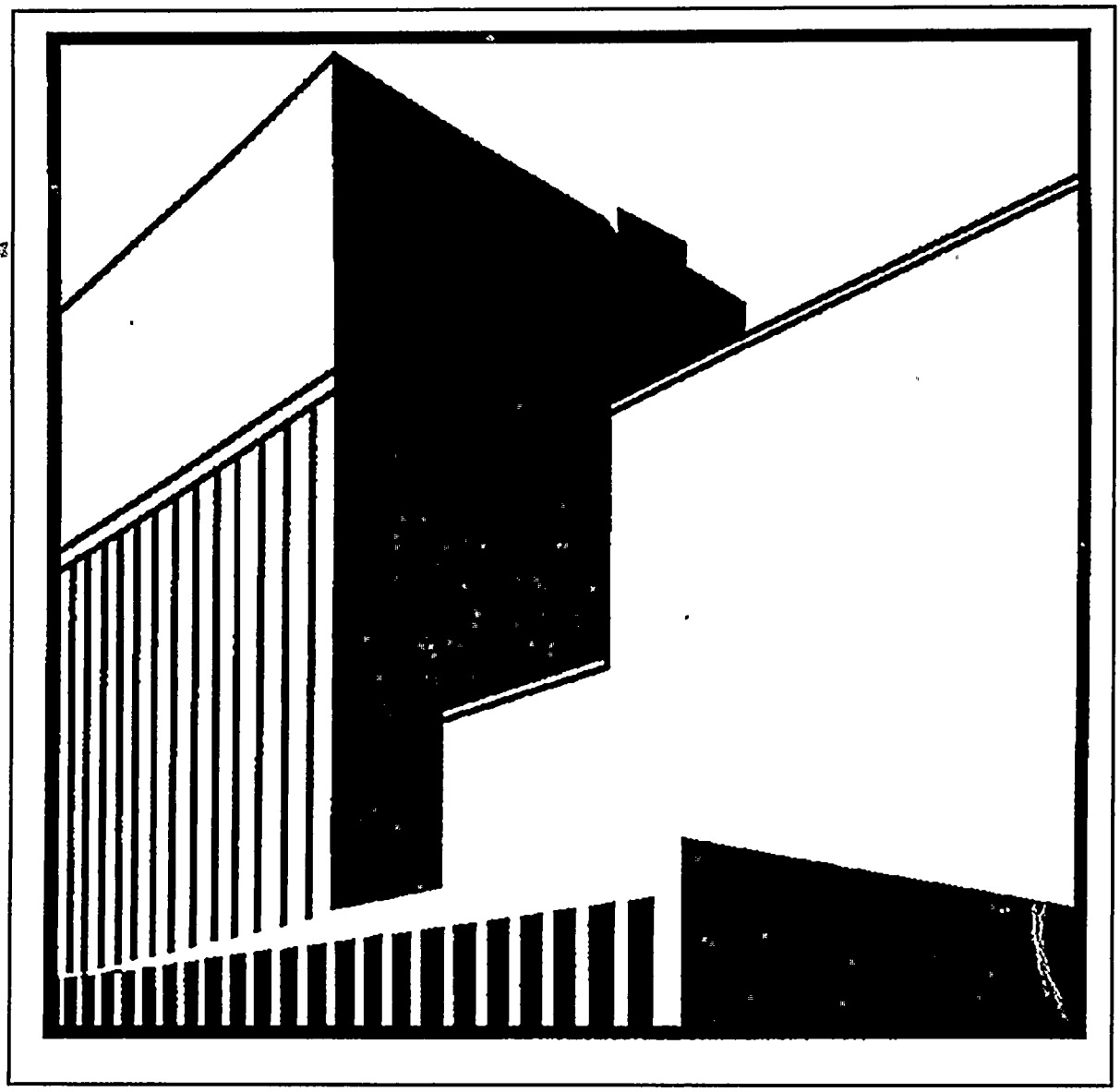

WNP-2
INSERVICE INSPECTION
SUMMARY REPORT
FOR REFUELING OUTAGE
RFO11

Spring, 1996

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

INSERVICE INSPECTION SUMMARY REPORT
FOR
REFUELING OUTAGE RFO11

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: 3486 Megawatts Thermal

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

Prepared By: D Ramey — ISI Engineer — Sept 6, 1996 — Date

Rudolph Smith — Repair/Replacement Engineer — 9/6/96 — Date

Reviewed & Concurred By: Carl M Kemp — Supervisor, Materials and Welding — 9/6/96 — Date

A.S. Barker for J.J. Muth — Supervisor, Quality Support Services — 9/11/96 — Date

Concurrence: [signature] — Authorized Nuclear Inservice Inspector — 9/12/96 — Date

Author: DOROTHY R. GORDON at ~SSPO07
Date: 9/10/96 1:19 PM
Priority: Normal
TO: KEVIN M. AVILA at ~SSPO08
TO: AMANDA S. BARBER at ~SSPO10
TO: WILLIAM H. BARLEY at ~SSPO11
TO: MERRILEE A. BARTEL at ~SSPO10
TO: KAREN E. BUTLER at ~SSPO11
TO: MARIANNE S. COLLINS at ~SSPO11
TO: CLIFFORD R. EDWARDS at ~SSPO03
TO: CHIH-AN FU
TO: DOROTHY R. GORDON
TO: ROGER O. GREGORY at ~SSPO03
TO: KERRY M. GUNTER
TO: BILLY J. HAHN
TO: JOHN A. HARMON
TO: JAMES D. IMEL
TO: PAUL J. INSERRA at ~SSPO14
TO: DENNIS A. KERLEE
TO: SOPHIA S. KIM at ~SSPO05
TO: CARLOS LEON
TO: RONALD D. MADDEN
TO: LINDA M. MAR at ~SSPO08
TO: JAMES W. MASSEY at ~SSPO12
TO: DANIEL L. MOON at ~SSPO12
TO: ARTHUR J. MOORE at ~SSPO08
TO: JOSEPH J. MUTH at ~SSPO16
TO: SANDRA L. NUXALL at ~SSPO08
TO: JOHN N. PACE at ~SSPO06
TO: JOHN F. PETERS at ~SSPO06
TO: LOUISE S. PETERS
TO: MARYANN L. POZNANSKI at ~SSPO08
TO: CALVIN L. ROBINSON at ~SSPO13
TO: ANDRE R. SIMON at ~SSPO02
TO: LARRY W. SYVERSON at ~SSPO15
TO: PAUL L. TOMPKINS at ~SSPO15
TO: WILLIAM W. WADDEL at ~SSPO12
TO: DAVID A. WALKER at ~SSPO15
TO: DON R. WELCH at ~SSPO15
TO: JONATHAN C. WILES at ~SSPO10
TO: LINDA S. WOOSLEY at ~SSPO10
Subject: DELEGATION OF AUTHORITY

---------- Message Contents ----------

From: J.J. Muth, Supervisor, Quality Services

During my absence from the Supply System September 11 through September 13, 1996, Ms. Amanda Barber will act for the Supervisor, Quality Services. Ms. Barber will have full authority of this position with the exception of salary and personnel actions.

Should my scheduled return be delayed, this delegation shall stand until my actual return.

JJM:drg

"original signed and filed"

Table of Contents

SUMMARY

WNP-2 has completed ASME Section XI examinations for the second refueling outage of the second inspection interval (eleventh refuel cycle, RFO11). The following augmented examinations were also completed during this outage: feedwater nozzle inner radius, Generic Letter 88-01, and examinations of high energy line break welds outside of ASME Section XI scope. WNP-2 is on schedule with its Generic Letter 88-01 commitments. No change was found in weld 20RRC(6)-8 indication (identified during RFO6 in Spring, 1991).

EXAMINATION RESULTS

This report summarizes the results of inservice inspection (ISI) of ASME Section III, Code Class 1, 2 and 3 components and their supports performed at Washington Public Power Supply System (Supply System) Nuclear Plant No. 2 (WNP-2) between June 25, 1995 and June 21, 1996. Both General Electric (GE) and Supply System personnel performed the examinations. During this period, WNP-2 completed its eleventh scheduled refueling outage, RFO11. This outage is the second refueling outage of the second inspection interval. This report includes a copy of the NIS-1 Owner's Report of Inservice Inspection for this refueling outage in Appendix A and copies of the NIS-2 Owner's Report of Repair or Replacement in Appendix B.

Documentation supporting this summary report is located in the WNP-2 Operations File (DIC 1100).

The ISI examinations are specified in ASME Section XI and required by 10CFR50.55a. In addition, the following examinations were performed to meet augmented requirements or commitments.

- IGSCC (intergranular stress corrosion cracking) detection in stainless steel welds, based on Generic Letter 88-01.
- Feedwater nozzle inner radius and bore region for NUREG 0619.
- Welds in high energy line break boundary not examined under Section XI.

ASME SECTION XI EXAMINATIONS

The ASME Section XI examinations performed during the eleventh refueling outage comply with the 1989 Edition with no Addenda.

The items examined for ASME Section XI requirements are listed on the NIS-1 Owner's Data Report for Inservice Inspection. A copy is included as Appendix A. Approximately 19% of the required ISI items requiring examination for the second inspection interval have been examined. Table I summarizes the number of items completed through refuel outage eleven (RFO11) by Examination Category and Item Number.

Post refueling leakage test and visual examination per Examination Category B-P found nine (9)

Control Rod Drive housing flanges leaking at various rates, from one (1) drop per minute to one hundred (100) drops per minute. The leaks were acceptable based on the leakage decreasing over time. Relief Requests 2ISI-06 and 2ISI-07 were implemented during this test. A through wall leak on a 3/4 inch process vent line on recirculation system isolation valve RRC-V-67B bonnet was found. The leaking pipe was replaced. The leak was caused by fatigue in the process vent line from nearby flanges. Additional dye penetrant examinations of the other welds in this vent line and the bonnet vent line on RRC-V-67A were acceptable.

During examinations of the removed CRD cap screws (Category B-G-2, Item number B7.80), eight (8) of the 160 cap screws could not be located for performance of the VT-1 examination. It was determined that these eight cap screws were not reinstalled. All 160 of the removed cap screws were replaced with improved design cap screws. The eight cap screws not receiving examination were misplaced after removal. Based on the results of the remaining 152 cap screw VT-1 examinations it was determined that no new degradation mechanisms are present.

Localized pitting corrosion was found in the shank area of some of the examined cap screws. This degradation has been noticed at prior inspections. As with prior inspections the worst case localized pitting was metallurgically analyzed and determined not to exceed Section XI acceptance standards.

AUGMENTED EXAMINATIONS

GL 88-01 IGSCC (ISI Program Plan Section 6.2.3)

Ultrasonic examinations were performed on fourteen (14) category B welds and one (1) category F weld. Table II lists the welds that were examined per GL 88-01. Table III presents the current GL 88-01 status.

The category F weld, 20RRC(6)-8, was examined for the fifth consecutive outage to determine any change in the indication found during the sixth refueling outage. The indication showed no change from RFO10 results. The analysis performed during refueling outage RFO6 for continued operation is still valid. The results of this examination and analysis were submitted to the Commission by letter GO2-96-102, dated May 14, 1996.

High Energy Line Break Augmented Examinations (ISI Program Plan Section 6.2.1)

Seven (7) welds were examined per the high energy line break commitment with no unacceptable indications. The welds examined are listed in Table IV.

Feedwater Nozzle Inner Radius (ISI Program Plan Section 6.2.3)

One feedwater nozzle inner radius, bore, and associated safe-end were examined. No unacceptable indications were found.

Snubber Testing (ISI Program Plan section 6.2.2)

An initial sample of thirty-seven (37) snubbers was selected from the WNP-2 general population of 440 safety-related snubbers. These snubbers were randomly selected by computer sub-routine which is part of the ISI System data base. The selected snubbers were then reviewed to determine if the sample was representative, as required by Technical Specification 4.7.4.e.

Testing of snubbers was performed using portable test devices called "Validators", supplied by the snubber manufacturer. There were no unacceptable results. The snubbers tested are listed on the NIS-1 Owner's Report of Inservice Inspection form in Appendix A.

The outer tube of RHR-20 was found painted during visual examination. There was no paint on support cylinder. The snubber was removed and tested satisfactorily.

NON-REGULATORY AUGMENTED EXAMINATIONS

Additional Reactor Pressure Vessel (RPV) interior visual examinations were performed on jet pump sensing lines, jet pump adjusting screws and incore dry tubes with the guidance contained in General Electric Service Information Letters (SIL). These examinations were performed based on Supply System internal review of the applicable SILs and their application to WNP-2.

During refueling outage RFO9, a crack was found in jet pump 18 sensing line. The crack was reexamined during RFO11. There was no noticeable change from RF09 data. The other nineteen (19) sensing lines were examined as part of the sensing line clamp installation program. No indications were found in these lines.

Eight incore dry tubes were visually examined. No unacceptable indications were noted.

All 80 of the jet pump adjusting screw tack welds were visually examined. Two of the tack welds on two different screws were found to be cracked at RFO10. Reinspection during RFO11 showed no change. During the adjusting screw tack weld examination several set screws on the retaining ring were found with unacceptable gaps between the screw and the inlet mixer piping. The jet pump beams were detensioned and the inlet mixer section was repositioned. The gaps were closed on all but 3 of the jet pumps. Two of the jet pumps with gaps had wedges installed to correct the gaps. The remaining jet pump with a set screw gap was analyzed as acceptable.

REPAIRS AND REPLACEMENTS

Seven (7) significant ASME Section XI repair or replacement activities were performed during the refuel outage RFO11 as listed below. A listing and NIS-2 Owner's Reports for these and other ASME Section XI repair or replacement work accomplished and closed out between July 25, 1995 and June 21, 1996 are provided in Appendix B.

1) Local Power Range Monitoring (LPRM)

Replaced eight (8) Local Power Range Monitoring (LPRM) incore assemblies.

2) Main Steam Relief Valves (MSRV)

Refurbished eleven (11) main steam relief valves. Ten (10) of these main steam relief valves were refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The refurbishment work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs. Replaced eight (8) main steam relief valves.

3) Containment Supply Purge (CSP) System

Replaced three (3) 24" butterfly valves CSP-V-5, CSP-V-6 and CSP-V-9 in Containment Supply Purge (CSP) system.

4) Control Rod Drive (CRD)

Overhauled twenty (20) Control Rod Drives (CRD's) and replaced twenty (20) Control Rod Drives (CRD's).

5) Snubber Optimization Program

As part of Supply System's effort to reduce the number of safety related snubbers at WNP-2, fourteen (14) existing snubbers were replaced with rigid struts. Twenty (29) additional snubbers were deleted.

6) Service Water (SW) System

A through wall pin hole leak was observed on the bottom of the 18" Service Water (SW) Loop A return pipe between SW-FE-1A and valve SW-PCV-38A. Temporary Non Code repair was performed in accordance with Relief Request No 2ISI-16. ASME Section XI work plan was implemented to perform permanent repair as required by PER No 295-1002 and Relief Request No 2ISI-16. The permanent repair consisted of removing a section of 18" pipe containing the through wall pin hole leak and replacing it with new pipe. Based upon the examination of the piping, it was determined that the pinhole leak was the result of localized erosion caused by cavitation induced by the flow conditions developed by the nearby flow orifice. The localized erosion in the similiar designed area on Service Water Loop B is being monitored.

7) Relief Valves

Replaced miscellaneous relief valves such as RHR-RV-1A, SLC-RV-29A, SLC-RV-29B, SW-RV-1A, etc.

Table I SUMMARY OF COMPLETED ITEMS BY EXAMINATION CATEGORY

Category	Item No.	Description	Complete
B-D		Full Penetration Welds of Nozzles in Vessels	
	B3.100	Nz Inside Radius Section	2
B-F		Pressure Retaining Dissimilar Metal Welds	
	B5.10	RPV - eq or > 4 NPS Nz-to-SE Butt	1
	B5.130	Piping - eq or > 4 NPS Dissimilar Metal Butt Welds	6
B-G-2		Pressure Retaining Bolting, 2 in. and less in dia.	
	B7.50	Piping - Bolts, Studs, and Nuts	4
	B7.70	Valves - Bolts, Studs, and Nuts	11
	B7.80	CRD Housing - Blts, Studs and Nuts	20
B-J		Pressure Retaining Welds in Piping	
	B9.11	Circumferential Welds - NPS 4 or Larger	55
	B9.31	Branch Connections NPS 4 or Larger	4
	B9.32	Branch Connections Less Than NPS 4	1
	B9.40	Socket Welds	1
B-K-1		Integral Attachments for Piping, Pumps, and Valves	
	B10.10	Piping - Intg Welded Att	6
	B10.20	Pumps - Intg Welded Att	1
B-M-2		Valve Bodies	
	B12.50	Valve Body - > NPS 4	5
B-P		All Pressure Retaining Components	
	B15.10	RPV - Pressure Retaining Boundary	2
	B15.50	Piping - Pressure Retaining Boundary	31
	B15.60	Pumps - Pressure Retaining Boundary	1
	B15.70	Valves - Pressure Retaining Boundary	75
C-C		Intgrl Att for Vessels, Piping, Pumps, and Valves	
	C3.20	Piping - Integrally Welded Attachments	14
C-F-2		Pressure Retaining Welds in Carbon Piping	
	C5.51	Piping Welds - > 4 NPS, eq or > 3/8 Nom. Wall Thk. - Circumfer	27
	C5.81	Pipe Branch Connections of Branch Piping 2 NPS or Greater - Ci	1
D-A		Systems in Support of Reactor Shutdown Function	
	D1.20	Integral Attachments - Component Supports and Restraints	3
	D1.40	Integral Attachments - Spring Type Supports	2
D-B		Systems in Support of ECCS, CHR, AC, and RHR	
	D2.20	Integral Attachments - Component Supports and Restraints	1
F-A		Supports	
	F1.10A	Cl 1 piping supports, rigid, strut, anchor, rod	4
	F1.10C	Cl 1 piping supports, spring	5
	F1.10D	Cl 1 piping supports, snubbers	3
	F1.20A	Cl 2 piping supports, rigid, strut, anchor, rod	13
	F1.20C	Cl 2 piping supports, spring	8
	F1.20D	Cl 2 piping supports, snubber	2
	F1.30A	Cl 3 piping supports, rigid, strut, anchor, rod	9
	F1.30C	Cl 3 piping supports, spring	2
	F1.40A	Supports other than piping, rigid, strut, anchor	23
	F1.40B	Supports other than piping, constant load type support	2
	F1.40D	Supports other than piping, snubber	4

Table II GL 88-01 WELDS EXAMINED AT REFUELING OUTAGE 11

IdentNo	Desc	DrawNo	Drawpg	Category
12RHR(1)A-16	PIPE TO ELL	RHR-105		B
12RHR(1)A-17	ELL TO PIPE	RHR-105		B
12RHR(1)A-18	PIPE TO VLV	RHR-105		B
12RRC(7)A-1	VALVE TO PIPE	RRC-106		B
12RRC(7)A-2	PIPE TO ELL	RRC-106		B
12RRC(7)A-3	ELL TO PIPE	RRC-106		B
12RRC(7)A-4	PIPE TO ELL	RRC-106		B
12RRC(7)B-4	PIPE TO ELL	RRC-107		B
12RRC(7)B-5	ELL TO PIPE	RRC-107		B
12RRC(7)B-6	PIPE TO SWL	RRC-107		B
20RRC(6)-3	ELL TO PIPE	RRC-105		B
20RRC(6)-4	PIPE TO ELL	RRC-105		B
20RRC(6)-5	ELL TO PIPE	RRC-105		B
20RRC(6)-6	PIPE TO ELL	RRC-105		B
20RRC(6)-8	PIPE TO VALVE	RRC-105		F

Table III STATUS OF GL 88-01 PROGRAM

Category (Total #)	Required within 6 yrs[1]	Required within 10 yrs[1]	WNP-2 Status through R11 (After 6 yrs)[1]
A (57)	7	14	37[2]
B (147)	37	74	61

Category (Total #)[3]	Required within 3 RFO	Required within 4 RFO	WNP-2 Status through R11 (After 2 RFO)
C (25)	20	5	8

Category (Total #)[4]	Required within 1 yrs	WNP-2 Status through R11 (After 1 yr)
F (1)	1	1

1 WNP-2 commitment began at RFO4

2 WNP-2 requirements exceed GL 88-01 because of ASME Section XI requirements

3 Reexamine after stress improvement. Stress improvement performed at RFO9. See NRC letter "Request for Extension of Intergranular Stress Corrosion Cracking (IGSCC) Examination of Category C Welds for the Washington Public Power Supply System Nuclear Plant 2", dated January 22, 1996

4 This category "F" weld was reclassified from category "B" at RFO6.

Table IV HIGH ENERGY LINE BREAK WELDS EXAMINED AT RFO11

IdentNo	Desc	DrawNo	Drawpg
2MS(20)C-1	SOL TO PIPE	MS-203	05
2MS(20)C-2	PIPE TO ELL	MS-203	05
2MS(20)C-3	ELL TO PIPE	MS-203	05
6RWCU(3)-28	VLV TO PIPE	RWCU-301	
6RWCU(3)-29	PIPE TO ELL	RWCU-301	
6RWCU(3)-30	ELL TO PIPE	RWCU-301	
6RWCU(3)-31	PIPE TO ELL	RWCU-301	

APPENDIX A

NIS-1 Owner's Report for Inservice Inspection

FORM NIS-1 OWNER'S DATA REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA
7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Pressure Vessel	CBIN Nuclear Co.	T-45	29936-84W	8
Large Bore Pipe	Bechtel - the piping examined is listed on pages 4-11 of this data report	NA	NA	NA
MS-RV-3C	Crosby Valve and Gage Co.	N63790-00-0052	NA	NA
RCIC-V-66	Anchor/Darling	IN-321	NA	NA
RFW-V-10A	Anchor/Darling	IN-260	NA	NA

FORM NIS-1 (back)

8. Examination Dates 6/25/95 to 6/21/96

9. Inspection Period Identification 1 10. Inspection Interval Identification 2

11. Applicable Edition of Section XI 1989 Addenda none

12. Date/Revision of Inspection Plan December, 1994, Revision 0, change notices through 0-C

13. **Abstract of Examinations and Tests.** Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan. Approximately 19% of the Examinations required for this interval have been completed. See pages 3-11 of this data report for a listing of examinations and tests completed during this refueling outage. Continued on page 3.

