup> List other internal or external pressure with coincident temperature when applicable.



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

As required by the Provisions of the ASME Code Rules

Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)  
(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 5951 Nat'l Id. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Paterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 G1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi  
(Brief description of service for which component was designed)  
minimum.

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

Date December 17 19 74 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)  
Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor  
of State of North Carolina

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 17 19 74 and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date December 17 19 74

[Signature]  
Inspector's Signature

Commissions NC 723 PA 1746 OH 10  
National Board, State, Province and No.

## FORM No. 1 (Rev. 10-1-63)

Items 1-10 to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

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

2. Seams: Long \_\_\_\_\_ H.T. \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

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

3. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Top, bottom, ends) (Conv. or Conc.)

(a) \_\_\_\_\_

(b) \_\_\_\_\_

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

4. Jacket Closure: \_\_\_\_\_  
(Describe as gage and weld, bar, etc. If bargive dimensions, if bolted, describe or sketch)

5. Design pressure \_\_\_\_\_ 1250 \_\_\_\_\_ psi at \_\_\_\_\_ 575 \_\_\_\_\_ °F  
Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft.-lb.  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

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

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

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

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

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

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

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

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ (Number) \_\_\_\_\_ Legs \_\_\_\_\_ (Number) \_\_\_\_\_ Other \_\_\_\_\_ (Describe) \_\_\_\_\_ Attached \_\_\_\_\_ (Where, How)

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

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.  
(Name and address of Manufacturer of part)  
Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 7200 Nat'l Bd. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1974, Addenda date S'74, Case No. \_\_\_\_\_ Class \_\_\_\_\_

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)  
minimum

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

Date January 13, 1975 Signed GE, BWPSD - REM By [Signature]  
(Manufacturer)

Date of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWPSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWPSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this

Manufacturer's Partial Data Report on January 8, 1975, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date January 13, 1975

FOR INFORMATION ONLY

Inspector's Signature [Signature] Commissions NC 779, PA, WC 2L60, Ohio  
National Board, State, Province and No.

PROJECT NAME— HANFORD 2  
CUSTOMER ORDER NUMBER— 3758-014  
ITEM NUMBER— 1

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

4. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_  
(Kind & Spec. No.) (Min. of Range Specified)Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Top, bottom, ends) (Conv. or Conc.)

(a) \_\_\_\_\_

(b) \_\_\_\_\_

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: \_\_\_\_\_  
(Describe as edge and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)8. Design pressure<sup>2</sup> 1250 psi at 575 °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

11. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_  
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

13. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_

Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Conv. or Conc.)

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Other \_\_\_\_\_ Attached \_\_\_\_\_  
(Yes or No) (Number) (Number) (Describe) (Where & How)<sup>1</sup> Postweld Heat-Treated.<sup>2</sup> List other internal or external pressure with coincident temperature when applicable.

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

As required by the Provisions of the ASME Code Rules

1. Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)  
Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 7053 ✓ Nat'l Bd. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-2 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi  
(Brief description of service for which component was designed).  
minimum.

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

Date June 18 19 75 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)

Use of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor  
of State of North Carolina

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on June 18 19 75, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date June 18 19 75

[Signature]  
Inspector's Signature

Commission No. NC 721 PA. No. 1766 04-10  
National Board, State, Province and No.

2X00368021

Items 1-10 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

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

Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_

| Location<br>(Top, bottom, ends) | Thickness | Crown<br>Radius | Knuckle<br>Radius | Elliptical<br>Ratio | Conical<br>Apex Angle | Hemispherical<br>Radius | Flat<br>Diameter | Side to Press.<br>(Conv. or Conc.) |
|---------------------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|
| (a)                             |           |                 |                   |                     |                       |                         |                  |                                    |
| (b)                             |           |                 |                   |                     |                       |                         |                  |                                    |

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_

(Material, Spec. No., T.S., Size, Number)