14. **Abstract of Results of Examinations and Tests.** All examinations and tests were acceptable except the following: 1) Weld 20RRC(6)-8 indication no change from previous examination; 2) Nine CRD flanges leaked during post outage Class 1 pressure test; 3) A 3/4 inch vent line on Reactor Recirculation Loop B isolation valve was found with through wall leak during post outage Class 1 pressure test; and 4) RHR-V-41A bonnet to body flange leaked during post outage Class 1 pressure test. All snubber functional tests were acceptable.

15. **Abstract of Corrective Measures.** 1) Weld 20RRC(6)-8 reexamination determined indication was still bounded by refueling outage RFO6 (Spring, 1991) analysis. 2) Relief Request 2ISI-06 was implemented for the CRD flanges. The flange leaks were evaluated for corrective action. They were either repaired or accepted based on the leakage decreasing over time. 3) The 3/4 inch vent line on RRC isolation valve was repaired. Continued on page 11.

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

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

Date SEPT. 6 1996 Signed Washington Public Power Supply System By Carl M Terry
Owner

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 Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Data Report during the period 6/25/95 to 6/21/96, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

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

Inspector's Signature

Commissions 7486, 7486 w NJSB-IS
National Board, State, Province, and Endorsements

Date 9/6 1996

1. Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA

13. Abstract of Examinations and Tests (continued).

Snubber Functional Testing IWF-5000

Snubber Mark No.	Position	Description	Serial No.	Test Date
DE-902N	TP	PSA-1 SNUBBER	614	4/16/96
EDR-905N	UA	PSA-1 SNUBBER	594	4/17/96
HY-4235-110	UA	PSA-1/4 SNUBBER	28429	4/15/96
MD-1285-14A	UA	PSA-1/2 SNUBBER	2473	4/17/96
MS-135	UA	PSA-35 SNUBBER	7033	4/18/96
MS-145	UA	PSA-10 SNUBBER	14556	4/17/96
MS-2619-45	UA	PSA-1/4 SNUBBER	28450	4/26/96
MS-954N	UA	PSA-3 SNUBBER	2366	4/26/96
MS-999N	UA	PSA-10 SNUBBER	328	4/18/96
MSRV-2C-3	UA	PSA-10 SNUBBER	4871	4/30/96
MSRV-4A-2	UA	PSA-10 SNUBBER	694	4/29/96
MSRV-5C-2	UA	PSA-10 SNUBBER	4872	5/26/96
MSRV-5C-6	UA	PSA-10 SNUBBER	11858	4/30/96
RCIC-2562-25	UA	PSA-1/2 SNUBBER	2462	4/15/96
RFW-162	W	PSA-10 SNUBBER	132	4/29/96
RHR-183	E	PSA-10 SNUBBER	122	4/15/96
RHR-20	UA	PSA-1/2 SNUBBER	413	4/15/96[1]
RHR-200	UA	PSA-1/2 SNUBBER	2131	4/16/96
RHR-218	E	PSA-10 SNUBBER	308	4/15/96
RHR-2264-22	UA	PSA-1 SNUBBER	352	4/21/96
RHR-264	S	PSA-3 SNUBBER	4471	4/16/96
RHR-274	UA	PSA-3 SNUBBER	2590	4/16/96
RHR-282	UA	PSA-35 SNUBBER	9256	4/29/96
RHR-286	E	PSA-10 SNUBBER	15458	4/25/96
RHR-325	UA	PSA-1/2 SNUBBER	119	4/16/96
RHR-345	E	PSA-1 SNUBBER	571	4/15/96
RHR-390	UA	PSA-35 SNUBBER	10569	4/25/96
RHR-406	UA	PSA-3 SNUBBER	2588	4/16/96
RHR-419	E	PSA-3 SNUBBER	4432	4/15/96
RHR-437	S	PSA-3 SNUBBER	4456	4/16/96
RHR-52	UA	PSA-3 SNUBBER	4463	4/16/96
RHR-548	E	PSA-3 SNUBBER	630	4/16/96
RHR-944N	UA	PSA-3 SNUBBER	4411	4/17/96
RHR-962N	UA	PSA-10 SNUBBER	123	4/15/96
RHR-SB-33	UA	PSA-10 SNUBBER	11851	4/26/96
RRC-SB-3	UA	PSA-100 SNUBBER	617	4/30/96
SGT-11	BM	PSA-10 SNUBBER	7787	4/16/96
SW-124	N	PSA-35 SNUBBER	7037	4/16/96

KEY

BM	Bottom	NE	Northeast	SE	Southeast	UA	Single snubber
E	East	NW	Northwest	S	South	W	West
N	North	SW	Southwest	TP	Top		

Notes to snubber functional testing

All snubber functional tests were acceptable. None of the tested snubbers require testing at the next refueling outage. Testing results are in PPM 7.4.7.4.2.

[1] Snubber RHR-20 was tested due to paint found on extension tube. Results were acceptable.

1. Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA

13. Abstract of Examinations and Tests (continued).

Identification No	Description	Diagram No.	Pg	Method	Report No.	Date	Results(1)
Examination Category: B-D							
Item No.: B3.100							
N4-30-IR	FW NZ-IR @ 30	RPV-101		VOL	2RPU-002	4/23/96	A
Examination Category: B-F							
Item No.: B5.10							
12RFW(1)AC-13	SE TO N4	RFW-101	05	VOL	R-R11-020	4/26/96	A
Examination Category: B-G-2							
Item No.: B7.50							
6RCIC(1)-41ABD	FLANGE BOLTING	RCIC-102	03	VT-1	2RIV-002	5/01/96	A
8MSR-3B-2BD	FLANGE BOLTING	MS-102	01	VT-1	2MSV-053	4/16/96	A
8MSR-4B-2BD	FLANGE BOLTING	MS-102	01	VT-1	2MSV-050	4/16/96	A
8MSR-5B-2BD	FLANGE BOLTING	MS-102	01	VT-1	2MSV-052	4/16/96	A
Item No.: B7.70							
LPCS-V-5-BLT	VALVE BOLTING	LPCS-101	01	VT-1	2LPV-001	4/26/96	A
MS-RV-1A-BLT	VALVE BOLTING	MS-101	01	VT-1	2MSV-043	3/21/96	A
					2MSV-044	3/21/96	R
MS-RV-1B-BLT	VALVE BOLTING	MS-102	01	VT-1	2MSV-048	3/21/96	A
MS-RV-1C-BLT	VALVE BOLTING	MS-103	01	VT-1	2MSV-045	3/21/96	A
MS-RV-1D-BLT	VALVE BOLTING	MS-104	01	VT-1	2MSV-041	3/21/96	A
MS-RV-2A-BLT	VALVE BOLTING	MS-101	01	VT-1	2MSV-046	3/21/96	A
MS-RV-3A-BLT	VALVE BOLTING	MS-101	01	VT-1	2MSV-040	3/21/96	A
MS-RV-3B-BLT	VALVE BOLTING	MS-102	01	VT-1	2MSV-054	4/16/96	A
MS-RV-3C-BLT	VALVE BOLTING	MS-103	01	VT-1	2MSV-039	3/21/96	A
MS-RV-4A-BLT	VALVE BOLTING	MS-101	01	VT-1	2MSV-049	3/21/96	A
MS-RV-4B-BLT	VALVE BOLTING	MS-102	01	VT-1	2MSV-051	4/16/96	A
MS-RV-4C-BLT	VALVE BOLTING	MS-103	01	VT-1	2MSV-042	3/21/96	A
MS-RV-5B-BLT	VALVE BOLTING	MS-102	01	VT-1	2MSV-047	3/21/96	A
					2MSV-055	4/16/96	A
RHR-V-111A-BLT	VALVE BOLTING	RHR-101		VT-1	2RHV-005	4/23/96	A
RHR-V-42A-BLT	VALVE BOLTING	RHR-101		VT-1	2RHV-006	5/02/96	A
Item No.: B7.80							
CRD HOUSING 06-27 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-002	5/24/96	A
CRD HOUSING 06-31 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-001	5/24/96	A
CRD HOUSING 10-19 BLT	CRD HOUSING BLT	RPV-102		VT-1	2CRV-001	5/24/96	A
					2RPV-002	9/01/95	A(7)
CRD HOUSING 10-43 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-003	5/24/96	A

Notes are on page 11

1. Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA

13. Abstract of Examinations and Tests (continued).

Identification No	Description	Diagram No.	Pg	Method	Report No.	Date	Results(1)
Examination Category: B-G-2							
Item No.: B7.80							
CRD HOUSING 10-47 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-003	5/24/96	A
CRD HOUSING 14-19 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-001	5/24/96	A
CRD HOUSING 14-27 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-002	5/24/96	A
CRD HOUSING 14-47 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-002	5/24/96	A
CRD HOUSING 22-39 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-003	5/24/96	A
CRD HOUSING 22-55 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-003	5/24/96	A
CRD HOUSING 26-03 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-001	5/24/96	A
CRD HOUSING 38-31 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-002	5/24/96	A
CRD HOUSING 38-35 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-003	5/24/96	A
CRD HOUSING 38-39 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-002	5/24/96	A
CRD HOUSING 42-11 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-001	5/24/96	A
CRD HOUSING 42-23 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-002	5/24/96	A
CRD HOUSING 46-11 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-001	5/24/96	A
CRD HOUSING 46-15 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-001	5/24/96	A
CRD HOUSING 46-31 BLT	CRD HOUSING BLT	RPV-102		VT-1	2RPV-002	9/01/95	A(7)
					2CRV-003	5/24/96	A
Examination Category: B-J							
Item No.: B9.11							
12RHR(1)A-16	PIPE TO ELL	RHR-105		SUR	2RHP-001	4/30/96	A
				VOL	R-R11-038	5/01/96	A
12RHR(1)A-17	ELL TO PIPE	RHR-105		SUR	2RHP-002	4/30/96	A
				VOL	R-R11-039	5/01/96	A
12RHR(1)A-18	PIPE TO VLV	RHR-105		SUR	2RHP-002	4/30/96	A
				VOL	R-R11-040	5/01/96	A
12RRC(7)A-1	VALVE TO PIPE	RRC-106		SUR	2RRP-004	4/23/96	A
				VOL	R-R11-022	4/26/96	A
12RRC(7)A-2	PIPE TO ELL	RRC-106		SUR	2RRP-004	4/23/96	A
				VOL	R-R11-023	4/26/96	A
12RRC(7)A-3	ELL TO PIPE	RRC-106		SUR	2RRP-005	4/23/96	A
				VOL	R-R11-025	4/26/96	A
12RRC(7)A-4	PIPE TO ELL	RRC-106		SUR	2RRP-005	4/23/96	A
				VOL	R-R11-024	4/26/96	A
12RRC(7)B-4	PIPE TO ELL	RRC-107		SUR	2RRP-006	4/25/96	A
				VOL	R-R11-031	4/30/96	A
12RRC(7)B-5	ELL TO PIPE	RRC-107		SUR	2RRP-006	4/25/96	A
				VOL	R-R11-030	4/30/96	A
12RRC(7)B-6	PIPE TO SWL	RRC-107		SUR	2RRP-006	4/25/96	A
				VOL	R-R11-032	4/29/96	A
14LPCI(1)A-2	PIPE TO ELL	RHR-101		SUR	2RHM-012	4/24/96	A

Notes are on page 11

1. Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA

13. Abstract of Examinations and Tests (continued).

Identification No	Description	Diagram No.	Pg	Method	Report No.	Date	Results(1)
Examination Category: B-J							
Item No.: B9.11							
14LPCI(1)A-2	PIPE TO ELL	RHR-101		VOL	R-R11-026	4/29/96	A
20RHR(2)-10	PIPE TO ELL	RHR-104		SUR	2RHM-014	4/25/96	A
				VOL	R-R11-028	4/27/96	A
20RHR(2)-9	ELL TO PIPE	RHR-104		SUR	2RHM-013	4/25/96	A
				VOL	R-R11-027	4/27/96	A
20RRC(6)-3	ELL TO PIPE	RRC-105		SUR	2RRP-003	4/22/96	A
				VOL	R-R11-018	4/26/96	A
20RRC(6)-4	PIPE TO ELL	RRC-105		SUR	2RRP-003	4/22/96	A
				VOL	R-R11-017	4/26/96	A
20RRC(6)-5	ELL TO PIPE	RRC-105		SUR	2RRP-005	4/23/96	A
				VOL	R-R11-015	4/25/96	A
20RRC(6)-6	PIPE TO ELL	RRC-105		SUR	2RRP-005	4/23/96	A
				VOL	R-R11-016	4/25/96	A
20RRC(6)-8	PIPE TO VALVE	RRC-105		VOL	R-R11-019	4/24/96	R(2)
24RFW(1)A-2	PIPE TO VALVE	RFW-101	01	SUR	2FWM-006	4/19/96	A
				VOL	R-R11-021	4/26/96	A
24RFW(1)A-3	VALVE TO PENE	RFW-101	01	SUR	2FWM-009	4/20/96	A
				VOL	R-R11-011	4/25/96	A
24RFW(1)A-4	PENE TO VALVE	RFW-101	01	VOL	R-R11-009	4/24/96	A
24RFW(1)A-5	VALVE TO PIPE	RFW-101	01	VOL	R-R11-010	4/24/96	A
24RFW(1)B-1	VALVE TO PIPE	RFW-102	01	SUR	2FWM-010	4/20/96	A
				VOL	R-R11-008	4/23/96	A
24RFW(1)B-2	PIPE TO VALVE	RFW-102	01	SUR	2FWM-008	4/20/96	A
				VOL	R-R11-007	4/23/96	A
24RFW(1)B-3	VALVE TO PENE	RFW-102	01	SUR	2FWM-007	4/20/96	A
				VOL	R-R11-006	4/23/96	A
26MS(1)A-15	PIPE TO VALVE	MS-101	02	SUR	2MSM-020	4/25/96	A
				VOL	R-R11-029	4/29/96	A
4RFW(11)A-1	TEE TO PIPE	RFW-103		VOL	R-R11-014	4/25/96	A
4RFW(11)A-2	PIPE TO ELL	RFW-103		SUR	2FWM-005	4/19/96	A
				VOL	R-R11-013	4/25/96	A
4RFW(11)A-3	ELL TO SLEEVE	RFW-103		SUR	2FWM-005	4/19/96	A
				VOL	R-R11-012	4/24/96	A
5RFW(11)B-2	SLEEVE TO WOL	RFW-102	01	SUR	2FWM-012	4/20/96	A
				VOL	R-R11-005	4/21/96	A
6RCIC(1)-41A	PIPE TO FLANGE	RCIC-102	03	SUR	2RIM-005	5/03/96	A
				VOL	R-R11-045	5/07/96	A
6RCIC(1)-42	FLANGE TO ELL	RCIC-102	03	SUR	2RIM-005	5/03/96	A
				VOL	R-R11-046	5/07/96	A
6RCIC(1)-43	ELL TO PIPE	RCIC-102	03	SUR	2RIM-005	5/03/96	A
				VOL	R-R11-047	5/07/96	A
6RWCU(3)-27	PIPE TO VALVE	RWCU-101	05	VOL	R-R11-048	5/10/96	A
8MSR-5B1	SWL TO PIPE	MS-102	01	SUR	2MSM-015	4/16/96	A
				VOL	R-R11-001	4/19/96	A
Item No.: B9.31							
24RFW(1)B-1/5RFW(11)-4	PIPE TO WOL	RFW-102	01	SUR	2FWM-013	4/20/96	A
				VOL	R-R11-004	4/24/96	A
26MS(1)B-9/8MSR-3B	PIPE TO SWL	MS-102	01	SUR	2MSM-014	4/16/96	A
				VOL	R-R11-002	4/19/96	A
26MS(1)B-9/8MSR-5B	PIPE TO SWL	MS-102	01	SUR	2MSM-013	4/16/96	A
				VOL	R-R11-003	4/19/96	A

Notes are on page 11

1. Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA

13. Abstract of Examinations and Tests (continued).

Identification No	Description	Diagram No.	Pg	Method	Report No.	Date	Results(1)
Examination Category: B-J							
Item No.: B9.40							
5RFW(11)B-1	SLEEVE-SLEEVE	RFW-102	01	SUR	2FWM-011	4/20/96	A
Examination Category: B-K-1							
Item No.: B10.10							
MS FLUED HEAD A	FLUED HEAD WELD	MS-101	02	SUR	2MSM-016	4/18/96	A
RCIC-940N(W)	1 WELDED LUG	RCIC-102	03	SUR	2RIM-005	5/03/96	A
RHR-528(W)	4 WELDED LUGS	RHR-101		SUR	2RHM-011	4/23/96	A
Examination Category: B-M-2							
Item No.: B12.50							
MS-RV-3C-BDY	VALVE BODY	MS-103	01	VT-3	2MSV-038	3/21/96	A
RCIC-V-63-BDY	VALVE BODY	RCIC-101	01	VT-3	2RIV-003	5/11/96	A
RCIC-V-66-BDY	VALVE BODY	RCIC-102	03	VT-3	2RIV-001	4/17/96	A
RFW-V-10A-BDY	VALVE BODY	RFW-101	01	VT-3	2FWV-001	4/26/96	A
Examination Category: B-P							
Item No.: B15.10							
RPV-PB-101(L)	LK PRES BNDRY	RPV-101		VT-2	2VT2-96	6/05/96	A(3)
RPV-PB-102(L)	LK PRES BNDRY	RPV-102		VT-2	2VT2-96	6/05/96	A(3,4)
Item No.: B15.50							
HPCS-PB-101(L)	LK PRES BNDRY	HPCS-101		VT-2	2VT2-96	6/05/96	A(3)
LPCS-PB-101(L)	LK PRES BNDRY	LPCS-101		VT-2	2VT2-96	6/05/96	A(3)
MS-PB-101(L)	LK PRES BNDRY	MS-101		VT-2	2VT2-96	6/05/96	A(3)
MS-PB-102(L)	LK PRES BNDRY	MS-102		VT-2	2VT2-96	6/05/96	A(3)
MS-PB-103(L)	LK PRES BNDRY	MS-103		VT-2	2VT2-96	6/05/96	A(3)
MS-PB-104(L)	LK PRES BNDRY	MS-104		VT-2	2VT2-96	6/05/96	A(3)
MS-PB-105(L)	LK PRES BNDRY	MS-105		VT-2	2VT2-96	6/05/96	A(3)
MS-PB-106(L)	LK PRES BNDRY	MS-106		VT-2	2VT2-96	6/05/96	A(3)
RCIC-PB-101(L)	LK PRES BNDRY	RCIC-101		VT-2	2VT2-96	6/05/96	A(3)
RCIC-PB-102(L)	LK PRES BNDRY	RCIC-102		VT-2	2VT2-96	6/05/96	A(3)
RFW-PB-101(L)	LK PRES BNDRY	RFW-101		VT-2	2VT2-96	6/05/96	A(3)
RFW-PB-102(L)	LK PRES BNDRY	RFW-102		VT-2	2VT2-96	6/05/96	A(3)
RFW-PB-103(L)	LK PRES BNDRY	RFW-103		VT-2	2VT2-96	6/05/96	A(3)
RHR-PB-101(L)	LK PRES BNDRY	RHR-101		VT-2	2VT2-96	6/05/96	A(3)
RHR-PB-102(L)	LK PRES BNDRY	RHR-102		VT-2	2VT2-96	6/05/96	A(3)
RHR-PB-103(L)	LK PRES BNDRY	RHR-103		VT-2	2VT2-96	6/05/96	A(3)
RHR-PB-104(L)	LK PRES BNDRY	RHR-104		VT-2	2VT2-96	6/05/96	A(3)
RHR-PB-105(L)	LK PRES BNDRY	RHR-105		VT-2	2VT2-96	6/05/96	A(3)
RHR-PB-106(L)	LK PRES BNDRY	RHR-106		VT-2	2VT2-96	6/05/96	A(3)
RRC-PB-101(L)	LK PRES BNDRY	RRC-101		VT-2	2VT2-96	6/05/96	R(3,5)
RRC-PB-102(L)	LK PRES BNDRY	RRC-102		VT-2	2VT2-96	6/05/96	A(3)
RRC-PB-104(L)	LK PRES BNDRY	RRC-104		VT-2	2VT2-96	6/05/96	A(3)
RRC-PB-105(L)	LK PRES BNDRY	RRC-105		VT-2	2VT2-96	6/05/96	A(3)
RRC-PB-106(L)	LK PRES BNDRY	RRC-106		VT-2	2VT2-96	6/05/96	A(3)
RRC-PB-107(L)	LK PRES BNDRY	RRC-107		VT-2	2VT2-96	6/05/96	A(3)
RRC-PB-108(L)	LK PRES BNDRY	RRC-108		VT-2	2VT2-96	6/05/96	A(3)
RRC-PB-109(L)	LK PRES BNDRY	RRC-109		VT-2	2VT2-96	6/05/96	A(3)
RRC-PB-110(L)	LK PRES BNDRY	RRC-110		VT-2	2VT2-96	6/05/96	A(3)
RRC-PB-111(L)	LK PRES BNDRY	RRC-111		VT-2	2VT2-96	6/05/96	A(3)
RWCU-PB-101(L)	LK PRES BNDRY	RWCU-101		VT-2	2VT2-96	6/05/96	A(3)
SLC-PB-101(L)	LK PRES BNDRY	SLC-101		VT-2	2VT2-96	6/05/96	A(3)

Notes are on page 11

1. Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA

13. Abstract of Examinations and Tests (continued).

Identification No	Description	Diagram No.	Pg	Method	Report No.	Date	Results(1)
Examination Category: B-P							
Item No.: B15.70							
HPCS-V-4-BDY(L)	LK PRES TEST	HPCS-101	01	VT-2	2VT2-96	6/05/96	A
HPCS-V-5-BDY(L)	LK PRES TEST	HPCS-101	02	VT-2	2VT2-96	6/05/96	A
HPCS-V-51-BDY(L)	LK PRES TEST	HPCS-101	02	VT-2	2VT2-96	6/05/96	A
LPCS-V-5-BDY(L)	LK PRES TEST	LPCS-101	01	VT-2	2VT2-96	6/05/96	A
LPCS-V-51-BDY(L)	LK PRES TEST	LPCS-101	02	VT-2	2VT2-96	6/05/96	A
LPCS-V-6-BDY(L)	LK PRES TEST	LPCS-101	02	VT-2	2VT2-96	6/05/96	A
MS-RV-1A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	2VT2-96	6/05/96	A
MS-RV-1B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-96	6/05/96	A
MS-RV-1C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-96	6/05/96	A
MS-RV-1D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	2VT2-96	6/05/96	A
MS-RV-2A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	2VT2-96	6/05/96	A
MS-RV-2B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-96	6/05/96	A
MS-RV-2C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-96	6/05/96	A
MS-RV-2D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	2VT2-96	6/05/96	A
MS-RV-3A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	2VT2-96	6/05/96	A
MS-RV-3B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-96	6/05/96	A
MS-RV-3C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-96	6/05/96	A
MS-RV-3D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	2VT2-96	6/05/96	A
MS-RV-4A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	2VT2-96	6/05/96	A
MS-RV-4B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-96	6/05/96	A
MS-RV-4C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-96	6/05/96	A
MS-RV-4D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	2VT2-96	6/05/96	A
MS-RV-5B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-96	6/05/96	A
MS-RV-5C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-96	6/05/96	A
MS-V-22A-BDY(L)	LK PRES TEST	MS-101	02	VT-2	2VT2-96	6/05/96	A
MS-V-22B-BDY(L)	LK PRES TEST	MS-102	02	VT-2	2VT2-96	6/05/96	A
MS-V-22C-BDY(L)	LK PRES TEST	MS-103	02	VT-2	2VT2-96	6/05/96	A
MS-V-22D-BDY(L)	LK PRES TEST	MS-104	02	VT-2	2VT2-96	6/05/96	A
MS-V-28A-BDY(L)	LK PRES TEST	MS-101	02	VT-2	2VT2-96	6/05/96	A
MS-V-28B-BDY(L)	LK PRES TEST	MS-102	02	VT-2	2VT2-96	6/05/96	A
MS-V-28C-BDY(L)	LK PRES TEST	MS-103	02	VT-2	2VT2-96	6/05/96	A
MS-V-28D-BDY(L)	LK PRES TEST	MS-104	02	VT-2	2VT2-96	6/05/96	A
RCIC-V-13-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	2VT2-96	6/05/96	A
RCIC-V-63-BDY(L)	LK PRES TEST	RCIC-101	01	VT-2	2VT2-96	6/05/96	A
RCIC-V-64-BDY(L)	LK PRES TEST	RCIC-101	01	VT-2	2VT2-96	6/05/96	A
RCIC-V-65-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	2VT2-96	6/05/96	A
RCIC-V-66-BDY(L)	LK PRES TEST	RCIC-102	03	VT-2	2VT2-96	6/05/96	A
RFW-V-10A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	2VT2-96	6/05/96	A
RFW-V-10B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	2VT2-96	6/05/96	A
RFW-V-11A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	2VT2-96	6/05/96	A
RFW-V-11B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	2VT2-96	6/05/96	A
RFW-V-32A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	2VT2-96	6/05/96	A
RFW-V-32B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	2VT2-96	6/05/96	A
RFW-V-65A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	2VT2-96	6/05/96	A
RFW-V-65B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	2VT2-96	6/05/96	A
RHR-V-111A-BDY(L)	LK PRES TEST	RHR-101		VT-2	2VT2-96	6/05/96	A
RHR-V-111B-BDY(L)	LK PRES TEST	RHR-102		VT-2	2VT2-96	6/05/96	A
RHR-V-111C-BDY(L)	LK PRES TEST	RHR-103		VT-2	2VT2-96	6/05/96	A
RHR-V-112A-BDY(L)	LK PRES TEST	RHR-105		VT-2	2VT2-96	6/05/96	A
RHR-V-112B-BDY(L)	LK PRES TEST	RHR-106		VT-2	2VT2-96	6/05/96	A
RHR-V-113-BDY(L)	LK PRES TEST	RHR-104		VT-2	2VT2-96	6/05/96	A
RHR-V-19-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	2VT2-96	6/05/96	A
RHR-V-23-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	2VT2-96	6/05/96	A
RHR-V-41A-BDY(L)	LK PRES TEST	RHR-101		VT-2	2VT2-96	6/05/96	R(6)

Notes are on page 11

1. Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA

13. Abstract of Examinations and Tests (continued).

Identification No	Description	Diagram No.	Pg	Method	Report No.	Date	Results(1)
Examination Category: B-P							
Item No.: B15.70							
RHR-V-41B-BDY(L)	LK PRES TEST	RHR-102		VT-2	2VT2-96	6/05/96	A
RHR-V-41C-BDY(L)	LK PRES TEST	RHR-103		VT-2	2VT2-96	6/05/96	A
RHR-V-42A-BDY(L)	LK PRES TEST.	RHR-101		VT-2	2VT2-96	6/05/96	A
RHR-V-42B-BDY(L)	LK PRES TEST	RHR-102		VT-2	2VT2-96	6/05/96	A
RHR-V-42C-BDY(L)	LK PRES TEST	RHR-103		VT-2	2VT2-96	6/05/96	A
RHR-V-50A-BDY(L)	LK PRES TEST	RHR-105		VT-2	2VT2-96	6/05/96	A
RHR-V-50B-BDY(L)	LK PRES TEST	RHR-106		VT-2	2VT2-96	6/05/96	A
RHR-V-53A-BDY(L)	LK PRES TEST	RHR-105		VT-2	2VT2-96	6/05/96	A
RHR-V-53B-BDY(L)	LK PRES TEST	RHR-106		VT-2	2VT2-96	6/05/96	A
RHR-V-8-BDY(L)	LK PRES TEST	RHR-104		VT-2	2VT2-96	6/05/96	A
RHR-V-9-BDY(L)	LK PRES TEST	RHR-104		VT-2	2VT2-96	6/05/96	A
RRC-V-23A-BDY(L)	LK PRES TEST	RRC-101	01	VT-2	2VT2-96	6/05/96	A
RRC-V-23B-BDY(L)	LK PRES TEST	RRC-102	01	VT-2	2VT2-96	6/05/96	A
RRC-V-60A-BDY(L)	LK PRES TEST	RRC-101	02	VT-2	2VT2-96	6/05/96	A
RRC-V-60B-BDY(L)	LK PRES TEST	RRC-102	02	VT-2	2VT2-96	6/05/96	A
RRC-V-67A-BDY(L)	LK PRES TEST	RRC-101	02	VT-2	2VT2-96	6/05/96	A
RRC-V-67B-BDY(L)	LK PRES TEST	RRC-102	02	VT-2	2VT2-96	6/05/96	A
RWCU-V-1-BDY(L)	LK PRES TEST	RWCU-101	04	VT-2	2VT2-96	6/05/96	A
RWCU-V-102-BDY(L)	LK PRES TEST	RWCU-101	02	VT-2	2VT2-96	6/05/96	A
RWCU-V-4-BDY(L)	LK PRES TEST	RWCU-101	05	VT-2	2VT2-96	6/05/96	A
RWCU-V-40-BDY(L)	LK PRES TEST	RFW-103		VT-2	2VT2-96	6/05/96	A
Examination Category: C-C							
Item No.: C3.20							
RHR-117(W)	4 WELDED LUGS	RHR-209	01	SUR	2RHM-025	5/14/96	A
RHR-118(W)	4 WELDED LUGS	RHR-209	02	SUR	2RHM-027	5/15/96	A
RHR-121(W)	8 WELDED LUGS	RHR-206	01	SUR	2RHM-021	5/02/96	R
					2RHM-024	5/03/96	A
RHR-138(W)	4 WELDED LUGS	RHR-205	04	SUR	2RHM-019	5/01/96	A
RHR-230(W)	4 WELDED LUGS	RHR-207	11	SUR	2RHM-026	5/14/96	A
RHR-354(W)	4 WELDED LUGS	RHR-201	05	SUR	2RHM-018	5/01/96	A
RHR-365(W)	12 WELDED LUGS	RHR-201	06	SUR	2RHM-023	5/02/96	A
RHR-367(W)	4 WELDED LUGS	RHR-201	06	SUR	2RHM-022	5/02/96	A
Examination Category: C-F-2							
Item No.: C5.51							
10HPCS(9)-1	TEE TO PIPE	HPCS-202	03	SUR	2HPM-002	4/29/96	A
				VOL	R-R11-037	5/01/96	A
18RHR(1)A-14	PIPE TO ELL	RHR-201	02	SUR	2RHM-015	4/26/96	A
				VOL	R-R11-035	5/01/96	A
18RHR(1)A-15	ELL TO PIPE	RHR-201	02	SUR	2RHM-015	4/26/96	A
				VOL	R-R11-034	4/30/96	A
18RHR(1)A-60	PIPE TO ELL	RHR-201	08	SUR	2RHM-020	5/01/96	A
				VOL	R-R11-044	5/02/96	A
18RHR(1)A-61	ELL TO PIPE	RHR-201	08	SUR	2RHM-020	5/01/96	A
				VOL	R-R11-041	5/02/96	A
18RHR(11)A-8	PIPE TO ELL	RHR-201	05	SUR	2RHM-017	5/01/96	A
				VOL	R-R11-043	5/02/96	A
18RHR(11)A-9	ELL TO PIPE	RHR-201	05	SUR	2RHM-016	5/01/96	A
				VOL	R-R11-042	5/02/96	A
6CRD(12)A-18	PIPE TO ELL	CRD-201	02	SUR	2CRM-001	5/14/96	A
				VOL	R-R11-055	5/14/96	A
6CRD(12)A-3	ELL TO ELL	CRD-201	01	SUR	2CRM-002	5/14/96	A
				VOL	R-R11-054	5/14/96	A

Notes are on page 11

1. Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA

13. Abstract of Examinations and Tests (continued).

Identification No	Description	Diagram No.	Pg	Method	Report No.	Date	Results(1)
Examination Category: C-F-2							
Item No.: C5.51							
6RCIC(1)-111	PIPE TO VALVE	RCIC-205	6A	SUR	2RIM-003	4/26/96	A
				VOL	R-R11-033	5/01/96	A
6RCIC(1)-46	NOZZLE TO PIPE	RCIC-205	01	SUR	2RIM-006	5/10/96	A
				VOL	R-R11-053	5/11/96	A
6RCIC(6)-11	ELL TO PIPE	RCIC-205	03	SUR	2RIM-004	4/26/96	A
				VOL	R-R11-036	5/01/96	A
Examination Category: D-A							
Item No.: D1.20							
MSRV-1A-4(W)	WELDED ATTACH	MS-301	01	VT-3	2MSV-060	4/16/96	A
MSRV-3A-4(W)	WELDED ATTACH	MS-303	02	VT-3	2MSV-059	4/16/96	A
MSRV-3B-7(W)	WELDED ATTACH	MS-307	03	VT-3	2MSV-057	4/16/96	A
Item No.: D1.40							
MS-267(W)	WELDED ATTACH	MS-301	02	VT-3	2MSV-061	4/16/96	A
MS-270(W)	WELDED ATTACH	MS-302	02	VT-3	2MSV-058	4/16/96	A
Examination Category: D-B							
Item No.: D2.20							
SW-198(W)	WELDED ATTACH	SW-305	01	VT-3	2SWV-001	4/01/96	A
Examination Category: F-A							
Item No.: F1.10A							
SLC-4475-122	STRUT	SLC-101	05	VT-3	2HV-059	4/26/96	A
Item No.: F1.10C							
MS-HB-2	SPRING	MS-102	01	VT-3	2HV-053	4/16/96	A
RCIC-940N	SPRING	RCIC-102	03	VT-3	2HV-070	5/02/96	A
RHR-431	SPRING	RHR-104		VT-3	2HV-057	4/24/96	A
RHR-510	SPRING	RHR-105		VT-3	2HV-060	4/29/96	A
Item No.: F1.10D							
RHR-941N	PSA-10 SNUBBER	RHR-101		VT-3	2HV-058	4/25/96	A
RHR-SA-33	PSA-10 SNUBBER	RHR-105		VT-3	2HV-061	4/29/96	A
RHR-SA-34	PSA-35 SNUBBER	RHR-105		VT-3	2HV-062	4/29/96	A
Item No.: F1.20A							
RHR-230	BOX	RHR-207	11	VT-3	2HV-074	5/14/96	A
RHR-365	STRUT	RHR-201	06	VT-3	2HV-066	5/01/96	A
					2HV-071	5/07/96	A
RHR-366	STRUT	RHR-201	06	VT-3	2HV-065	5/01/96	A
Item No.: F1.20C							
RHR-117	SPRING	RHR-209	01	VT-3	2HV-075	5/14/96	A
RHR-118	SPRING	RHR-209	02	VT-3	2HV-078	5/14/96	A
RHR-138	SPRING	RHR-205	04	VT-3	2HV-067	5/02/96	A
RHR-354	SPRING	RHR-201	05	VT-3	2HV-063	5/01/96	A
RHR-367	SPRING	RHR-201	06	VT-3	2HV-064	5/01/96	A
RHR-66	SPRING	RHR-205	01	VT-3	2HV-051	10/27/95	A(7)
Item No.: F1.20D							
RHR-121	PSA-10 SNUBBER	RHR-206	01	VT-3	2HV-068	5/02/96	A
RHR-137	PSA-10 SNUBBER	RHR-205	04	VT-3	2HV-069	5/01/96	A

Notes are on page 11

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2. Plant: WNP-2, Hanford Reservation, Benton County, Washington
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: NA
5. Commercial Service Date: 12/13/84
6. National Board Number: NA

13. Abstract of Examinations and Tests (continued).

Identification No	Description	Diagram No.	Pg	Method	Report No.	Date	Results(1)
Examination Category: F-A							
Item No.: F1.30A							
MSH-51A	RIGID	MS-209	02	VT-3	2HV-072	5/07/96	A
MSH-51B	RIGID	MS-209	02	VT-3	2HV-072	5/07/96	A
MSH-55A	RIGID	MS-213	02	VT-3	2HV-073	5/07/96	A
MSH-55B	RIGID	MS-213	02	VT-3	2HV-073	5/07/96	A
MSRV-3B-7	RIGID STRUT	MS-307	03	VT-3	2HV-054	4/16/96	A
Item No.: F1.40A							
SDV-A(CS)	SDV BASE	CRD-201	03	VT-3	2HV-076	5/14/96	A
SDV-B(CS)	SDV BASE	CRD-202	03	VT-3	2HV-077	5/14/96	A
Item No.: F1.40B							
RRC-HA-2	SPRING	RRC-103		VT-3	2HV-056	4/23/96	A
RRC-HA-3	SPRING	RRC-103		VT-3	2HV-055	4/23/96	A

15. Abstract of Corrective Measures. (continued)

4) The RHR-V-41A body to bonnet leakage was evaluated at operating temperature and nominal pressure and found to have decreased significantly. Relief request 2ISI-07 was implemented. A work order was generated to replace the gasket.

Notes to section 13 "Abstract of Examinations and Tests"

(1) A = Acceptable R = Rejectable
(2) Resizing of indication found in refuel outage 6. Analysis found indication acceptable for continued service.
(3) Includes item B15.70 valves, NPS 4 inch and smaller, within examination boundary.
(4) 9 CRD flanges found leaking at various rates.
(5) 3/4 inch vent line found with through wall leak
(6) Bonnet to body flange found leaking.
(7) Preservice Inspection

-- END OF REPORT --

Notes are on page 11

APPENDIX B

NIS-2 OWNER'S REPORTS

This appendix summarizes ASME Section XI repair or replacement work performed between July 25, 1995 and June 21, 1996. The status of the NIS-2 Owner's Report is stated for each repair and replacement work performed.

PLAN NO	WO NO	COMPONENT NUMBER AND WORK DESCRIPTION	DESC OF COMP	R&R REPORTED IN
2-0994 *	TT 6501	Installed conversion rings for connection "A" and connection "B" for spare stuffing box removed from existing pump RRC-P-1A	Pump	RF96A Summary Report
2-1064	WC 4903	Replaced existing front snubber for valve CVB-V-1AB	Valve	RF96A Summary Report
2-1066	WC 4905	Replaced existing rear snubber for valve CVB-V-1LM	Valve	RF96A Summary Report
2-1149	SD 3601	Replaced bolting material for piping to valve SW-V-165A flanged joint	Piping	RF96A Summary Report
2-1151	SD 4001	Replaced bolting material for piping to valve SW-V-170A flanged joint	Piping	RF96A Summary Report
2-1152	SD 4101	Replaced bolting material for piping to valve SW-V-170B flanged joint	Piping	RF96A Summary Report
2-1193	UC 2601	Replaced disc insert and/or nozzle for relief valve S/N N63790-00-0051	Relief Valve	RF96A Summary Report
2-1205 *	UV 2201	Replaced existing stem disc assembly for valve LPCS-V-13	Valve	RF96A Summary Report
2-1211	BJM 603	Removed and reinstalled support for valve PSR-V-X77A/3	Piping	RF96A Summary Report
2-1212	BJM 604	Removed and reinstalled support for valve PSR-V-X77A/4	Piping	RF96A Summary Report
2-1228	WC 4904	Replaced existing rear snubber for valve CVB-V-1EF	Valve	RF96A Summary Report
2-1229	WC 4906	Replaced existing rear snubber for valve CVB-V-1NP	Valve	RF96A Summary Report
2-1230	WC 4907	Replaced existing rear snubber for valve CVB-V-1QR	Valve	RF96A Summary Report
2-1231 *	TG 9807	Fabricated closure plates (plugs) for Penetrations X-76 and X-77	Penetration	RF96A Summary Report
2-1232 *	TG 9803	Installed closure plates (plugs) for Penetrations X-76b, 76c, 76e and 76f	Penetration	RF96A Summary Report
2-1233 *	TG 9806	Installed closure plates (plugs) for Penetrations X-77b, 77c, 77e and 77f	Penetration	RF96A Summary Report
2-1235	WZ 7301	Replaced existing pipe clamp for support RHR-66	Support	RF96A Summary Report
2-1237	XH 9901	Replaced existing snubbers with rigid struts for MS supports	Supports	RF96A Summary Report
2-1238	XH 9901	Replaced existing snubbers with rigid struts for MSRV supports	Supports	RF96A Summary Report
2-1243	WC 9501	Replaced existing front snubber for valve CVB-V-1AB	Valve	RF96A Summary Report
2-1244	WC 9503	Replaced existing front snubber for valve CVB-V-1EF	Valve	RF96A Summary Report
2-1245	WC 9504	Replaced existing front snubber for valve CVB-V-1GH	Valve	RF96A Summary Report
2-1246	WC 9505	Replaced existing front snubber for valve CVB-V-1JK	Valve	RF96A Summary Report
2-1247	WC 9506	Replaced existing front snubber for valve CVB-V-1LM	Valve	RF96A Summary Report
2-1248	WC 9507	Replaced existing front snubber for valve CVB-V-1NP	Valve	RF96A Summary Report
2-1249	WC 9508	Replaced existing front snubber for valve CVB-V-1QR	Valve	RF96A Summary Report
2-1252	XF 6901	Replaced existing valve RCIC-V-28	Piping	RF96A Summary Report
2-1254	YR 2701	Cut and rewelded socket weld for connection with valve SW-V-730	Piping	RF96A Summary Report
2-1255	WB 9001	Replaced 18" Service Water (SW) pipe piece near valve SW-PCV-38A	Piping	RF96A Summary Report
2-1261	VY 8704	Refurbished MS-RV-3D, S/N N63790-00-0126 - Also See Plan No 2-1284	Relief Valve	RF96A Summary Report
2-1262	VY 8504	Replaced existing relief valve MS-RV-4B with spare S/N N63790-00-0055	Piping	RF96A Summary Report
2-1263	VY 8404	Replaced existing relief valve MS-RV-4C with spare S/N N63790-00-0057	Piping	RF96A Summary Report
2-1264	VY 8604	Replaced existing relief valve MS-RV-5B with spare S/N N63790-00-0059	Piping	RF96A Summary Report
2-1265	WL 7302	Replaced existing relief valve MS-RV-1A with spare S/N N63790-00-0048	Piping	RF96A Summary Report
2-1266	WL 7402	Replaced existing relief valve MS-RV-3B with spare S/N N63790-00-0051	Piping	RF96A Summary Report
2-1267	WL 7502	Replaced existing relief valve MS-RV-1C with spare S/N N63790-00-0045	Piping	RF96A Summary Report
2-1268	WL 7602	Replaced existing relief valve MS-RV-3C with spare S/N N63790-00-0052	Piping	RF96A Summary Report
2-1269	WL 7702	Replaced existing relief valve MS-RV-4D with spare S/N N63790-00-0061	Piping	RF96A Summary Report
2-1272	WU 4203	Modified outlet flange and replaced relief valve RHR-RV-1A	Piping/Relief Valve	RF96A Summary Report
2-1273	CL 4303	Refurbished and reinstalled relief valve RHR-RV-25A	Piping/Relief Valve	RF96A Summary Report
2-1276	XY 7102	Replaced existing relief valve SLC-RV-29A	Piping	RF96A Summary Report
2-1278	XY 7302	Replaced existing relief valve SW-RV-1A	Piping	RF96A Summary Report
2-1283	YJ 9401	Replaced Local Power Range Monitoring (LPRM) in core assemblies	RPV	RF96A Summary Report
2-1284	VY 8705	Reinstalled MS-RV-3D, S/N N63790-00-0126 - Also See Plan No 2-1261	Piping	RF96A Summary Report
2-1285	WN 7201	Made body to bonnet seal weld for valve PI-V-X265	Valve	RF96A Summary Report
2-1286	WW 7702	Replaced existing valve CSP-V-5	Piping	RF96A Summary Report
2-1287	YT 6002	Replaced existing valve CSP-V-6	Piping	RF96A Summary Report
2-1288	YT 6102	Replaced existing valve CSP-V-9	Piping	RF96A Summary Report
2-1289 *	YT 6102	Modified connection with valve CSP-V-800/13 and valve CSP-V-800/14	Piping	RF96A Summary Report
2-1289 *	YT 6102	Modified connection with valve CSP-V-800/15 and valve CSP-V-800/16	Piping	RF96A Summary Report
2-1290 *	YT 6002	Modified connection with valve CSP-V-800/21 and valve CSP-V-800/22	Piping	RF96A Summary Report
2-1290 *	YT 6002	Installed new connection with valve CSP-V-800/25 and valve CSP-V-800/26	Piping	RF96A Summary Report
2-1291 *	WW 7702	Modified instrument piping for valve CSP-V-5	Piping	RF96A Summary Report
2-1293 *	YT 6102	Modified instrument piping for valve CSP-V-9	Piping	RF96A Summary Report
2-1294	XN 7501	Replaced existing parts for valve SLC-V-4B	Valve	RF96A Summary Report
2-1295	XY 7202	Replaced existing relief valve SLC-RV-29B	Piping	RF96A Summary Report