(Describe or attach sketch)

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

8. Design pressure<sup>1</sup> 1250 psi at 575<sup>1</sup> °F  
Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft.-lb.  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

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

12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

13. Heads (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_

| Location              | Thickness | Crown<br>Radius | Knuckle<br>Radius | Elliptical<br>Ratio | Conical<br>Apex Angle | Hemispherical<br>Radius | Flat<br>Diameter | Side to Press.<br>(Conv. or Conc.) |
|-----------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|
| (a) Top, bottom, ends |           |                 |                   |                     |                       |                         |                  |                                    |
| (b) Channel           |           |                 |                   |                     |                       |                         |                  |                                    |

If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_

(Describe or attach sketch)

Drop Weight \_\_\_\_\_

Charpy Impact \_\_\_\_\_ ft.-lb.

14. Design pressure<sup>1</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

<sup>1</sup> If Postweld Heat-Treated.

<sup>2</sup> List the internal or external pressure & the ambient temperature when applicable.

7X00368023

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

As required by the Provisions of the ASME Code Rules

1. Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.  
(Name and address of Manufacturer of part)
- (b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part 7166 Nat'l Bd. No. \_\_\_\_\_
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date S'74, Case No. \_\_\_\_\_ Class \_\_\_\_\_
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi  
(Brief description of service for which component was designed)
- minimum

FOR INFORMATION ONLY

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

Date January 13, 1975 Signed GE, BWRSO - REM By [Signature]  
(Manufacturer)

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSO-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSO-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on January 8, 1975, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

January 13, 1975

[Signature]  
Inspector's Signature

Commissions NC 779, PA, WC 2L60, Ohio  
National Board, State, Province and No.

PROJECT NAME HANFORD 2  
CUSTOMER ORDER NUMBER 3758-012

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

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

Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) \_\_\_\_\_

(b) \_\_\_\_\_

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

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

8. Design pressure<sup>2</sup> 1250 psi at 575 °F  
Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

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

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

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

12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

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

14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F  
Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_ ft-lb  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

<sup>1</sup> If Postweld Heat-Treated.



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

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)
- Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear components)
2. Identification-Manufacturer's Serial No. of Part 65521 Nat'l Bd. No. 7
- (a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144 G1
- (c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi  
(Brief description of service for which component was designed)  
minimum.

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

Date January 24 19 75 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)  
Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington  
Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington  
Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14438  
Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14438

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor  
of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on January 24 19 75, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.  
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date January 24 19 75  
[Signature] Commissions NC 723, PA, NC 1766, Ohio  
Inspector's Signature National Board, State, Province and No.

7X00367578

## FORM N-2 (back)

Items 1-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_

| Location<br>(Top, bottom, ends) | Thickness | Crown<br>Radius | Knuckle<br>Radius | Elliptical<br>Ratio | Conical<br>Apex Angle | Hemispherical<br>Radius | Flat<br>Diameter | Side to Press.<br>(Conv. or Conc.) |
|---------------------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|
|---------------------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|

(a) \_\_\_\_\_

(b) \_\_\_\_\_

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: \_\_\_\_\_  
(Describe anodes and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)8. Design pressure<sup>2</sup> 1250 psi at 575<sup>3</sup> °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

10. Tubes: Material \_\_\_\_\_ O.D. \_\_\_\_\_ in. Thickness \_\_\_\_\_ inches or gage. Number \_\_\_\_\_ Type \_\_\_\_\_  
(Str. or T.S.)

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

11. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ ft. \_\_\_\_\_ in. Length \_\_\_\_\_ ft. \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

13. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_

| Location | Thickness | Crown<br>Radius | Knuckle<br>Radius | Elliptical<br>Ratio | Conical<br>Apex Angle | Hemispherical<br>Radius | Flat<br>Diameter | Side to Press.<br>(Conv. or Conc.) |
|----------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|
|----------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|------------------------------------|

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

ZX00367577

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

As required by the Provisions of the ASME Code Rules

Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)

Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear components)

2. Identification-Manufacturer's Serial No. of Part 6218 Nat'l Id. No. 5

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 G1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi  
(Brief description of service for which component was designed)  
minimum.