PLAN NO	WO NO	COMPONENT NUMBER AND WORK DESCRIPTION	DESC OF COMP	R&R REPORTED IN
2-1297 *	YV 2601	Replaced existing valve RCIC-V-752B and valve RCIC-V-752D	Piping	RF96A Summary Report
2-1298	ZA 7101	Replaced existing valve RCIC-V-111 and valve RCIC-V-112	Piping	RF96A Summary Report
2-1299	ZC 9701	Cut and rewelded flange near valve RCIC-V-28 for alignment	Piping	RF96A Summary Report
2-1303 *	WT 5001	Replaced existing wedge for valve CRD-V-101/2623	Valve	RF96A Summary Report
2-1304 *	YH 1001	Replaced existing wedge for valve CRD-V-101/5027	Valve	RF96A Summary Report
2-1309	ZV 0901	Replaced existing stem disc assembly for valve RCIC-V-19	Valve	RF96A Summary Report
2-1310	ZU 0801	Replaced existing valve RCIC-V-67	Piping	RF96A Summary Report
2-1311 *	YT 6002	Modified instrument piping for valve CSP-V-6	Piping	RF96A Summary Report
2-1312	C 875 WE	Refurbished Main Steam Relief Valve (MSRV) S/N N56790-00-0046	Relief Valve	RF96A Summary Report
2-1313	C 875 WE	Refurbished Main Steam Relief Valve (MSRV) S/N N56790-00-0047	Relief Valve	RF96A Summary Report
2-1314	C 875 WE	Refurbished Main Steam Relief Valve (MSRV) S/N N56790-00-0048	Relief Valve	RF96A Summary Report
2-1315	C 875 WE	Refurbished Main Steam Relief Valve (MSRV) S/N N56790-00-0052	Relief Valve	RF96A Summary Report
2-1316	C 875 WE	Refurbished Main Steam Relief Valve (MSRV) S/N N56790-00-0055	Relief Valve	RF96A Summary Report
2-1317	C 875 WE	Refurbished Main Steam Relief Valve (MSRV) S/N N56790-00-0057	Relief Valve	RF96A Summary Report
2-1319 *	WB 9001	Replaced existing section of pipe associated with valve SW-V-821A	Piping	RF96A Summary Report
2-1322	XN 3107	Weld built-up the disc stud for valve RFW-V-10A	Valve	RF96A Summary Report
2-1323	XN 3207	Weld built-up the disc stud for valve RFW-V-10B	Valve	RF96A Summary Report
2-1324	WGM 701	Removed MT indication from lug weld for support RHR-121	Piping	RF96A Summary Report
2-1326	BGH 601	Made body to bonnet seal weld for valve CSP-V-93	Valve	RF96A Summary Report
2-1327	RK 3103	Replaced studs and nuts for body to bonnet joint for valve RCIC-V-63	Valve	RF96A Summary Report
2-1328	XN 3301	Replaced existing studs and nuts for gland flange and stuffing box for valve RFW-V-32A	Valve	RF96A Summary Report
2-1329	BGN 201	Replaced existing studs and nuts for gland flange and stuffing box for valve RFW-V-32B	Valve	RF96A Summary Report
2-1332 *	BKD 001	Replaced existing tubing associated with valve CAS-V-100/51	Tubing	RF96A Summary Report
2-1333	BJH 701	Cut and rewelded socket welds associated with valve PI-EFC-X67	Piping	RF96A Summary Report
2-1334	BHX 701	Cut and rewelded socket welds associated with valve PI-EFC-X78A	Piping	RF96A Summary Report
2-1335	BHX 601	Cut and rewelded socket welds associated with valve PI-EFC-X87A	Piping	RF96A Summary Report
2-1336	BJM 503	Made body to bonnet seal weld for valve PSR-V-X83/2	Valve	RF96A Summary Report
2-1337	BJM 403	Made body to bonnet seal weld for valve PSR-V-X84/2	Valve	RF96A Summary Report
2-1338	RK 3108	Replaced bonnet for valve RCIC-V-63 (Bonnet removed from RCIC-V-64)	Valve	RF96A Summary Report
2-1339	RK 3107	Replaced bonnet for valve RCIC-V-64 (Bonnet removed from RCIC-V-63)	Valve	RF96A Summary Report
2-1340 *	BJM 701	Replaced existing valve RFW-V-120	Piping	RF96A Summary Report
2-1341 *	BLL 201	Replaced block clamp for tubing for D-220-031.0-IR-63, Bulk Head No 10	Tubing	RF96A Summary Report
2-1344 *	BJM 603	Replaced existing valve PSR-V-X77A/3	Piping	RF96A Summary Report
2-1345	BJH 705	Cut and rewelded socket welds associated with valve PI-EFC-X67	Piping	RF96A Summary Report
2-1346	BLH 903	Replaced existing disc and made body to bonnet seal weld for spare valve Serial No 4, Model No 86Q-001-1	Valve	RF96A Summary Report
2-1347 *	BLH 905	Replaced existing valve PSR-V-X77A/4	Piping	RF96A Summary Report
2-1348	BLN 803	Replaced existing relief valve SW-RV-1B	Piping	RF96A Summary Report
2-1349	XN 4908	Replaced disc and made body to bonnet seal weld for valve RRC-V-19	Valve	RF96A Summary Report
2-1350	BML 206	Modified outlet flange and replaced relief valve RHR-RV-1B	Piping/Relief Valve	RF96A Summary Report
2-1351	ZA 7108	Repaired socket weld, FW No 64 located between valve RCIC-V-111 and valve RCIC-V-112	Piping	RF96A Summary Report
2-1352 *	BLZ 801	Replaced existing valve PI-V-X268	Piping	RF96A Summary Report
2-1357	BLZ 806	Cut and rewelded socket welds associated with valve PI-EFC-X42C	Piping	RF96A Summary Report
2-1358	BMF 401	Repaired cracked socket weld for bonnet vent line for valve RRC-V-67A	Piping	RF96A Summary Report
N/A	WU 5401	Deleted existing snubbers for supports MS-SC-4, 5, 6, 8 and 9	Supports	RF96A Summary Report
N/A	WU 5401	Deleted existing snubbers for supports MSRV-1C-1, 3, 4 and 7	Supports	RF96A Summary Report
N/A	WU 5401	Deleted existing snubbers for supports MSRV-2C-1, 3, 5, and 6	Supports	RF96A Summary Report
N/A	WU 5401	Deleted existing snubbers for supports MSRV-3C-1, 3, 5 and 6	Supports	RF96A Summary Report
N/A	WU 5401	Deleted existing snubbers for supports MSRV-4C-1, 3, 5, 6, 8 and 9	Supports	RF96A Summary Report
N/A	WU 5401	Deleted existing snubbers for supports MSRV-5C-1, 3, 5 and 9	Supports	RF96A Summary Report
N/A	WU 5401	Deleted existing snubbers for supports MSRV-3C-1, 3, 5 and 6	Supports	RF96A Summary Report
N/A	WU 5401	Deleted existing snubbers for supports CEP-905S and CEP-907S	Supports	RF96A Summary Report
N/A	TG 9806 *	Deleted Hydraulic (HY) process piping	Piping	RF96A Summary Report
N/A	XY 8207	Replaced one (1) Control Rod Drive (CRD) at Core Location No 06-31	CRD	RF96A Summary Report

PLAN NO	WO NO	COMPONENT NUMBER AND WORK DESCRIPTION	DESC OF COMP	R&R REPORTED IN
N/A	XY 8208	Replaced one (1) Control Rod Drive (CRD) at Core Location No 10-43	CRD	RF96A Summary Report
N/A	XY 8209	Replaced one (1) Control Rod Drive (CRD) at Core Location No 06-27	CRD	RF96A Summary Report
N/A	XY 8210	Replaced one (1) Control Rod Drive (CRD) at Core Location No 10-19	CRD	RF96A Summary Report
N/A	XY 8211	Replaced one (1) Control Rod Drive (CRD) at Core Location No 10-47	CRD	RF96A Summary Report
N/A	XY 8212	Replaced one (1) Control Rod Drive (CRD) at Core Location No 14-19	CRD	RF96A Summary Report
N/A	XY 8213	Replaced one (1) Control Rod Drive (CRD) at Core Location No 14-27	CRD	RF96A Summary Report
N/A	XY 8214	Replaced one (1) Control Rod Drive (CRD) at Core Location No 14-47	CRD	RF96A Summary Report
N/A	XY 8216	Replaced one (1) Control Rod Drive (CRD) at Core Location No 22-39	CRD	RF96A Summary Report
N/A	XY 8218	Replaced one (1) Control Rod Drive (CRD) at Core Location No 22-55	CRD	RF96A Summary Report
N/A	XY 8219	Replaced one (1) Control Rod Drive (CRD) at Core Location No 26-03	CRD	RF96A Summary Report
N/A	XY 8221	Replaced one (1) Control Rod Drive (CRD) at Core Location No 26-23	CRD	RF96A Summary Report
N/A	XY 8223	Replaced one (1) Control Rod Drive (CRD) at Core Location No 38-31	CRD	RF96A Summary Report
N/A	XY 8224	Replaced one (1) Control Rod Drive (CRD) at Core Location No 38-35	CRD	RF96A Summary Report
N/A	XY 8225	Replaced one (1) Control Rod Drive (CRD) at Core Location No 38-39	CRD	RF96A Summary Report
N/A	XY 8228	Replaced one (1) Control Rod Drive (CRD) at Core Location No 42-11	CRD	RF96A Summary Report
N/A	XY 8229	Replaced one (1) Control Rod Drive (CRD) at Core Location No 42-23	CRD	RF96A Summary Report
N/A	XY 8230	Replaced one (1) Control Rod Drive (CRD) at Core Location No 46-15	CRD	RF96A Summary Report
N/A	XY 8231	Replaced one (1) Control Rod Drive (CRD) at Core Location No 46-31	CRD	RF96A Summary Report
N/A	XY 8248	Replaced one (1) Control Rod Drive (CRD) at Core Location No 46-11	CRD	RF96A Summary Report
N/A	XY 8304	Installed ring flange cap screw for Control Rod Drive (CRD) Serial No A9120	CRD	RF96A Summary Report
N/A	XY 8307	Overhauled Control Rod Drive (CRD) Serial No A9128	CRD	RF96A Summary Report
N/A	XY 8314	Overhauled Control Rod Drive (CRD) Serial No A9280	CRD	RF96A Summary Report
N/A	XY 8317	Overhauled Control Rod Drive (CRD) Serial No A9159	CRD	RF96A Summary Report
N/A	XY 8319	Overhauled Control Rod Drive (CRD) Serial No A9447	CRD	RF96A Summary Report
N/A	XY 8321	Overhauled Control Rod Drive (CRD) Serial No A9138	CRD	RF96A Summary Report
N/A	XY 8323	Overhauled Control Rod Drive (CRD) Serial No A9420	CRD	RF96A Summary Report
N/A	XY 8326	Overhauled Control Rod Drive (CRD) Serial No A9348	CRD	RF96A Summary Report
N/A	XY 8328	Overhauled Control Rod Drive (CRD) Serial No A9155	CRD	RF96A Summary Report
N/A	XY 8329	Overhauled Control Rod Drive (CRD) Serial No A9350	CRD	RF96A Summary Report
N/A	XY 8337	Overhauled Control Rod Drive (CRD) Serial No A9172	CRD	RF96A Summary Report

Note * Authorized Nuclear Inspector's (ANI's) involvement was not required for these ASME Section XI replacement work plans for one (1) inch nominal pipe size (NPS) and smaller

PLAN No 2-0994

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Recirculation Cooling (RRC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC-P-1A	Bingham*	B 2 1034	134	N/A	1974	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Installed conversion rings for connections "A" and "B" on the spare stuffing box. The spare stuffing box was previously removed from pump RRC-P-1A. The replacement work was performed as follows:
   1) Installed new conversion ring for connection "A"
   2) Tack welded the new conversion ring to connection "A"
   3) Performed visual examination on the final tack welds. Visual examination results acceptable
   4) Installed new conversion ring for connection "B"
   5) Tack welded the new conversion ring to connection "B"
   6) Performed visual examination on the final tack welds. Visual examination results acceptable

NOTES -
1) * Bingham-Willamette Company

PLAN No 2-0994

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 8/19/96
Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

PLAN No 2-1064

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1AB	Anderson Greenwood	VB 7891	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced rear snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1AB. The replacement work was performed as follows:
   1) Removed existing rear snubber Serial No 4479 from the valve
   2) Installed new rear snubber Serial No 30889 for the valve

NOTES -
1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1064

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/3/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 8/29/95 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7486, 7486 W NBSI - IS
National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1066

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1LM	Anderson Greenwood	VB 7896	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced rear snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1LM. The replacement work was performed as follows:
   1) Removed existing rear snubber Serial No 4416 from the valve
   2) Installed new rear snubber Serial No 30918 for the valve

NOTES -
1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1066

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh - Program Lead Engineer (PLE) Signed By Supervisor, Materials And Welding

Date 8/14/96 Date 8/14/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/8/96 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Commissions 7486, 7486W NSIB IS
National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1149

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(21)-2	BF Shaw	SW(21)-2-10	N/A	N/A	1979	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced bolting material for pipe to valve SW-V-165A flanged joints. The replacement work was performed as follows:
   1) Removed existing studs and nuts for pipe to valve SW-V-165A inlet flanged joint
   2) Installed twenty four (24) new studs and twenty four (24) new nuts for pipe to valve SW-V-165A inlet flanged joint
   3) Removed existing studs and nuts for pipe to valve SW-V-165A outlet flanged joint
   4) Installed twenty four (24) new studs and twenty four (24) new nuts for pipe to valve SW-V-165A outlet flanged joint

PLAN No 2-1149

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 7/30/96
Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11-1-95 to 7-30-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection

[signature] — Inspector's Signature
Commissions 7486, 7486W NB SI IS — National Board, State, and Endorsements

Date 7/30/96

PLAN No 2-1151

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 7/28/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Service Water (SW) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(21)-2	BF Shaw	SW(21)-2-10	N/A	N/A	1979	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced bolting material for pipe to valve SW-V-170A flanged joints. The replacement work was performed as follows:

1) Removed existing studs and nuts for pipe to valve SW-V-170A inlet flanged joint
2) Installed twenty four (24) new studs and twenty four (24) new nuts for pipe to valve SW-V-170A inlet flanged joint
3) Removed existing studs and nuts for pipe to valve SW-V-170A outlet flanged joint
4) Installed twenty four (24) new studs and twenty four (24) new nuts for pipe to valve SW-V-170A outlet flanged joint

PLAN No 2-1151

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By Carl M King — Supervisor, Materials And Welding
Date 7/30/96
Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11-1-95 to 7-30-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Inspector's Signature
Commissions 7486, 7486 W NBSI IS
National Board, State, and Endorsements

Date 7/30/96

PLAN No 2-1152

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2	BF Shaw	SW(22)-2-10	N/A	N/A	1979	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced bolting material for pipe to valve SW-V-170B flanged joints. The replacement work was performed as follows:
   1) Removed existing studs and nuts for pipe to valve SW-V-170B inlet flanged joint
   2) Installed twenty four (24) new studs and twenty four (24) new nuts for pipe to valve SW-V-170B inlet flanged joint
   3) Removed existing studs and nuts for pipe to valve SW-V-170B outlet flanged joint
   4) Installed twenty four (24) new studs and twenty four (24) new nuts for pipe to valve SW-V-170B outlet flanged joint

PLAN No 2-1152

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh *Signed By* [signature]
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 7/30/96 *Date* 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 11-1-95 *to* 7-30-96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection*

[signature] *Commissions* 7486, 7486-W NBSI IS
Inspector's Signature National Board, State, and Endorsements

Date 7/30/96

PLAN No 2-1193

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/31/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0051	N/A	N/A	1981	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced disc insert and nozzle for spare main steam relief valve Serial No N63790-00-0051. The replacement work was performed as follows:
   1) Removed existing disc insert from the relief valve
   2) Installed new disc insert in the relief valve
   3) Removed existing nozzle from the relief valve
   4) Installed new nozzle in the relief valve
   5) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
   6) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
   7) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
   8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test

NOTES -

1) Spare main steam relief valve Serial No N63790-00-0051 was installed in accordance with ASME Section XI Plan No 2-1266
2) VT-3 visual examination on the exposed surfaces of the existing nuts for the relief valve inlet joint was performed in accordance with ASME Section XI Plan No 2-1266
3) VT-3 visual examination on the exposed surfaces of the existing bolts for the relief valve outlet joint was performed in accordance with ASME Section XI Plan No 2-1266

PLAN No 2-1193

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [X] Nominal Operating Pressure [ ] Other [ ] None

Test Pressure: 8 Psig
Component Design Pressure: 1185 Psig
Test Temperature: 74.4° F
Temperature: 575° F

9. Remarks: Pressure test to confirm pressure boundary integrity on the relief valve inlet joint was performed in accordance with ASME Section XI Plan No 2-1266

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Signed By _____
Kuldip Singh - Program Lead Engineer (PLE) — Supervisor, Materials And Welding

Date 7/31/96 — Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5-10-95 *to* 8/16/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions 7486, 7486 W NSIB IS
Inspector's Signature — National Board, State, and Endorsements

Date 8/16/96

PLAN No 2-1205

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/16/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Low Pressure Core Spray (LPCS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
LPCS-V-13	Borg Warner	22715	N/A	N/A	1977	Replacement	Yes, Code Class 1
Spare Disc	Borg Warner	201347	N/A	N/A	1989	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing disc assembly in valve LPCS-V-13. The replacement work was performed as follows:
   1) Removed existing disc assembly from valve LPCS-V-13
   2) Installed new replacement disc assembly Serial No 201347 in valve LPCS-V-13

PLAN No 2-1205

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement disc assembly Serial No 201347

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/19/96

Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

INFORMATION

PLAN NO. 2-1205
Quality Surv
.6/2/95

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

As Required by the Provisions of the ASME Code, Section III

Not To Exceed One Day's Production

1. Manufactured and certified by BW/IP INTERNATIONAL INC. POMP DIV. LOS ANGELES OPERATIONS 2300 EAST VERNON AVE. VERNON CALIF. 90058 (name and address of NPT Certificate Holder)

2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM P.O.BOX 968 RICHLAND WASHINGTON 99352-0968 (name and address of purchaser)

3. Location of installation WASHINGTON PUBLIC POWER SUPPLY SYSTEM NORTH POWER PLANT LOOP RICHLAND, WASHINGTON 99352 (name and address)

4. Type 73878 REV.D (drawing no.) | STELLITE # 6 (mat'l. spec. no.) | N/A (tensile strength) | N/A (CRN) | 1989 (year built)

5. ASME Code, Section III: 1974 (edition) | SUMMER 1975 (addenda date) | 1 (class) | N/A (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks: BW/IP JOB NO. 881-S-5205 PART NAME, STEM AND DISC ASSY.

HYDROSTATIC TESTING NOT PERFORMED. IDENTIFICATION IS PER NCA-8230 IN LIEU OF NAMEPLATE.

DISC R/S 201330 S/N 5 = STEM AND DISC S/N 201347

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

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

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	201338	N/A
(2)	201339	N/A
(3)	201340	N/A
(4)	201341	N/A
(5)	201342	N/A
(6)	201343	N/A
(7)	201344	N/A
(8)	201345	N/A
(9)	201346	N/A
(10)	201347	N/A
(11)	201348	N/A
(12)	201349	N/A
(13)	201350	N/A
(14)	201351	N/A
(15)	201352	N/A
(16)		
(17)		
(18)		
(19)		
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(22)		
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(24)		
(25)		

	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26)		
(27)		
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10. Design pressure 3600 psi. Temp. 100 °F. Hydro. test pressure N/A (when applicable) at temp. °F

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

FORM N-2 (back)

Mfr's Serial No. SEE BELOW

CERTIFICATION OF DESIGN

Design specifications certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

Design report* certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that ~~this~~ (these) STEM AND DISC ASSY. conforms to the rules of construction of the ASME Code, Section III.

NPT Certificate of Authorization No. N-1131 Expires 16 JUNE 1990

Date 28 Mar 89 Name BW/IP INTERNATIONAL INC. (NPT Certificate Holder) Signed (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 CALIFORNIA and employed by ARKWRIGHT MUTUAL INS.CO. (FACTORY MUTUAL SYSTEM) of NORWOOD, MASS. have inspected these items described in this Data Report on 28 MARCH 1989 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 3/28/89 Signed (Authorized Inspector) Commissions 1275 CA. (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

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PLAN No 2-1211

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/5/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Sample Radioactive (PSR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X77AD	JCI	PI(1)-4S-X77AD	N/A	N/A	1983	Repaired	Yes, Code Class 1

7. **Description Of Work Performed:** Removed support material to facilitate rework on valve PSR-V-X77A/3. Upon completion of work on the valve, the support material was reinstalled as follows:
   1) Reinstalled support material
   2) Made required welds
   3) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable

NOTES -

1) ASME Section III, Code Class NF(1) for the support

PLAN No 2-1211

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By — Supervisor, Materials And Welding

Date 8/5/96

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/8/96 to 8/19/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions 7486, 7486W NSB - IS

National Board, State, and Endorsements

Date 8/19/96

PLAN No 2-1212

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Sample Radioactive (PSR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X77AD	JCI	PI(1)-4S-X77AD	N/A	N/A	1983	Repaired	Yes, Code Class 1

7. **Description Of Work Performed:** Removed support material to facilitate rework on valve PSR-V-X77A/4. Upon completion of work on the valve, the support material was reinstalled as follows:
   1) Installed new tube steel material for the support
   2) Reinstalled the remaining support material
   3) Made required welds
   4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable

NOTES -

1) ASME Section III, Code Class NF(1) for the support

PLAN No 2-1212

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Signed By [signature]

Kuldip Singh - Program Lead Engineer (PLE) — Supervisor, Materials And Welding

Date 8/4/96 — Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6-1-96 to 8/8/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions 7486, 7486 W NB SE IS

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

Date 8/8/96

PLAN No 2-1228

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment Vacuum Breaker (CVB) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1EF	Anderson Greenwood	VB 7893	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced rear snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1EF. The replacement work was performed as follows:

1) Removed existing rear snubber Serial No 4448 from the valve
2) Installed new rear snubber Serial No 30888 for the valve

NOTES -

1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1228

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/13/96
Date 8/16/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/8/96 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

Inspector's Signature
Commissions 7486, 7486W NB 5I-IS
National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1229

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1NP	Anderson Greenwood	VB 7897	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced rear snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1NP. The replacement work was performed as follows:
   1) Removed existing rear snubber Serial No 4433 from the valve
   2) Installed new rear snubber Serial No 30921 for the valve

NOTES -

1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1[redacted]

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE) *Signed By* [signature] — Supervisor, Materials And Welding
Date 8/14/96 *Date* 8/14/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5/8/96 *to* 8/15/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature] *Commissions* 7486, 7486W NSIB-IS
Inspector's Signature — National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1230

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment Vacuum Breaker (CVB) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1QR	Anderson Greenwood	VB 7898	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced rear snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1QR. The replacement work was performed as follows:

1) Removed existing rear snubber Serial No 30488 from the valve
2) Installed new rear snubber Serial No 30487 for the valve

NOTES -

1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1230

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 8/3/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/8/96 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

[signature]
Inspector's Signature

Commissions 7486, 7486-W NB SI-IS
National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1231

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vessel Penetrations For Hydraulic (HY) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

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

7. **Description Of Work Performed:** Fabricated cover plates (plugs) for the existing Containment Vessel Penetrations X76b, X76c, X76e, X76f, X77b, X77c, X77e and X77f. The work was performed as follows:
   1) Fabricated (machined) cover plates (plugs) to the required dimensions
   2) Performed liquid penetrant (PT) examination on the final machined surfaces of the cover plates (plugs). Liquid penetrant (PT) examination results acceptable

NOTES -

1) The fabricated cover plates (plugs) for Containment Vessel Penetrations X76b, X76c, X76e and X76f were installed in accordance with ASME Section XI Plan No 2-1232
1) The fabricated cover plates (plugs) for Containment Vessel Penetrations X77b, X77c, X77e and X77f were installed in accordance with ASME Section XI Plan No 2-1233

PLAN No 2-1231

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 8/19/96 Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

PLAN No 2-1232

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vessel Penetrations For Hydraulic (HY) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: N-236-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

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

7. **Description Of Work Performed:** Installed cover plates (plugs) for the existing Containment Vessel Penetrations X76b, X76c, X76e and X76f. The replacement work was performed as follows:
   1) Installed cover plates (plugs) for each of the existing Containment Vessel Penetrations
   2) Made required welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable
   5) Performed VT-2 visual examination in conjunction with Local Leak Rate Test (LLRT) to confirm pressure boundary integrity of the welded joints. No evidence of leakage during the pressure test

NOTES -

1) The cover plates (plugs) for Containment Vessel Penetrations X76b, X76c, X76e and X76f were previously fabricated in accordance with ASME Section XI Plan No 2-1231
2) The VT-2 visual examination in conjunction with Local Leak Rate Test (LLRT) to confirm pressure boundary integrity of the welded joints was performed to satisfy the pressure test requirements of Code Case N-236-1

PLAN No 2-12

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [ ] **Nominal Operating Pressure** [ ] **Other** [X] **LLRT**

Test Pressure: See Below **Test Temperature:** See Below

Component Design Pressure: 45 Psig **Temperature:** 340° F

9. Remarks: 1) Test pressure of 38.77 Psig and test temperature of 71.4° F for Containment Vessel Penetration X76b, 2) Test pressure of 38.8 Psig and test temperature of 71.4° F for Containment Vessel Penetration X76c, 3) Test pressure of 38.79 Psig and test temperature of 71.4° F for Containment Vessel Penetration X76e and 4) Test pressure of 38.75 Psig and test temperature of 71° F for Containment Vessel Penetration X76f

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE) **Signed By** _____ Supervisor, Materials And Welding

Date 8/19/96 **Date** 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller **Commissions** _____

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

Date _____

PLAN No 2-1233

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vessel Penetrations For Hydraulic (HY) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: N-236-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

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

7. **Description Of Work Performed:** Installed cover plates (plugs) for the existing Containment Vessel Penetrations X77b, X77c, X77e and X77f. The replacement work was performed as follows:
   1) Installed cover plates (plugs) for each of the existing Containment Vessel Penetrations
   2) Made required welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable
   5) Performed VT-2 visual examination in conjunction with Local Leak Rate Test (LLRT) to confirm pressure boundary integrity of the welded joints. No evidence of leakage during the pressure test

NOTES -

1) The cover plates (plugs) for Containment Vessel Penetrations X77b, X77c, X77e and X77f were previously fabricated in accordance with ASME Section XI Plan No 2-1231
2) The VT-2 visual examination in conjunction with Local Leak Rate Test (LLRT) to confirm pressure boundary integrity of the welded joints was performed to satisfy the pressure test requirements of Code Case N-236-1

PLAN No 2-1233

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ **Pneumatic** ☐ **Nominal Operating Pressure** ☐ **Other** ☒ **LLRT**

Test Pressure: See Below
Component Design Pressure: 45 Psig
Test Temperature: See Below
Temperature: 340° F

9. Remarks: 1) Test pressure of 38.74 Psig and test temperature of 70° F for Containment Vessel Penetration X77b, 2) Test pressure of 38.75 Psig and test temperature of 79.8° F for Containment Vessel Penetration X77c, 3) Test pressure of 38.76 Psig and test temperature of 69.8° F for Containment Vessel Penetration X77e and 4) Test pressure of 38.54 Psig and test temperature of 69.8° F for Containment Vessel Penetration X77f

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By _____ — Supervisor, Materials And Welding
Date 8/19/96
Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

PLAN No 2-1235

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Residual Heat Removal (RHR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2*, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(3)-2A	WPPSS	RHR(3)-2A-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2*

7. **Description Of Work Performed:** Replaced pipe clamp for support RHR-66. The replacement work was performed as follows:
   1) Removed existing pipe clamp
   2) Installed new pipe clamp
   3) Performed VT-3 visual examination on the installed new pipe clamp. VT-3 visual examination results acceptable

* ASME Section III, Code Class NF(2) for pipe clamp for support RHR-66

PLAN No 2-1235

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By Carl M King 7/30/96 — Supervisor, Materials And Welding
Date 7/30/96
Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10-25-95 to 7-30-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

R. M. [illegible] — Inspector's Signature
Commissions 7486, 7486W NBSI IS — National Board, State, and Endorsements
Date 7/30/96

PLAN No 2-1237

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1*, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001C	WPPSS	B22-G001C-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1*

7. **Description Of Work Performed:** Replaced existing snubbers with rigid struts for supports MS-SC-3 and MS-SC-7. The replacement work was performed as follows:
   1) Removed existing snubbers
   2) Installed new rigid struts
   3) Performed VT-3 visual examination on the installed new rigid struts. VT-3 visual examination results acceptable

* ASME Section III, Code Class NF(1) for rigid struts for supports MS-SC-3 and MS-SC-7

PLAN No 2-1237

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding

Date 7/30/96
Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1-23-96 to 7-30-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection

[signature] — Inspector's Signature

Commissions 7486, 7486W NBSI IS — National Board, State, and Endorsements

Date 7/30/96

PLAN No 2-1238

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3*, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(18)-2-5	WPPSS	MS(18)-2-5-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3*
MS(18)-2-6	WPPSS	MS(18)-2-6-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3*
MS(18)-2-7	WPPSS	MS(18)-2-7-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3*
MS(18)-2-8	WPPSS	MS(18)-2-8-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3*
MS(18)-2-9	WPPSS	MS(18)-2-9-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3*

7. **Description Of Work Performed:** Replaced existing snubbers with rigid struts for supports MSRV-1C-5, MSRV-2C-4, MSRV-2C-7, MSRV-2C-9, MSRV-3C-7, MSRV-3C-8, MSRV-4C-6, MSRV-4C-7, MSRV-5C-4, MSRV-5C-6, MSRV-5C-7 and MSRV-5C-8. The replacement work was performed as follows:
   1) Removed existing snubbers
   2) Installed new rigid struts
   3) Performed VT-3 visual examination on the installed new rigid struts. VT-3 visual examination results acceptable

* ASME Section III, Code Class NF(3) for rigid struts for supports MSRV-1C-5, MSRV-2C-4, MSRV-2C-7, MSRV-2C-9, MSRV-3C-7, MSRV-3C-8, MSRV-4C-6, MSRV-4C-7, MSRV-5C-4, MSRV-5C-6, MSRV-5C-7 and MSRV-5C-8

PLAN No 2-123

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/30/96

Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1-23-96 to 7-30-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

[signature] — Inspector's Signature

Commissions 7486, 7486W, NBSI IS — National Board, State, and Endorsements

Date 7/30/96

PLAN No 2-1243

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1AB	Anderson Greenwood	VB 7891	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced front snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1AB. The replacement work was performed as follows:
   1) Removed existing rear snubber Serial No 4488 from the valve
   2) Installed new rear snubber Serial No 30886 for the valve

NOTES -
1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1243

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE) Signed By [signature] — Supervisor, Materials And Welding

Date 8/3/96 Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/8/96 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature] Inspector's Signature

Commissions 7486, 7486W WSIB IS
National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1244

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1EF	Anderson Greenwood	VB 7893	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced front snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1EF. The replacement work was performed as follows:
   1) Removed existing rear snubber Serial No 4474 from the valve
   2) Installed new rear snubber Serial No 30490 for the valve

NOTES -
1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1244

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/14/96
Date 8/14/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/16/96 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7486, 7486-W NSIB IV
National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1245

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment Vacuum Breaker (CVB) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1GH	Anderson Greenwood	VB 7894	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced front snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1GH. The replacement work was performed as follows:

1) Removed existing rear snubber Serial No 4498 from the valve
2) Installed new rear snubber Serial No 30492 for the valve

NOTES -

1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1245

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ **Pneumatic** ☐ **Nominal Operating Pressure** ☐ **Other** ☒ **None**

Test Pressure: Psig — **Test Temperature:** ° F

Component Design Pressure: Psig — **Temperature:** ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE) **Signed By** [signature] — Supervisor, Materials And Welding

Date 8/14/96 **Date** 8/14/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington **and employed by** Arkwright Mutual Insurance Company of Waltham, Massachusetts **have inspected the components described in this Owner's Report during the period** 5/8/96 **to** 8/15/96 **and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.**

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

[signature] — Inspector's Signature

Commissions 7486, 7486W NSEB IS — National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1246

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1JK	Anderson Greenwood	VB 7895	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced front snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1JK. The replacement work was performed as follows:
   1) Removed existing rear snubber Serial No 4466 from the valve
   2) Installed new rear snubber Serial No 30911 for the valve

NOTES -
1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1246

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/3/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/8/96 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7486, 7486W NSIB IS
National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1247

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1LM	Anderson Greenwood	VB 7896	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced front snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1LM. The replacement work was performed as follows:
   1) Removed existing rear snubber Serial No 4467 from the valve
   2) Installed new rear snubber Serial No 30907 for the valve

NOTES -
1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1247

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/3/96

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/15/96 to 5/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486, 7486-U NSIB IS — National Board, State, and Endorsements

Date 5/15/96

PLAN No 2-1248

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment Vacuum Breaker (CVB) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1NP	Anderson Greenwood	VB 7697	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced front snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1NP. The replacement work was performed as follows:
1) Removed existing rear snubber Serial No 4465 from the valve
2) Installed new rear snubber Serial No 30491 for the valve

NOTES -
1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1248

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/14/96

Date 8/14/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/8/96 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486, 7486-W WSEB EI — National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1249

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Vacuum Breaker (CVB) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1QR	Anderson Greenwood	VB 7898	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced front snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1QR. The replacement work was performed as follows:
   1) Removed existing rear snubber Serial No 4496 from the valve
   2) Installed new rear snubber Serial No 30885 for the valve

NOTES -
1) ASME Section III, Code Class 2 for the valve
2) ASME Section III, Code Class NF(1) for the snubber

PLAN No 2-1249

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 8/3/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/8/96 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature]
Inspector's Signature

Commissions 7486, 7486W NSIB IS
National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1252

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/5/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(19)-1	WPPSS	RCIC(19)-1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
RCIC-V-28	Rockwell	AP 766	N/A	N/A	1979	Replaced	Yes, Code Class 2
RCIC-V-28	Anchor Darling	ET 550-29-1	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced valve RCIC-V-28. The replacement work was performed as follows:
   1) Removed existing carbon steel valve RCIC-V-28, Serial No AP 766 and associated carbon steel piping material
   2) Installed new stainless steel valve RCIC-V-28, Serial No ET 550-29-1 and associated stainless steel piping material
   3) Made required socket welds
   4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable
   5) Performed VT-3 visual examination on the existing studs for the bolted flanged joint. VT-3 visual examination results acceptable
   6) Performed VT-3 visual examination on the existing nuts for the bolted flanged joint. VT-3 visual examination results acceptable
   7) Reinstalled VT-3 visually examined existing studs and nuts for the bolted flanged joint
   8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application
2) The liquid penetrant (PT) examination on the final socket welds was performed in accordance with the requirements of ASME Section III, Code Class 2, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1
3) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1

PLAN No 2-1252

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None

Test Pressure: 64 Psig
Component Design Pressure: 150 Psig
Test Temperature: 90° F
Temperature: 267° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve RCIC-V-28, Serial No ET 550-29-1

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 8/5/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/7/95 to 8/19/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature]
Inspector's Signature

Commissions 7486, 7486W WSIB-IS
National Board, State, and Endorsements

Date 8/19/96

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

Pg. ____ of ____

1. Manufactured and certified by Anchor/Darling Valve Co., 701 First St., Williamsport, PA 17701
(name and address of N Certificate Holder)

2. Manufactured for B & W Nuclear Service Co., 3315A Old Forest Rd., Lynchburg, VA 24501.
(name and address of Purchaser or Owner)

3. Location of installation Stocking Program
(name and address)

4. Model No., Series No., or Type Swing Check Drawing W9324074 Rev. A CRN N/A

5. ASME Code, Section III, Division 1: 1986 (edition) None (addenda date) 1 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 1-1/2" (in.) Outlet size 1-1/2" (in.)

7. Material: Body SA351-CF8M Bonnet SA351-CF8M Disk SA564-630-1075 Bolting Studs: SA453-660B Nuts: SA194-8M

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
ET550-29-1	N/A	1	21	Trace Code: A605
ET550-29-2	N/A	1	22	Trace Code: A605

RC1C-V-28, S/N ET550-29-1

*Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ × 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/86) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

PAGE 6 OF 49

Corr. 8/1/93

FORM NPV-1 (back)

8. Remarks _____

9. Design conditions 2735 (pressure) psi 680 (temperature) °F or valve pressure class 1878 (1)

10. Cold working pressure 4507 psi at 100°F

11. Hydrostatic test 6775 psi. Disk differential test pressure 4958 psi

CERTIFICATION OF DESIGN

Design Specification certified by Mark D. Cowell P.E. State PA Reg. no. 032082-E

Design Report certified by Ronald S. Farrell P.E. State PA Reg. no. 035216-E

CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. N1712 Expires 4/15/95

Date 7/21/93 Name Anchor/Darling Valve Company (N Certificate Holder) Signed _____ (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 Pennsylvania and employed by Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 4-20 to 7-22, 19 93, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 7-22-93 Signed _____ (Authorized Inspector) Charles Young Commissions Pennsylvania 2392 (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

(1) For manually operated valves only.

FAX 7 :49

PLAN No 2-1254

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS). **Date:** 8/5/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2	WPPSS	SW(22)-2-P1	N/A	N/A	1983	Repaired	Yes, Code Class 3

7. **Description Of Work Performed:** Repaired connection with valve SW-V-730. The repair work was performed as follows:
   1) Cut existing pipe to sockolet socket weld with a pin hole
   2) Rinstalled the existing pipe nipple in the sockolet
   3) Made required socket weld

PLAN No 2-1254

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/5/96

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/29/95 to 8/19/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486, 7486 AW NSIB-IS — National Board, State, and Endorsements

Date 8/19/96

PLAN No 2-1255

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 8/10/96
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(21)-2UG	WPPSS	SW(21)-2UG-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** A through wall pin hole leak was observed on the bottom of the 18" Service Water (SW) Loop A return pipe between SW-FE-1A and valve SW-PCV-38A. Temporary Non Code repair was performed in accordance with Relief Request No 2ISI-16. This ASME Section XI Plan No 2-1255 performed permanent repair which consisted of removing section of 18" pipe containing the through wall pin hole leak and replacing it Section of new pipe. The replacement work was performed as follows:
   1) Removed existing section of 18" pipe with a through wall pin hole leak
   2) Installed new section of 18" of pipe
   3) Completed the root pass on both the 18" circumferential butt welds
   4) Performed liquid penetrant (PT) examination on the root pass for both the welds. Liquid penetrant (PT) examination results acceptable
   5) Completed both the 18" circumferential butt welds
   6) Performed magnetic particle (MT) examination on the final 18" circumferential butt welds. Magnetic particle (MT) examination results acceptable
   7) Installed additional piping material associated with new section of 18" pipe
   8) Made required socket welds
   9) Installed new studs and nuts for the bolted flanged joint
   10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test

NOTES -

1) The liquid penetrant (PT) examination on the root pass for both the welds was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1
2) The magnetic particle (MT) examination on the final 18" circumferential butt welds was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1
3) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1

PLAN No 2-1255

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [X] Other [ ] None

Test Pressure: 217 Psig
Component Design Pressure: 309 Psig
Test Temperature: 52° F
Temperature: 150° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding

Date 8/11/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/17/96 to 8/13/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

[signature]
Inspector's Signature

Commissions 7486, 7486W NSBI IS
National Board, State, and Endorsements

Date 8/13/96

PLAN No 2-1261

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/31/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0126	N/A	N/A	1981	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Performed VT-3 visual examination and VT-2 visual examination on the spare main steam relief valve Serial No N63790-00-0126. The work was performed as follows:
   1) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
   2) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
   3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test

NOTES -

1) Spare main steam relief valve Serial No N63790-00-0126 was installed in accordance with ASME Section XI Plan No 2-1284
2) VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint was performed in accordance with ASME Section XI Plan No 2-1284
3) VT-3 visual examination on the exposed surfaces of the existing nuts for the relief valve inlet joint was performed in accordance with ASME Section XI Plan No 2-1284
4) VT-3 visual examination on the exposed surfaces of the existing bolts for the relief valve outlet joint was performed in accordance with ASME Section XI Plan No 2-1284

PLAN No 2-1261

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ **Pneumatic** ☒ **Nominal Operating Pressure** ☐ **Other** ☐ **None**

Test Pressure: 7.5 Psig
Component Design Pressure: 1195 Psig
Test Temperature: 65° F
Temperature: 575° F

9. Remarks: Pressure test to confirm pressure boundary integrity on the relief valve inlet joint was performed in accordance with ASME Section XI Plan No 2-1284

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Date 7/31/96

Signed By [signature] — Supervisor, Materials And Welding
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington **and employed by** Arkwright Mutual Insurance Company of Waltham, Massachusetts **have inspected the components described in this Owner's Report during the period** 12/19/95 **to** 8/16/96 **and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.**
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

[signature]
Inspector's Signature

Commissions 7486, 7486 UU NSIB -IS
National Board, State, and Endorsements

Date 8/16/96

PLAN No 2-1262

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/31/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001B	WPPSS	B22-G001B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
MS-RV-4B	Crosby	N63790-00-0137	N/A	N/A	1973	Replaced	Yes, Code Class 1
MS-RV-4B	Crosby	N63790-00-0055	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. Description Of Work Performed: The following work was performed either by Washington Public Power Supply System (WPPSS) or by Raytheon Engineers & Constructors. Replaced existing relief valve MS-RV-4B. The replacement work was performed as follows:

1) Removed existing relief valve MS-RV-4B, Serial No N63790-00-0137 with set pressure of 1195 Psig at rated temperature of 575° F
2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable
3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable
4) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1316
5) VT-3 visual examination on the existing studs and nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1316
6) Installed replacement relief valve with Serial No N63790-00-0055 with set pressure of 1195 Psig at rated temperature of 575° F
7) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint
8) Performed VT-1 visual examination on two (2) new nuts for the relief valve inlet joint. VT-1 visual examination results acceptable
9) Installed two (2) new nuts for the relief valve inlet joint
10) Installed one (1) new bolt for the relief valve outlet joint
11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test
12) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0055

PLAN No 2-1262

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [X] **Nominal Operating Pressure** [X] **Other** [ ] **None**

Test Pressure: 1020/7.5 Psig
Component Design Pressure: 1195 Psig
Test Temperature: 194/71° F
Temperature: 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0055
2) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0055
3) Nominal operating pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 194° F
4) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 71° F

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE) — **Date** 7/31/96

Signed By Carl J. Kinzi — Supervisor, Materials And Welding — **Date** 8/2/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/10/96 *to* 8/16/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

J. M. Thatcher — Inspector's Signature

Commissions 7486, 7486W WSIB-IS — National Board, State, and Endorsements

Date 8/16/96

~~MS-RV-3A~~

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1262

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves

Rudolph Sugg 7/31/96

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply Systems Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL#B22-F013 Serial No. N63790-00-0055 Drawing No. DS-A-63790 Rev. C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Inch Pipe Size -- Inch Inlet 6 Inch Outlet 10 Inch

6. Set Pressure (psig) 1195 575° F (Rated Temperature)

Stamped Capacity 899,185 @ 3 %Overpressure -- Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
Bar Stock & Forgings		
a. ~~Casting~~ Body	N93183-35-0074	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0037	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Disc Insert~~ Disc Insert	N93185-34-0087	ASME SA637 Gr. 718
Nozzle	N93184-33-0059	ASME SA182 Gr. F316
Disc Holder K55484-45-0191	N89714-37-0219	AMS 5662B
Spring Washers K62858-35-0037	K62856-35-0093 K62857-35-0058	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0062	ASME SA193 Gr. B6
Spindle Point K62873-35-0055	*N89720-34-0063	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0037	*N89722-0013	ASTM A304-66 Gr. 416H
d. Bolting		ZX0038014O
e. ~~Spindle Ball~~ K62873-35-0055	N93213-0055	Stellite #6
Thrust Bearing Adapter	N93409-33-0057	ASME SA193 Gr. B6
Bonnet Stud (BW5)	N93207-0657 thru 0668	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0877 thru 0888	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0659 thru 0670	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0663 thru 0674	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-33-0064	ASME SA193 Gr. B6

modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.