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

Date December 30 19 74 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)

of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14485

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14485

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor  
of State of North Carolina

have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 30 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date December 30 19 74

E. L. Sherrill Commissions NC 723, PA, NC 1766, OH 50  
Inspector's Signature National Board, State, Province and No.

7100367521

## FORM No. 1 (back)

Items 1-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ in. Length \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_6. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Top, bottom, ends)

(a) \_\_\_\_\_

(b) \_\_\_\_\_

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: \_\_\_\_\_  
(Describe as gage and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)8. Design pressure<sup>2</sup> 1250 psi at 575° F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_  
(Kind & Spec. No.) (Subject to pressure) (Weld-c, Bolts)

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

10. Tubes: Material \_\_\_\_\_ O.D. \_\_\_\_\_ in. Thickness \_\_\_\_\_ inches or gage. Number \_\_\_\_\_ Type \_\_\_\_\_  
(Str. or M)

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

11. Shell: Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ in. Corrosion Allowance \_\_\_\_\_ in. Dia. \_\_\_\_\_ in. Length \_\_\_\_\_ in.  
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_13. Heads: (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.  
(Top, bottom, ends)

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Describe or attach sketch)14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_  
Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

16. Nozzles:

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

17. Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Other \_\_\_\_\_ Attached \_\_\_\_\_  
(Yes or No) (Number) (Number) (Describe) (Where & How)<sup>1</sup> If Postweld Heat-Treated.

1X00367522

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

As required by the Provisions of the ASME Code Rules

Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.  
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California  
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 7377 Nat'l Bd. No. \_\_\_\_\_

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi  
(Brief description of service for which component was designed)  
minimum.

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

July 28 19 75 Signed GE, BWRSD - REM By [Signature]  
(Manufacturer)

Certificate of Authorization Expires June 20, 1978 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor  
of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on July 28 19 75, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.  
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date July 28 19 75  
[Signature] Commissions NC 723, PA, PC 1766, Ohio  
Inspector's Signature National Board, State, Province and No.

ZX00366705

Items 1-4 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

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

5. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) \_\_\_\_\_

(b) \_\_\_\_\_

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

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

8. Design pressure<sup>2</sup> 1250 psi at 575<sup>1</sup> °F Drop Weight \_\_\_\_\_ Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_ (ft.-lb.)

Items 9 and 10 to be completed for tube sections

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

Floating. Material \_\_\_\_\_ Dia. \_\_\_\_\_ Thickness \_\_\_\_\_ in. Attachment \_\_\_\_\_

10. Tubes: Material \_\_\_\_\_ O.D. \_\_\_\_\_ in. Thickness \_\_\_\_\_ inches or gage. Number \_\_\_\_\_ Type \_\_\_\_\_  
(Str. or M)

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

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

12. Seams: Long \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ Efficiency \_\_\_\_\_ %

Girth \_\_\_\_\_ H.T.<sup>1</sup> \_\_\_\_\_ R.T. \_\_\_\_\_ No. of Courses \_\_\_\_\_

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

(a) Top, bottom, ends \_\_\_\_\_

(b) Channel \_\_\_\_\_

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

14. Design pressure<sup>2</sup> \_\_\_\_\_ psi at \_\_\_\_\_ °F Drop Weight \_\_\_\_\_ Charpy Impact \_\_\_\_\_  
at temp. of \_\_\_\_\_

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_ FOR INFORMATION ONLY

16. Nozzles:

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

Inspection Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Openings: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

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

<sup>1</sup> If Postweld Heat-Treated.

<sup>2</sup> Indicate design temperature when applicable.

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