N63790-00-005

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711.

Class 1

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.G. Casavant

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company 43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 12/5 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 12/5 1980.

Signed John T. Dimsdale (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380141

FORM NVR-1 REPORT OF REPAIR ☒ MODIFICATION ☐ OR REPLACEMENT ☒ OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN NO. 2-1262

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) Purchase Supply (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) 7/31/96

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way Richland, WA 99352 (name and address)

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland (address)

4. Name, address and identification of nuclear power plant Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way, Richland, WA 99352

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0055 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1980 (year built)
d: Construction Code 1971 (edition) N/A (addenda) N/A (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1989 (edition) N/A (addenda) N/A (Code Case

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) N/A (addenda) N/A (Code Case(

9. Design responsibilities N/A

10. Opening pressure: 1195 Blowdown(if applicable) N/A Set pressure and blowdown adjustme made at Western Repair Center (location) using Steam (test medium)

Description of work:(include name and identifying number of replacement parts) Disassembled, lapped seats, inspected, replaced disc insert, assembled. Certified set pressure on steam.

12. Remarks: Disc insert S/N N93185-56-0235, MC 54401795

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above confor to Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB 102, current edition.

Certificate of Authorization no. 590 to use the "VR" stamp expires 1/11, 19 98.
Certificate of Authorization no. 78 to use the "NR" stamp expires 4/12, 19 98.

Date 3-29 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) Thomas P. Nellenstein (authorized representative) SR. Engr (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-29, 1996 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warrant expressed or implied, concerning the repair, modification 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.

3-29, 1996, Signed (Inspector) Commissions CA 1716 (Nat. Board No.(including endorsements)state or province and numbe

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

NB-1 Rev

PLAN No 2-1263

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001C	WPPSS	B22-G001C-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
MS-RV-4C	Crosby	N63790-00-0056	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-4C	Crosby	N63790-00-0057	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** The following work was performed either by Washington Public Power Supply System (WPPSS) or by Raytheon Engineers & Constructors. Replaced existing relief valve MS-RV-4C. The replacement work was performed as follows:
   1) Removed existing relief valve MS-RV-4C, Serial No N63790-00-0056 with set pressure of 1195 Psig at rated temperature of 575° F
   2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable
   3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable
   4) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1194 and Plan No 2-1317
   5) VT-3 visual examination on the existing studs and nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1194 and Plan No 2-1317
   6) Installed replacement relief valve with Serial No N63790-00-0057 with set pressure of 1195 Psig at rated temperature of 575° F
   7) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint
   8) Performed VT-1 visual examination on four (4) new nuts for the relief valve inlet joint. VT-1 visual examination results acceptable
   9) Installed four (4) new nuts for the relief valve inlet joint
   10) Installed three (3) new bolt for the relief valve outlet joint
   11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test
   12) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0057

PLAN No 2-1263

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [X] Nominal Operating Pressure [X] Other [ ] None

Test Pressure: 1020/7.5 Psig
Test Temperature: 194/71° F
Component Design Pressure: 1195 Psig
Temperature: 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0057
2) Nominal operating pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 194° F
3) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 71° F

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/12/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/10/96 to 8/16/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7466, 7458 W NSB-I
National Board, State, and Endorsements

Date 8/16/96

Rudath Engrs
5/4/65

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1263

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES Q.C.-44D
As Required by the Provisions of the ASME Code Rules

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Avenue., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0057 Drawing No. DS-A-63790 Rev

Type Safety Relief Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch

6. Set Pressure (psig) 1195 575° F
Rated Temperature

Stamped Capacity 899,185 @ 3 %Overpressure -- Blowdown (psig) 2 % to [illegible]

Hydrostatic Test (psig) Inlet 2370 Outlet 1100 psig (Body Only) 975 psig (Assembled Valve)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. ~~Casting~~ Bar Stock & Forgings		
Body	N93183-35-0076	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0039	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Machined Parts~~ ~~Superseded~~ Disc Insert	N93185-34-0089	ASME SA637 Gr. 718
Nozzle	N93184-33-0061	ASME SA182 Gr. F316
Disc Holder *K55484-35-0083	*N89714-34-0093	AMS 5662B
Spring Washers K62858-35-0039	K62856-35-0095 K62857-35-0060	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0064	ASME SA193 Gr. B6
Spindle Point K62873-35-0057	*N89720-34-0073	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0039	*N89722-0015	ASTM A304-66 Gr. 4161 H
d. Bolting		7X00380090
e. ~~Consumable~~ Spindle Ball K62873-35-0057	N93213-0057	Stellite #6
Thrust Bearing Adapter	N93409-32-0059	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0681 thru 0692	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0901 thru 0912	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0683 thru 0694	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0687 thru 0698	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button K63618-33-0066	N93411-33-0066	ASME SA193 Gr. B6

Modification consists of replacement of the Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.

~~MS-RV-4B~~ Radiflo Size 3 5/4
~~N-3790-00-0007~~

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711.

Class 1

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.A. Casavant

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company 43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 12-9, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 12-9 1980.

Signed [signature] (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery D

ZX00380091

PLAN No 2-1264

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001B	WPPSS	B22-G001B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
MS-RV-5B	Crosby	N63790-00-0136	N/A	N/A	1973	Replaced	Yes, Code Class 1
MS-RV-5B	Crosby	N63790-00-0059	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** The following work was performed either by Washington Public Power Supply System (WPPSS) or by Raytheon Engineers & Constructors. Replaced existing relief valve MS-RV-4C. The replacement work was performed as follows:
   1) Removed existing relief valve MS-RV-5B, Serial No N63790-00-0136 with set pressure of 1205 Psig at rated temperature of 575° F
   2) Performed VT-3 visual examination on the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
   3) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable
   4) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable
   5) Performed VT-3 visual examination on the existing studs for the relief valve body to bonnet joint while in place. VT-3 visual examination results acceptable
   6) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint while in place. VT-3 visual examination results acceptable
   7) Installed replacement relief valve with Serial No N63790-00-0059 with set pressure of 1205 Psig at rated temperature of 575° F
   8) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint
   9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test
   10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0059

PLAN No 2-1264

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [X] **Nominal Operating Pressure** [X] **Other** [ ] **None**

Test Pressure: 1020/7.5 Psig **Test Temperature:** 194/84° F

Component Design Pressure: 1205 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0059
2) Nominal operating pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 194° F
3) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 84° F

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh **Signed By** [signature]
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/11/96 **Date** 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12-9-95 *to* 8/13/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature] **Commissions** 7486, 7486 W NB IS-IS
Inspector's Signature National Board, State, and Endorsements

Date 8/13/96

PLAN No. 2-1264 ~~MS-RV-4A~~

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Rudolph Supp
8/10/86

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0059 Drawing No. DS-A-63790 Rev.

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Inch Pipe Size -- Inch Inlet 6 Inch Outlet 10 Inch

6. Set Pressure (psig) 1205 575° F
Rated Temperature

Stamped Capacity 906,621 @ 3 %Overpressure -- Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 1100 psig (Body Only)

Pressure Retaining Pieces (Applicable to Valves for Closed Systems Only)

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0078	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0041	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Xxxxxxxxxxxxxxx~~		
~~Xxxxxxxxxx~~ Disc Insert	N93185-34-0091	ASME SA637 Gr. 718
Nozzle	N93184-33-0063	ASME SA182 Gr. F316
Disc Holder *K55484-35-0085	*N89714-34-0105	AMS 5662B
Spring Washers K62858-35-0041	K62856-35-0097 K62857-35-0062	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0066	ASME SA193 Gr. B6
Spindle Point K62873-35-0059	*N89720-34-0067	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0041	*N89722-0017	ASTM A304-66 Gr. A161H
d. Bolting		
e. ~~Xxxxxxxxx~~ Spindle Ball K62873-35-0059	N93213-0059	Stellite #6
Thrust Bearing Adapter	N93409-32-0061	ASME SA193 Gr. B6
Bonnet Stud	(BW5) N93207-0705 thru 0716	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut	(J87) N93210-0933 thru 0936	ASME SA194 Gr. 2H
Inlet Stud	(BW6) N93216-0707 thru 0713	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut	(BW8) N93218-0711 thru 0722	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-33-0068	ASME SA193 Gr. B6

XC0380149

Valve originally built against Crosby Order No. N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

N103790-00-0059

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 & 1711

Class 1 (Date)

Date 11-5-80 Signed Crosby Valve & Gage Co. by R.A. Cusmano
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1878 to use the NV

symbol expires September 30, 1983.
(Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/18, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 11/18 1980.

Signed [signature] Commissions MASS 1766
(Inspector) (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380150

PLAN No 2-1265

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/31/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001A	WPPSS	B22-G001A-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
MS-RV-1A	Crosby	N63790-00-0049	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-1A	Crosby	N63790-00-0048	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** The following work was performed either by Washington Public Power Supply System (WPPSS) or by Raytheon Engineers & Constructors. Replaced existing relief valve MS-RV-1A. The replacement work was performed as follows:
   1) Removed existing relief valve MS-RV-1A, Serial No N63790-00-0049 with set pressure of 1175 Psig at rated temperature of 575° F
   2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable
   3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable
   4) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1314
   5) VT-3 visual examination on the existing studs and nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1314
   6) Installed replacement relief valve with Serial No N63790-00-0048 with set pressure of 1175 Psig at rated temperature of 575° F
   7) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint
   8) Installed one (1) new bolt for the relief valve outlet joint
   9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test
   10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test

NOTES -
1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0048

PLAN No 2-126

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [X] **Nominal Operating Pressure** [X] **Other** [ ] **None**

Test Pressure: 1020/7.5 Psig **Test Temperature:** 194/84° F

Component Design Pressure: 1175 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0048

2) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0055

3) Nominal operating pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 194° F

4) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 84° F

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Date 7/31/96

Signed By C. M. King — Supervisor, Materials And Welding

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/10/96 *to* 8/16/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

R. M. Scott — Inspector's Signature

Commissions 7486, 7486 W NSIB - IS — National Board, State, and Endorsements

Date 8/16/96

MS-RV-1A

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. Z-1265

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

Rudolph Bumpus 7/31/86

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0048 Drawing No. DS-A-63790 Rev. C

Type Safety Relief Orifice Size R Pipe Size Inlet 6 Inch Outlet 10 Inch
Safety, Safety Relief, Pilot, Power Actuated

6. Set Pressure (psig) 1175 575° F
Rated Temperature

Stamped Capacity 884,314 @ 3 % Overpressure — Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
Bar Stock & Forgings		
a. ~~Casting~~		
Body	N93183-35-0067	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0030	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Bar Stock & Forgings~~		
~~Support~~ Disc Insert	N93185-34-0079	ASME SA637 Gr. 718
Nozzle	N93184-33-0052	ASME SA182 Gr. F316
Disc Holder *K55484-35-0081	*N89714-34-0126	AMS 5662B
Spring Washers K62858-35-0030	K62856-35-0086 K62857-35-0051	ASTM A105-71Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0055	ASME SA193 Gr. B6
Spindle Point K62873-35-0048	*N89720-34-0065	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0030	*N89722-0004	ASTM A304-66 Gr. 4161H
d. Bolting		ZX0038011 3
e. ~~Spindle Ball~~ Spindle Ball K62873-35-0048	N93223-0048	Stellite #6
Thrust Bearing Adapter	N93409-32-0050	ASME SA193 Gr. B6
Bonnet Stud (JI7)	N93207-0573 thru 0584	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0793 thru 0804	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0575 thru 0586	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0579 thru 0590	ASTM A194-71 Gr. 2H — ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-33-0056	ASME SA193 Gr. B6

Valve originally built against Crosby Order No N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

N63790-00-0048

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711.
Class 1

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R. A. Cabaniss

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/24, 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 for Nuclear Power Plant Components.

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

Date 11/24 19 80.

Signed (Inspector) Commissions MHSS1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380114

FORM NVR-1 REPORT OF REPAIR ☒ MODIFICATION ☐ OR REPLACEMENT ☒ OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-1265

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) Purchase Order (P.O. no., job no., etc.)

200 S. Highland Springs Ave., Banning, CA 92220 (address) 7/31/96

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way (name and address) Richland, WA 99352

3. Owner Washington Public Power Supply System, WNP-2 (name)

3000 Geo. Washington Way, Richland (address)

4. Name, address and identification of nuclear power plant Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way, Richland, WA 99352

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve

b: Name of manufacturer Crosby

c: Identifying nos. HB-65-BP (type) N63790-00-0048 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1980 (year built)

d: Construction Code 1971 (edition) N/A (addenda) N/A (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1989 (edition) N/A (addenda) N/A (Code Case

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) N/A (addenda) N/A (Code Case(s

9. Design responsibilities N/A

10. Opening pressure: 1175 Blowdown(if applicable) _____ Set pressure and blowdown adjustme made at Western Repair Center (location) using steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Disassembled, lapped seats, inspected, replaced inlet stud, assembled. Certified set pressure on steam.

12. Remarks: Inlet stud - PO #231692, Item #003, MC #54400514

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above confor to Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB 102, current edition.

Certificate of Authorization no. 590 to use the "VR" stamp expires 1/11, 19 98

Certificate of Authorization no. 78 to use the "NR" stamp expires 4/12, 19 98

Date 3-29 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) Thomas P Nedostup (authorized representative) SR. ENGR (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued b the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-29, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warrant expressed or implied, concerning the repair, modification 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 3-29, 19 96. Signed Russ Eben (Inspector) Commissions CA 1716 (Nat. Board No.(including endorsements) state or province and numbe

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

NB-1 Rev

PLAN No 2-1266

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/31/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001B	WPPSS	B22-G001B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
MS-RV-3B	Crosby	N63790-00-0053	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-3B	Crosby	N63790-00-0051	N/A	N/A	1981	Replacement	Yes, Code Class 1

7. Description Of Work Performed: The following work was performed either by Washington Public Power Supply System (WPPSS) or by Raytheon Engineers & Constructors. Replaced existing relief valve MS-RV-3B. The replacement work was performed as follows:

1) Removed existing relief valve MS-RV-3B, Serial No N63790-00-0053 with set pressure of 1185 Psig at rated temperature of 575° F
2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable
3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable
4) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1193
5) VT-3 visual examination on the existing studs and nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1193
6) Installed replacement relief valve with Serial No N63790-00-0051 with set pressure of 1185 Psig at rated temperature of 575° F
7) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint
8) Performed VT-1 visual examination on four (4) new nuts for the relief valve inlet joint. VT-1 visual examination results acceptable
9) Installed four (4) new nuts for the relief valve inlet joint
10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test
11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0051

PLAN No 2-1266

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [X] **Nominal Operating Pressure** [X] **Other** [ ] **None**

Test Pressure: 1020/7.5 Psig
Component Design Pressure: 1185 Psig
Test Temperature: 194/84° F
Temperature: 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0051
2) Nominal operating pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 194° F
3) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 84° F

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 7/31/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/19/95 *to* 8/16/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

[signature]
Inspector's Signature

Commissions 7486, 7486W NBSI - IS
National Board, State, and Endorsements

Date 8/16/96

AAS RV's
3E

PLAN NO. 2-1266
Rudolph Sapp
7/31/96

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FM Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured for General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL 8822-F013 Serial No. N63790-00-0051 Drawing No. DS-A-63790 Rev. C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Inch Pipe Size — Inch Inlet 6 Inch Outlet 10 Inch

6. Set Pressure (psig) 1185 575° F
Rated Temperature

Stamped Capacity 891,250 @ 3 %Overpressure — Blowdown (psig) 2% to 11%
975 psig (Assembled Valve)

Hydrostatic Test (psig) Inlet 2370 Outlet 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

		Serial No. Identification	Material Specification Including Type or Grade
a.	Bar Stock & Forgings		
	Body	N93183-35-0070	ASTM A106-71 Gr. B II ASME SA105 Gr. II
	Bonnet	N93407-35-0033	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.			
	Disc Insert	N93185-34-0083	ASME SA637 Gr. 718
	Nozzle	N93184-33-0055	ASME SA182 Gr. F316
	Disc Holder *K55434-35-0084	*N89714-34-0122	AMS 5662B
	Spring Washers K62358-35-0033	K62856-35-0089 K62857-35-0054	ASTM A105-71 Gr. II ASME SA105 Gr. II
	Adjusting Bolt	N93410-33-0058	ASME SA193 Gr. B6
	Spindle Point K62373-37-0151	N89720-43-0146	ASME SA564 Type 630
c.	Spring K62858-35-0033	NX2689-0119	ASTM A304-66 Gr. 4161H
d.	Bolting		
e.	Spindle Ball K62873-37-0151	N93213-0218	Stoody 46
	Thrust Bearing Adapter	N93409-32-0053	ASME SA193 Gr. B6
	Bonnet Stud (BW5, J17)	N93207-0609 thru 0620	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
	Bonnet Stud Nut (J87)	N93210-0829 thru 0840	ASME SA194 Gr. 2H
	Inlet Stud (BW6)	N93216-0611 thru 0622	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
	Inlet Stud Nut (BW8)	N93218-0615 thru 0626	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
	Adjusting Bolt Button K63618-33-0059	N93411-33-0059	ASME SA193 Gr. B6

MAB

2

FOR INFORMATION ONLY

ZX00380611

N 63790-00-0051
Rwlsp Grp 3
3/1/89

Valve originally built against Crosby Order No. N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New serialization is required unless indicated by an asterisk.
-- Original nameplate removed and new nameplate attached.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 & 1711.
Class 1 (Date)

Date 11-5-80 Signed Crosby Valve & Gage Co. by R.O. Caswell
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1878 to use the NV
symbol expires September 30, 1983.
(Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company
Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093
Design specifications certified by[1] Boyd F. Brooks
PE State California Reg. No. 13655
Stress report certified by[1] W. D. Greenlaw
PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts
and employed by Factory Mutual Systems* of Norwood, Massachusetts
have inspected the pump, or valve, described in this Data Report on 11-4-, 51
and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 1/9 19 81.
Signed John E. Wilson Commissions MASS 1266
(Inspector) (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

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ZX00380612

PLAN No 2-1267

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/2/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001C	WPPSS	B22-G001C-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
MS-RV-1C	Crosby	N63790-00-0139	N/A	N/A	1973	Replaced	Yes, Code Class 1
MS-RV-1C	Crosby	N63790-00-0045	N/A	N/A	1981	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** The following work was performed either by Washington Public Power Supply System (WPPSS) or by Raytheon Engineers & Constructors. Replaced existing relief valve MS-RV-1C. The replacement work was performed as follows:
   1) Removed existing relief valve MS-RV-1C, Serial No N63790-00-0139 with set pressure of 1165 Psig at rated temperature of 575° F
   2) Performed VT-3 visual examination on the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
   3) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
   4) Performed VT-3 visual examination on the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
   5) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable
   6) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable
   7) Performed VT-3 visual examination on the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
   8) Installed replacement relief valve with Serial No N63790-00-0045 with set pressure of 1165 Psig at rated temperature of 575° F
   9) Reinstalled VT-3 visually examined existing studs and nuts for the relief valve
   10) Performed VT-1 visual examination on two (2) new nuts for the relief valve inlet joint in accordance with ASME Section XI Plan No 2-0963. VT-1 visual examination results acceptable
   11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test
   12) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0045

PLAN No 2-1267

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [X] **Nominal Operating Pressure** [X] **Other** [ ] **None**

Test Pressure: 1020/7.5 Psig **Test Temperature:** 194/86.5° F

Component Design Pressure: 1165 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0045
2) Nominal operating pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 194° F
3) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 86.5° F

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh _____ ***Signed By*** _____
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/2/96 ***Date*** _____

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*** Arkwright Mutual Insurance Company of Waltham, Massachusetts ***have inspected the components described in this Owner's Report during the period*** 4/10/96 ***to*** 8/16/96 ***and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.***
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ ***Commissions*** 7486, 7486W NSIB - I
Inspector's Signature National Board, State, and Endorsements

Date 8/16/96

MS-RV-1B

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1267

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Section III, Div. 1 - 1974 Ed. thru S74 Addenda

DATA REPORT
Safety and Safety Relief Valves

FOR INFORMATION ONLY

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply Systems, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0045 Drawing No. DS-A-63790 Rev. C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Inch Pipe Size -- Inch Inlet 6 Inch Outlet 10 Inch

6. Set Pressure (psig) 1150 575° F
Rated Temperature

Stamped Capacity 865,725 @ 3 % Overpressure -- Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0064	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0027	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. Disc Insert	N93185-34-0076	ASME SA637 Gr. 718
Nozzle	N93184-32-0047	ASME SA182 Gr. F316
Disc Holder *K55484-35-0092	*N89714-34-0133	AMS 5662B
Spring Washers K62858-35-0027	K62856-35-0083 K62857-35-0048	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0052	ASME SA193 Gr. B6
Spindle Point K62873-37-0146	N89720-43-0143	ASME SA564 Type 630
c. Spring K62858-35-0027	NX2689-0123	ASTM A304-66 Gr. 4161H
d. Bolting		7X00380093
e. Spindle Ball K62873-37-0146	N93213-0213	Stoody #6
Thrust Bearing Adapter	N93409-32-0047	ASME SA193 Gr. B6
Bonnet Stud (I17)	N93207-0537 thru 0548	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0757 thru 0768	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0539 thru 0550	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0543 thru 0554	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-32-0043	ASME SA193 Gr. B6

Valve originally built against Crosby Order No. N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

N6379D-00-0045

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 & 1711.
(Date)

Class 1

Date 11-5-80 Signed Crosby Valve & Gage Co. by R. G. Casavant
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1878 to use the NV

symbol expires September 30, 1983.
(Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company

43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

FOR INFORMATION ONLY

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 1/9, 1981 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 1/9 1981.

Signed J. Pinsonneau (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380214

PLAN No 2-1268

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/2/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001C	WPPSS	B22-G001C-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
MS-RV-3C	Crosby	N63790-00-0124	N/A	N/A	1981	Replaced	Yes, Code Class 1
MS-RV-3C	Crosby	N63790-00-0052	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. Description Of Work Performed: The following work was performed either by Washington Public Power Supply System (WPPSS) or by Raytheon Engineers & Constructors. Replaced existing relief valve MS-RV-3C. The replacement work was performed as follows:

1) Removed existing relief valve MS-RV-3C, Serial No N63790-00-0124 with set pressure of 1185 Psig at rated temperature of 575° F
2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable
3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable
4) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1315
5) VT-3 visual examination on the existing studs and nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1315
6) Installed replacement relief valve with Serial No N63790-00-0052 with set pressure of 1185 Psig at rated temperature of 575° F
7) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint
8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test
9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0052

PLAN No 2-1268

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [X] **Nominal Operating Pressure** [X] **Other** [ ] **None**

Test Pressure: 1020/7.5 Psig
Component Design Pressure: 1185 Psig
Test Temperature: 194/84° F
Temperature: 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0052
2) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0052
3) Nominal operating pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 194° F
4) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 84° F

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Date 8/2/96

Signed By — Supervisor, Materials And Welding
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/10/96 *to* 8/16/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7486, 7486W NSIB-IS
National Board, State, and Endorsements

Date 8/16/96

~~AAS-RV-2D~~

~~MS-545-1~~

FOR REFERENCE ONLY

PLAN NO. 2-1268

Rudolf Smith 7/31/96.

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured by Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-SP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured for General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-A1986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No. ~~N63290-00-0002~~ Drawing No. SS-A-63790 Rev. C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Inch Pipe Size -- Inch Inlet 6 Inch Outlet 10 Inch

6. Set Pressure (psig) 1185 575° F
Rated Temperature

Stamped Capacity 891,730 @ 3 %Overpressure -- Blowdown (psig) 2% to 11%
975 psig (Assembled Valve)

Hydrostatic Test (psig) Inlet 2370 Outlet 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0071	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0034	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. Disc Insert	N93185-34-0084	ASME SA637 Gr. 718
Nozzle	N93184-33-0056	ASME SA182 Gr. F316
Disc Holder *K55484-35-0091	*N89714-34-0124	AMS 5662B
Spring Washers K62858-35-0034	K62856-35-0090 K62857-35-0055	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0059	ASME SA193 Gr. B6
Spindle Point K62373-35-0052	*N89720-34-0068	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0034	*N89722-3010	ASTM A304-66 Gr. 4161H
d. Bolting		
e. Spindle Ball K62373-35-0052	N93213-0052	Stellite #6
Thrust Bearing Adapter	N93409-32-0054	ASME SA193 Gr. B6
Bonnet Stud (117, BW5)	N93207-0621 thru 0632	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (187)	N93210-0841 thru 0852	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-1623 thru 0634	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0627 thru 0638	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button K63618-33-0060	N93411-33-0060	ASME SA193 Gr. B6

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FOR REFERENCE ONLY

~~AS-KV-2D~~

S/N N63790-00-00052

Ralph Gish
6/2

Valve originally built against Crosby Order No. N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711.
Class 1

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.A. Schmidt

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN[1]

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W. D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/10, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 11/18, 1980.

Signed John Eldridge (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

MAB 1-29-81

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FOR INFORMATION ONLY

FORM NVR-1 REPORT OF REPAIR XX MODIFICATION ☐ OR REPLACEMENT ☒ OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-126E

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) Rudolf Rupb (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) 7/31/96

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way (name and address) Richland, WA 99352

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland (address)

4. Name, address and identification of nuclear power plant Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way, Richland, WA 99352

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0052 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1980 (year built)
d: Construction Code 1971 (edition) N/A (addenda) N/A (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1989 (edition) N/A (addenda) N/A (Code Case(

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) N/A (addenda) N/A (Code Case(s

9. Design responsibilities N/A

10. Opening pressure: 1185 Blowdown(if applicable) N/A Set pressure and blowdown adjustmer made at Western Repair Center (location) using Steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Disassembled, lapped seats, inspected, replaced disc insert, assembled. Certified set pressure on steam.

12. Remarks: Disc insert S/N N93185-56-0239, MC #54401795

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conform to Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB 102, current edition.

Certificate of Authorization no. 590 to use the "VR" stamp expires 1/11, 19 98.
Certificate of Authorization no. 78 to use the "NR" stamp expires 4/12, 19 98.

Date 3-29 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) Thomas D Niederstadt (authorized representative) SR. ENGR (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-24, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification 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.

3-29, 19 96. Signed Robert Ebner (Inspector) Commissions CA 1716 (Nat. Board No.(including endorsements) state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

NB-166
Rev 2

PLAN No 2-1269

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/2/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001D	WPPSS	B22-G001D-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
MS-RV-4D	Crosby	N63790-00-0060	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-4D	Crosby	N63790-00-0061	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. Description Of Work Performed: The following work was performed either by Washington Public Power Supply System (WPPSS) or by Raytheon Engineers & Constructors. Replaced existing relief valve MS-RV-4D. The replacement work was performed as follows:

1) Removed existing relief valve MS-RV-4D, Serial No N63790-00-0060 with set pressure of 1205 Psig at rated temperature of 575° F
2) Performed VT-3 visual examination on the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
3) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
4) Performed VT-3 visual examination on the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
5) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable
6) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable
7) Installed replacement relief valve with Serial No N63790-00-0061 with set pressure of 1205 Psig at rated temperature of 575° F
8) Reinstalled VT-3 visually examined existing studs and nuts for the relief valve
9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test
10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0061

PLAN No 2-1269

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [X] **Nominal Operating Pressure** [X] **Other** [ ] **None**

Test Pressure: 1020/7.5 Psig **Test Temperature:** 194/84.2° F

Component Design Pressure: 1205 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0061
2) Nominal operating pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 194° F
3) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 84.2° F

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh **Signed By**

Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/2/96 **Date** 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/10/96 *to* 8/16/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

J. M. Coutts **Commissions** 7486, 7486 w NSB-IS

Inspector's Signature National Board, State, and Endorsements

Date 8/16/96

PLAN NO. 2-1269

Ruaip Sup 7/31/96

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

O.C.-44D

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-3P-FN Order No. N94275 Contract Date 4/24/79 National board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MOV #232-F013 Serial No. N63790-00-0061 Drawing No. DS-A-63790 Rev. C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R inch Pipe Size -- inch Inlet 6 inch Outlet 10 inch

6. Set Pressure (psig) 1205 575° F (Rated Temperature)

Stamped Capacity 906.621 @ 3 %Overpressure -- Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) *100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

		Serial No. Identification	Material Specification Including Type or Grade
a.	Bar Stock & Forgings		ASTM A105-71 Gr. II
	Body	N93183-35-0080	ASME SA105 Gr. II
	Bonnet	N93407-35-0043	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.			
	Disc Insert	N93185-34-0093	ASME SA637 Gr. 718
	Nozzle	N93184-33-0065	ASME SA182 Gr. F316
	Disc Holder *K55154-35-0087	*N89714-34-0117	AMS 56629
	Spring Washers K62858-35-0043	K62856-35-0099 K62857-35-0064	ASTM A105-71 Gr. II ASME SA105 Gr. II
	Adjusting Bolt	N93420-33-0068	ASME SA193 Gr. B6
	Spindle Point K62873-35-0061	*N89720-34-0072	ASTM A564-71 Type 630 ASME SA564 Type 630
c.	Spring K62855-35-0043	*N89722-0019	ASTM A294-66 Gr. 416B
d.	Bolting		
e.	Spindle Ball K62873-35-0061	N93213-0061	Stellite #6
	Thrust Bearing Adapter	N93609-22-0062	ASME SA193 Gr. B6
	Bonnet Stud (7/8", B4S)	N93207-0729 thru 0740	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
	Bonnet Stud Nut (1/8")	N93210-0949 thru 0960	ASME SA194 Gr. 2H
	Inlet Stud (3/4")	N93216-0731 thru 0740	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
	Inlet Stud Nut (3/4")	N93218-0735 thru 0745	ASME SA194 Gr. 2H
	Adjusting Set Screw K63618-33-0070	N93422-33-0070	ASME SA193 Gr. B6

MAB

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FOR INFORMATION ONLY

ZX00383132

Valve originally built against Crosby Order No. N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 & 1711
Class 1 (Date)

Date 11-5-80 Signed Crosby Valve & Gage Co. by R.O. Cavanagh
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 20, 1983.
(Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14786

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Syscems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 12-9, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 12-8, 1980.

Signed [signature] (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

MAB 1-1331

FOR INFORMATION ONLY

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7 8 9 10

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ZX00383133

PLAN No 2-1272

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Residual Heat Removal (RHR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2A	WPPSS	RHR(1)-2A-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
RHR-RV-1A	Crosby	N60597-00-0018	N/A	N/A	1990	Replaced	Yes, Code Class 2
RHR-RV-1A	Crosby	N60597-00-0019	N/A	N/A	1990	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing relief valve RHR-RV-1A. The replacement work was performed as follows:
   1) Machined the raised face of the discharge flange for the new relief valve RHR-RV-1A, Serial No N60597-00-0019
   2) Removed existing relief valve RHR-RV-1A, Serial No N60597-00-0018
   3) Installed new relief valve RHR-RV-1A, Serial No N60597-00-0019

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda for the new relief valve RHR-RV-1A, Serial No N60597-00-0019

PLAN No 2-1272

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NV-1 Code Data Report for the new relief valve RHR-RV-1A, Serial No N60597-00-0019

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Signed By _____

Kuldip Singh - Program Lead Engineer (PLE) — Supervisor, Materials And Welding

Date 7/30/96 — Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2-2-96 to 7-31-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

_____ Commissions 7486, 7486 CW NB SI IS

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

Date 7/31/96

PLAN NO. 2-1272

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Rec'd by SWEC 7/27/96.

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-4C-1

RHR-RV-1A

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. JR-WR Order No N06360 Contract Date 3/7/90 National Board No. —

2. Manufactured For Washington Public Power Supply System PO Box 968 Richland, WA 99352-0968 Order No. 204649
Name and Address

3. Owner Washington Public Power Supply System
Name and Address

4. Location of Plant Hanford II

5. Valve Identification MPL E12B001 Serial No. N60597-00-0019 Drawing No. DS-C-60597 Rev. E

Type Relief Orifice Size .280 Inch Pipe Size — Inch Inlet 3/4 Inch Outlet 1 Inch
Safety, Safety Relief, Pilot, Power Actuated

6. Set Pressure (PSIG) 500 480° F
Rated Temperature

Stamped Capacity 20 GPM WTR @ 70°F @ 10 % Overpressure — Blowdown (PSIG) 15% of SP

Hydrostatic Test (PSIG) Inlet 750 Complete Valve 225

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 2 Edition 1974, Addenda Date Summer 1975, Case No. 1567 & N242-1
1711

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body		
~~Bonnet~~ Cylinder	N91851-34-0024	ASME SA 216 Gr. WCB
b. Bar Stock and Forgings		
Support Rods		
~~Nozzle~~ Base	N91850-37-0024	ASME SA 479 Type 316
Disc	N91855-46-0088	ASME SB 164 CL. A
Spring Washers	N92220-36-0081 N92220-36-0083	ASME SA 193 Gr. B6
Adjusting Bolt	N92221-34-0028	ASME SA 193 Gr. B6
Spindle K61719-39-0034	N92219-39-0034	ASME SA 193 Gr. B6

VERIFIED & ACCEPTED _____ REG. INSPECTOR
LEVEL II DATE 10-22-90

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX3119-0027	ASTM B166
d. Bolting		
e. Other Parts such as Pilot Components		

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

Date 9/29/1990 Signed Crosby Valve & Gage Co. By
Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1992

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Arkwright Mutual Insurance Company have inspected the equipment described in this Data Report on Sept 27 1990 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date Sept 27 1990 Factory Mutual System

(Inspector) Commissions MA 1207
(National Board, State, Province and No.)

PLAN No 2-1273

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/14/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Residual Heat Removal (RHR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2A	WPPSS	RHR(1)-2A-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
RHR-RV-25A	Lonergan	509258 74 1	N/A	N/A	1978	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Refurbished and reinstalled existing relief valve RHR-RV-25A. The work was performed as follows:
   1) Installed new replacement disc in the relief valve
   2) Installed new replacement nozzle in the relief valve
   3) Performed VT-3 visual examination on the existing studs for the relief valve outlet joint. VT-3 visual examination results acceptable
   4) Performed VT-3 visual examination on the existing nuts for the relief valve outlet joint. VT-3 visual examination results acceptable
   5) Reinstalled VT-3 visually examined existing nuts for the relief valve outlet joint
   6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda for the relief valve

PLAN No 2-1273

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None

Test Pressure: 38.57 Psig
Component Design Pressure: 125 Psig
Test Temperature: 76° F
Temperature: 480° F

9. Remarks: The component design pressure of 125 Psig and design temperature of 480° F is for the relief valve outlet piping

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Signed By [signature] 8/14/96
Kuldip Singh - Program Lead Engineer (PLE) — Supervisor, Materials And Welding

Date 8/14/96 — Date

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 Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/1/96 to 8/15/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

[signature] Commissions 7486, 7486W WSTB-IS
Inspector's Signature — National Board, State, and Endorsements

Date 8/15/96

PLAN No 2-1276

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Standby Liquid Control (SLC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC(2)-3S	WPPSS	SLC(2)-3S-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
SLC-RV-29A	Lonergan	137180-1-1	N/A	N/A	1994	Replaced	Yes, Code Class 2
SLC-RV-29A	Lonergan	509258-82-1	N/A	N/A	1978	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing relief valve SLC-RV-29A. The replacement work was performed as follows:
   1) Removed existing relief valve SLC-RV-29A, Serial No 137180-1-1
   2) Installed refurbished spare relief valve SLC-RV-29A, Serial No 509258-82-1
   3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet bolted joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1974 (12/31/74) Addenda for the refurbished spare relief valve SLC-RV-29A, Serial No 509258-82-1

PLAN No 2-1276

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None

Test Pressure: Static Head

Component Design Pressure: 150 Psig

Test Temperature: 97° F

Temperature: 150° F

9. Remarks: See attached NV-1 Code Data Report for the refurbished spare relief valve SLC-RV-29A, Serial No 509258-82-1

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/30/96

Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1-11-96 to 7/31/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

[signature] — Inspector's Signature

Commissions 7486, 7486W NB SI IS — National Board, State, and Endorsements

Date 7/31/96

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES • PCAN No. 2-1276

As required by the Provisions of the ASME Code Rules

Rec'd Sup 5 7/22/76

1. Manufactured by J. E. Lonergan Company, Red Lion Rd., W. of Verree, Philadelphia, Pa. 191
Name and Address

Model No. D-50D/S4 Order No. 509258 Contract Date 8/5/75 National Board No.

2. Manufactured For Bovee & Crail Const. Co. and General Energy Resources, Inc., Richland, Wash. Order No. 215-15190
Name and Address

3. Owner Washington Public Power, Hanford, Washington 99352
Name and Address

4. Location of Plant Hanford #2 Jobsite, 12 Miles North of Richland, Washington 99352

5. Valve Identification SLC-RV-29A Serial No. 509258-82-1 Drawing No. A-2346, No Rev.

Type Safety Relief Valve Orifice Size 0.110 Sq. Inch Pipe Size Inch Inlet 1" Inch Outlet 2" Inch
Safety; Safety Relief; Pilot; Power Actuated

6. Set Pressure (PSIG) 1400 * 200 Rated Temperature 650°F

Stamped Capacity 67.2 G.P.M. Rated @ 10 % Overpressure Blowdown (PSIG) **

Hydrostatic Test (PSIG) Inlet 2100 Outlet Valve 425

7. The material, design, construction and workmanship comply with ASME Code, Section III, Winter Addenda

Class 2, Edition 1974, Addenda Date 12/31/74, Case No. 1555

BOVEE & CRAIL / G.E Q.A./Q.C. APPROVED

Pressure Containing or Pressure Retaining Components

	Serial No. or Identification	Material Specification Including Type or Grade
a. Castings		
Body	D371-1	ASME SA-351 (CF8M) Type 316
Bonnet	E5369-1	ASME SA-351 (CF8M) Type 316
b. Bar Stock and Forgings		WBG BR. 215 15C1B
Support Rods		
Nozzle	02607	ASME SA-479 Type 316
Disc	G8864	ASME SA-479 Type 316
Spring Washers	02607	ASME SA-479 Type 316
Adjusting Screw	G9913	ASME SA-479 Type 316
Spindle	G9938	ASME SA-479 Type 316

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

2 1276 1004

FORM NV-1 (back)

	Serial No. or Identification	Material Specification Including Type or Grade
c. Swing	Heat No. 00653	ASTM A-313 Type 316
d. Bolting	Studs - Cert. of Conformance	ASME SA-320, GR.B8
	Nuts - Cert. of Conformance	ASME SA-194, GR. 8

e. Other Parts such as Pilot Components

Cap	02977	ASME SA-479 Type 316

SLC-LV-29A

Kulavik

6/24/82.

BOVE" IL / G.E.R.L.
Q.I. BOVED
SIGN: [illegible]
DATE: 12-22-79. 38338

** Blowdown not specified by code.

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

Date 12-15 19 78 Signed J. E. LONERGAN CO. (Manufacturer) By T. A. NICKEY

Certificate of Authorization No: N-1443 expires Aug. 9, 1979.

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 Penna. and employed by Hartford Stm. Boiler I.&I. Co. of Hartford, Conn. have inspected the equipment described in this Data Report on Dec 15 19, 78 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date Dec 15 19 78

WBG BR 215 15018

Walter J. Comeaux Commissions Pa 1786
(Inspector) (National Board, State, Province and No.)

Printed in U.S.A. 1/79

This form (E42) is obtainable from the ASME, 345 E. 47th St., New York, N.Y. 10017

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2 1 2 7 9 1 0 0 5

PLAN No 2-1278

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(21)-2	WPPSS	SW(21)-2-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3
SW-RV-1A	Crosby	N67441-00-0001	N/A	N/A	1983	Replaced	Yes, Code Class 3
SW-RV-1A	Crosby	N67441-00-0003	N/A	N/A	1991	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing relief valve SW-RV-1A. The replacement work was performed as follows:
   1) Removed existing relief valve SW-RV-1A, Serial No N67441-00-0001
   2) Installed new relief valve SW-RV-1A, Serial No N67441-00-0003

NOTES -

1) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 3, 1974 Edition with Summer 1975 Addenda for the new relief valve SW-RV-1A, Serial No N67441-00-0003

PLAN No 2-1278

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NV-1 Code Data Report for the new relief valve SW-RV-1A, Serial No N67441-00-0003

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/30/96

Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1-5-96 to 7-31-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

[signature] — Inspector's Signature

Commissions 7486, 7486W NBSI IS — National Board, State, and Endorsements

Date 7/31/96

PLAN NO. 2-1278
SW-RV-1A

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-4C-1

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. JR-WR Order No N06360 Contract Date 3/7/90 National Board No. --

2. Manufactured For Washington Public Power Supply System PO Box 968 Richland, WA 99352-0968 Order No. 204649
Name and Address

3. Owner Washington Public Power Supply System SW-RV-1A
Name and Address

4. Location of Plant Hanford II Rudip Gupta 7/22/96

5. Valve Identification MPL E12B001 Serial No. N67441-00-0003 Drawing No. DS-C-67441 Rev. 0

Type Relief Orifice Size .280 Pipe Size -- Inlet 3/4 Outlet 1
Safety, Safety Relief, Pilot, Power Actuated — Inch — Inch — Inch — Inch

6. Set Pressure (PSIG) 275 480° F
Design Rated Temperature

Stamped Capacity 15 GPM WTR @ 70°F @ 10 % Overpressure -- Blowdown (PSIG) 15% of SP

Hydrostatic Test (PSIG) Inlet 750 Complete Valve 225

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 3 Edition 1974, Addenda Date SUMMER 1975, Case No. 1711 1567&N242-1

Pressure Containing or Pressure Retaining Components

a. Castings	Serial No. Identification	Material Specification Including Type or Grade
Body		
~~Bonnet~~ Cylinder	N91851-35-0026	ASME SA 216 Gr. WCB
b. Bar Stock and Forgings		
Support Rods		
~~Yoke~~ Base	N91850-39-0032	ASME SA 479 Type 316
Disc	N91855-46-0091	ASME SB 164 CL. A
Spring Washers	N92220-37-0088 N92220-37-0089	ASME SA 193 Gr. B6
Adjusting Bolt	N92221-35-0029	ASME SA 193 Gr. B6
Spindle K61719-40-0035	N92219-40-0035	ASME SA 193 Gr. B6

2411067

CROSBY VALVE & GAGE COMPANY

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX4691-0005	ASTM B 166
d. Bolting		
e. Other Parts such as Pilot Components		

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

Date Jan 15 19 91 Signed Crosby Valve & Gage Co. By Laurence Hines
Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1992

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Arkwright Mutual Insurance Company have inspected the equipment described in this Data Report on 1-16 19 91 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date 1-16 19 91 Factory Mutual System

W E Hallam Commissions MA 1207
(Inspector) (National Board, State, Province and No.)

2 4 2 6 1 1 6 8 8

PLAN No 2-1283

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Pressure Vessel (RPV)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	9	N/A	1974	Replacement	Yes, Code Class 1
LPRM	General Electric*	M3796	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric*	M3801	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric*	M3345	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric*	M3794	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric*	M3795	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric*	M3344	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric*	M3348	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric*	95S01114	N/A	N/A	1994	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced Local Power Range Monitoring (LPRM) Incore assemblies. The replacement work was performed as follows:
   1) Removed existing Local Power Range Monitoring (LPRM) Incore assemblies from the Reactor Pressure Vessel core locations listed below
   2) Installed new Local Power Range Monitoring (LPRM) Incore assemblies in the Reactor Pressure Vessel core locations listed below

Core Location	Core Location	Core Location	Core Location
08-25	32-17	40-41	56-33
24-57	32-33	56-25	56-41

NOTES -

1) * General Electric (GE) Reuter-Stokes
2) ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda for the Reactor Pressure Vessel (RPV)
3) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new Local Power Range Monitoring (LPRM) Incore assemblies

PLAN No 2-1283

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached N-2 Code Data Reports for the following new Local Power Range Monitoring (LPRM) incore assemblies:

Core Location	LPRM Serial No	Core Location	LPRM Serial No
08-25	M3796	40-41	M3795
24-57	M3801	56-25	M3344
32-17	M3345	56-33	M3348
32-33	M3794	56-41	95S01114

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/13/96

Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/16/96 to 8/13/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486, 7486 w NB5I I5 — National Board, State, and Endorsements

Date 8/13/96

WORK ORDER NUMBER: 2548

PLAN NO. 2-1283

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

As required by the Provisions of the ASME Code Rules

Rudolph Ruf's 8/8/94

1. (a) Manufactured by GE REUTER-STOKES, INC. 8499 DARROW ROAD, TWINSBURG, OHIO 44087
(Name and address of Manufacturer of part)

(b) Manufactured for WNP-2 - WASHINGTON PUBLIC POWER SUPPLY SYSTEM, RICHLAND, WA 99352
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part SEE PAGE 2 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. RS-E5-1260-201 Drawing Prepared by GE REUTER-STOKES

(b) Description of Part Inspected POWER RANGE DETECTOR DRY TUBE

(c) Applicable ASME Code: Section III, Edition 1977, Addenda date SUMMER 1977, Case No. N/A Class 1

3. Remarks: DESIGN: PRESSURE 1250 PSIG, DESIGN TEMPERATURE 575°F
(Brief description of service for which component was designed)

HYDROSTATIC TEST PRESSURE: 1925 PSIG

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 10/18 19 93 Signed GE REUTER-STOKES (Manufacturer) By QUALITY ASSURANCE

Certificate of Authorization Expires SEPTEMBER 16, 1994 Certificate of Authorization No. N-2703

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE REUTER-STOKES, INC. TWINSBURG, OHIO CDS-C-5026-1

Stress analysis report on file at GE REUTER-STOKES, INC. TWINSBURG, OHIO CDR-C-5253-05

Design specifications certified by SURINDER L. KAMPANI Prof. Eng. State OH Reg. No. E-034113

Stress analysis report certified by DOUGLAS E. BACSO Prof. Eng. State OH Reg. No. E-044071

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 OHIO and employed by H.S.B.I. & I. Co. of HARTFORD, CT have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 10-18 19 93, 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 10-18 19 93

Jacob P. Schell
Inspector's Signature

Commissions NB7920 AN OHIO PANC2454-N
National Board, State, Province and No.

10/20/93

WORK ORDER NUMBER: 2548

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 GE REUTER-STOKES, INC. 8499 DARROW ROAD, TWINSBURG, OHIO 44087
(Name and address of Manufacturer of part)

(b) Manufactured for WNP-2 - WASHINGTON PUBLIC POWER SUPPLY SYSTEM, RICHLAND, WA 99352
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part SEE BELOW Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. RS-E5-1260-201 Drawing Prepared by GE REUTER-STOKES

(b) Description of Part Inspected POWER RANGE DETECTOR DRY TUBE

(c) Applicable ASME Code: Section III, Edition 1977, Addenda date SUMMER 1977, Case No. N/A Class 1

3. Remarks: DESIGN: PRESSURE 1250 PSIG, DESIGN TEMPERATURE 575°F
(Brief description of service for which component was designed)

HYDROSTATIC TEST PRESSURE: 1925 PSIG

SERIAL NUMBERS: M3341 thru M3355
M3791 thru M3801
M3803, M3804, M3805
M5263

10/2[illegible]

James H Holmes 10/18/93
QUALITY ASSURANCE DATE

Jack P Schell 10-18-93
ANI DATE

NB7920-OHIO-PAWC2454-N

WORK ORDER NUMBER: 7316

PLAN NO. [illegible]

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 GE REUTER-STOKES, INC. 8499 DARROW ROAD. TWINSBURG, OHIO 44087
(Name and address of Manufacturer of part)

(b) Manufactured for WNP-2, WASHINGTON PUBLIC POWER SUPPLY SYSTEM, RICHLAND, WA 99352
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 95S01114 - 95S01116 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. RS-C6-1315-201 Drawing Prepared by GE REUTER-STOKES

(b) Description of Part Inspected NA-300 POWER RANGE DETECTOR

(c) Applicable ASME Code: Section III, Edition 1977, Addenda date SUMMER 1977, Case No. N-176-1 Class 1

3. Remarks: DESIGN: PRESSURE 1250 PSIG, TEMPERATURE - VESSEL 575°F. SEAL 300°F.
(Brief description of service for which component was designed)

HYDROSTATIC TEST PRESSURE: 1925 PSIG

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 10/17 19 95 Signed GE REUTER-STOKES (Manufacturer) By [signature] QUALITY ASSURANCE

Certificate of Authorization Expires SEPTEMBER 16. 1997 Certificate of Authorization No. N-2703

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE REUTER-STOKES, INC. TWINSBURG. OHIO DC24A1257AK

Stress analysis report on file at GE REUTER-STOKES, INC. TWINSBURG. OHIO CDR-C-5320-139

Design specifications certified by SURINDER L. KAMPANI Prof. Eng. State OH Reg. No. E-034113

Stress analysis report certified by DOUGLAS E. BACSO Prof. Eng. State OH Reg. No. E-044071

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 OHIO and employed by H.S.B.I. & I. Co. of HARTFORD, CT have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 10-17 19 95 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 10-17 19 95

[signature] Commissions OHIO - NB 7920 AN
Inspector's Signature National Board, State, Province and No.

WPPSS Approved [signature] 10/18/95

PLAN No 2-1284

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/2/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001D	WPPSS	B22-G001D-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
MS-RV-3D	Crosby	N63790-00-0126	N/A	N/A	1981	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** The following work was performed either by Washington Public Power Supply System (WPPSS) or by Raytheon Engineers & Constructors. The work was performed as follows:
   1) Removed existing relief valve MS-RV-3D, Serial No N63790-00-0126 with set pressure of 1195 Psig at rated temperature of 575° F
   2) The removed existing relief valve MS-RV-3D, Serial No N63790-00-0126 was previously refurbished in accordance with ASME Section XI Plan No 2-1261
   3) Performed VT-3 visual examination on the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
   4) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable
   5) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable
   6) Reinstalled relief valve with Serial No N63790-00-0126 with set pressure of 1195 Psig at rated temperature of 575° F
   7) Reinstalled VT-3 visually examined existing studs and nuts for the relief valve
   8) Performed VT-1 visual examination on one (1) new stud for the relief valve inlet joint. VT-1 visual examination results acceptable
   9) Performed VT-1 visual examination on four (4) new nuts for the relief valve inlet joint. VT-1 visual examination results acceptable
   10) Installed one (1) new stud for the relief valve inlet joint
   11) Installed four (4) new nuts for the relief valve inlet joint
   10) VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint was previously performed in accordance with ASME Section XI Plan No 2-1261
   11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test

NOTES -
1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0126

PLAN No 2-1284

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None

Test Pressure: 1020 Psig
Component Design Pressure: 1195 Psig
Test Temperature: 194° F
Temperature: 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0126
2) Nominal operating pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 194° F

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/2/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/19/95 to 8/16/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7486, 7486w NSTB-IS
National Board, State, and Endorsements

Date 8/16/96

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1284

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94281 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0126 Drawing No. DS-A-63790 Rev. C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Inch Pipe Size -- Inch Inlet 6 Inch Outlet 10 Inch

6. Set Pressure (psig) 1195 575° F
Rated Temperature

Stamped Capacity 899,185 @ 3 % Overpressure -- Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

		Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings			
Body		N93183-36-0089	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet		N93407-36-0095	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.			
Disc Insert		N93185-37-0159	ASME SA637 Gr. 718
Nozzle		N93184-33-0074	ASME SA182 Gr. F316
Disc Holder K55484-31-0002		N89714-31-0003	AMS 5662B
Spring Washers K62858-36-0105		K62856-36-0114 K62857-36-0101	ASME SA105 Gr. II
Adjusting Bolt		N93410-33-0074	ASME SA193 Gr. B6
Spindle Point K62873-37-0134		N89720-43-0154	ASME SA564 Type 630
c. Spring K62858-36-0105		*N89722-0056	ASTM A304-66 Gr. 4161H
d. Bolting			
e. Spindle Ball K62873-37-0134		N93213-0201	Stoody #6
Thrust Bearing Adapter		N93409-32-0067	ASME SA193 Gr. B6
Bonnet Stud	(BW19)	N93207-1534 thru 1545	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut	(J87)	N93210-1057 thru 1068	ASME SA194 Gr. 2H
Inlet Stud	(BW18)	N93216-1685 thru 1696	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut	(BW22)	N93218-1401 thru 1412	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button K63618-33-0079		N93411-33-0079	ASME SA193 Gr. B6

Valve originally built against Crosby Order No. N51727, Assembly No. N50000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

N63790-00-0126

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711.
Class 1

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.G. Gasnault

Our ASME Certificate of Authorization No. 1878 to use the NV

symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 1/14, 1981 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 1/14 19 81.

Signed John J. Mullaney (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

PLAN No 2-1285

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/5/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrument (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI-VX-265	Target Rock	15	N/A	N/A	1991	Repaired	Yes, Code Class 2

7. **Description Of Work Performed:** Made body to bonnet seal weld for valve PI-VX-265. The repair work was performed as follows:
   1) Cut body to bonnet seal weld and disassembled the valve
   2) Replaced non ASME parts
   3) Reassembled the valve
   4) Made body to bonnet seal weld
   5) Performed liquid penetrant (PT) examination on the final body to bonnet seal weld. Liquid penetrant (PT) examination results acceptable

PLAN No 2-1285

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/5/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/17/96 to 8/19/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

Inspector's Signature
Commissions 7486, 7486W NSIB-IS
National Board, State, and Endorsements

Date 8/19/96

PLAN No 2-1286

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Supply Purge (CSP) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CSP(1)-1B	WPPSS	CSP(1)-1B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
CSP-V-5	BIF	N 27236 1	N/A	N/A	1976	Replaced	Yes, Code Class 2
CSP-V-5	Atwood & Morrill	1-10244-01	N/A	N/A	1996	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing valve CSP-V-5. The replacement work was performed as follows:
   1) Drilled and tapped hole in the inboard pipe flange for valve CSP-V-5
   2) Installed new plug on the modified inboard pipe flange for valve CSP-V-5
   3) Removed existing valve CSP-V-5, Serial No N 27236 1
   4) Installed new valve CSP-V-5, Serial No 1-10244-01
   5) Installed new bolting material for pipe to valve CSP-V-5 flanged joints
   6) Performed pressure test on the flanged joints for valve CSP-V-5 to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 2, 1989 Edition with no Addenda for the new valve CSP-V-5, Serial No 1-10244-01

PLAN No 2-1286

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] LLRT

Test Pressure: 38.7 Psig

Component Design Pressure: 45 Psig

Test Temperature: ~~74.4/71.8~~ 72 ° F

Temperature: 340° F 2 Vs

9. Remarks: See attached NPV-1 Code Data Report for the new valve CSP-V-5, Serial No 1-10244-01

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/11/96

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 3/19/96 to 8/18/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

[signature]
Inspector's Signature

Commissions 7486, 7486.W NPSI-IS
National Board, State, and Endorsements

Date 8/18/96

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

Quality Assurance 8/8/8

1. Manufactured and certified by Atwood & Morrill Co., 285 Canal St., Salem, MA 01970
(name and address of N Certificate Holder)

2. Manufactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 99352-0968
(name and address of Purchaser)

3. Location of installation WNP-2, North Power Plant Loop, Richland, WA 99352
(name and address)

4. Model No., Series No., or Type Butterfly Drawing 10244-01 Rev. 01 CRN N/A

5. ASME Code, Section III, Division 1: 1989 (edition) No (addenda date) 2 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 24" (in.) Outlet size 24" (in.)

7. Material: Body SA216-WCB Bonnet SA516-Gr. 70 Disk SA216-WCB Bolting See Remarks

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
1-10244-01	N/A	HT: 254095 S/N: 1	HT: D04452-05W03 S/N: 1	HT: 95113 S/N: G108
	CSP-V-S, S/N 1-10244-01			

*Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ × 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial No. 1-10244-01

8. Design conditions Body 218 / Disc 45 (pressure) psi 340 (temperature) °F or valve pressure class 150 (1)

9. Cold working pressure 285 psi at 100°F

10. Hydrostatic test 450 psi. Disk differential test pressure 45 psi

11. Remarks: Gland Follower SA516-Gr. 70 HT: 801E04500.W31740 S/N: 1
Cap Screw SA193-Gr. B7 HT: 99370 - Trace:Q173
Stud SA193-Gr. B8M HT: H5094 - Trace: CL18
Nut SA194-Gr. 8M HT: 42315 - Trace: 23C
Pipe Plug SA182-F316 - Trace: EVD

CERTIFICATION OF DESIGN

Design Specification certified by Jack R. Cole, Jr. P.E. State WA Reg. no. 20653
Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

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

N Certificate of Authorization No. N-2606 Expires 6-13-98

Date 3/1/96 Name Atwood & Morrill Co., Inc. (N Certificate Holder) Signed Brian D. Sullivan (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by H.S.B.I. & I. Co. of Hartford, CT have inspected the pump, or valve, described in this Data Report on MAR. 1, 1996, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 3/1/96 Signed Willie W. Wall (Authorized Inspector) Commissions MA-1337 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

PLAN No 2-1287

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Supply Purge (CSP) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CSP(1)-1B	WPPSS	CSP(1)-1B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
CSP-V-6	BIF	N 27236 2	N/A	N/A	1977	Replaced	Yes, Code Class 2
CSP-V-6	Atwood & Morrill	2-10244-01	N/A	N/A	1996	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing valve CSP-V-6. The replacement work was performed as follows:
   1) Drilled and tapped hole in the inboard pipe flange for valve CSP-V-6
   2) Installed new plug on the modified inboard pipe flange for valve CSP-V-6
   3) Removed existing valve CSP-V-6, Serial No N 27236 2
   4) Installed new valve CSP-V-6, Serial No 2-10244-01
   5) Installed new bolting material for pipe to valve CSP-V-6 flanged joints
   6) Performed pressure test on the flanged joints for valve CSP-V-6 to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 2, 1989 Edition with no Addenda for the new valve CSP-V-6, Serial No 2-10244-01

PLAN No 2-1287

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ LLRT

Test Pressure: 38.7 Psig
Component Design Pressure: 45 Psig
Test Temperature: 72/72.8° F
Temperature: 340° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CSP-V-6, Serial No 2-10244-01

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 7/30/96
Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 3-19-96 to 7-31-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection

Inspector's Signature
Commissions 7486, 7486 WA NB SI IS
National Board, State, and Endorsements

Date 7/31/96

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

PLAN NO. 2-128

Quality Supts 7/27/86

1. Manufactured and certified by Atwood & Morrill Co., 285 Canal St., Salem, MA 01970
(name and address of N Certificate Holder)

2. Manufactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 99352-0968
(name and address of Purchaser)

3. Location of installation WNP-2, North Power Plant Loop, Richland, WA 99352
(name and address)

4. Model No., Series No., or Type Butterfly Drawing 10244-01 Rev. 01 CRN N/A

5. ASME Code, Section III, Division 1: 1989 (edition) No (addenda date) 2 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 24" (in.) Outlet size 24" (in.)

7. Material: Body SA216-WCB Bonnet SA516-Gr. 70 Disk SA216-WCB Bolting See Remarks

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
2-10244-01	N/A	HT: 254095 S/N: 2	HT: D04452-05W03 S/N: 2	HT: 95113 S/N: G109
	CSP-V-6, SIN 2-10244-01			

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ × 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial No. 2-10244-01

8. Design conditions Body 218 / Disc 45 (pressure) psi 340 (temperature) °F or valve pressure class 150 (1)

9. Cold working pressure 285 psi at 100°F

10. Hydrostatic test 450 psi. Disk differential test pressure 45 psi

11. Remarks: Gland Follower SA516-Gr. 70 HT: 801E04500.W31740 S/N: 2
Cap Screw SA193-Gr. B7 HT: 99370 - Trace:Q173
Stud SA193-Gr. B8M HT: H5094 - Trace: CL18
Nut SA194-Gr. 8M HT: 42315 - Trace: 23C
Pipe Plug SA182-F316 - Trace: EVD

CERTIFICATION OF DESIGN

Design Specification certified by Jack R. Cole, Jr. P.E. State WA Reg. no. 20653

Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

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

N Certificate of Authorization No. N-2606 Expires 6-13-98

Date 3/1/96 Name Atwood & Morrill Co., Inc. (N Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by H.S.B.I. & I. Co. of Hartford, CT have inspected the pump, or valve, described in this Data Report on MAR. 1, 1996, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 3/1/96 Signed Willie W. Wall (Authorized Inspector) Commissions MA-1337 [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

(1) For manually operated valves only.

PLAN No 2-1288

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Supply Purge (CSP) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CSP(1)-1B	WPPSS	CSP(1)-1B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
CSP-V-9	BIF	N 27236 3	N/A	N/A	1977	Replaced	Yes, Code Class 2
CSP-V-9	Atwood & Morrill	3-10244-01	N/A	N/A	1996	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing valve CSP-V-9. The replacement work was performed as follows:
   1) Drilled and tapped hole in the inboard pipe flange for valve CSP-V-9
   2) Installed new plug on the modified inboard pipe flange for valve CSP-V-9
   3) Removed existing valve CSP-V-9, Serial No N 27236 2
   4) Installed new valve CSP-V-9, Serial No 3-10244-01
   5) Installed new bolting material for pipe to valve CSP-V-9 flanged joints
   6) Performed pressure test on the flanged joints for valve CSP-V-9 to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 2, 1989 Edition with no Addenda for the new valve CSP-V-9, Serial No 3-10244-01

PLAN No 2-128

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ LLRT

Test Pressure: 38.7 Psig
Component Design Pressure: 45 Psig
Test Temperature: 72/72.8° F
Temperature: 340° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CSP-V-9, Serial No 3-10244-01

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 7/30/96
Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 3-19-96 to 7-31-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Inspector's Signature
Commissions 7486, 7486 W WPSI IS
National Board, State, and Endorsements

Date 7/31/96

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

PLAN NO. 2-1288

Rudolf Engel 7/27/96

1. Manufactured and certified by Atwood & Morrill Co., 285 Canal St., Salem, MA 01970
(name and address of N Certificate Holder)

2. Manufactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 99352-0968
(name and address of Purchaser)

3. Location of installation WNP-2, North Power Plant Loop, Richland, WA 99352
(name and address)

4. Model No., Series No., or Type Butterfly Drawing 10244-01 Rev. 01 CRN N/A

5. ASME Code, Section III, Division 1: 1989 (edition) No (addenda date) 2 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 24" (in.) Outlet size 24" (in.)

7. Material: Body SA216-WCB Bonnet SA516-Gr. 70 Disk SA216-WCB Bolting See Remarks

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
3-10244-01	N/A	HT: 257795	HT: D04452-05W03	HT: 95113
		S/N: 4	S/N: 3	S/N: G110

CSP-V-9, S/N 3-10244-01

*Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial No. 3-10244-01

8. Design conditions Body 218 / Disc 45 (pressure) psi 340 (temperature) °F or valve pressure class 150 (1)

9. Cold working pressure 285 psi at 100°F

10. Hydrostatic test 450 psi. Disk differential test pressure 45 psi

11. Remarks: Gland Follower SA516-Gr. 70 HT: 801E04500.W31740 S/N: 3
Cap Screw SA193-Gr. B7 HT: 99370 - Trace:Q173
Stud SA193-Gr. B8M HT: H5094 - Trace: CL18
Nut SA194-Gr. 8M HT: 42315 - Trace: 23C
Pipe Plug SA182-F316 - Trace: EVD

CERTIFICATION OF DESIGN

Design Specification certified by Jack R. Cole, Jr. P.E. State WA Reg. no. 20653
Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

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

N Certificate of Authorization No. N-2606 Expires 6-13-98

Date 3/6/96 Name Atwood & Morrill Co., Inc. (N Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MA and employed by H.S.B.I. & I. Co. of Hartford, CT have inspected the pump, or valve, described in this Data Report on MAR. 1, 1996, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 3/1/96 Signed Willie W. Will (Authorized Inspector) Commissions MA-1337 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

PLAN No 2-1289

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS)
Address: 3000 George Washington Way, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: C30893
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment Supply Purge (CSP) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Date: 8/17/96
Sheet: 1 of 1
Unit: WNP-2

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CSP(1)-1B	WPPSS	CSP(1)-1B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Modified existing test connection assemblies with valves CSP-V-800-13, CSP-V-800-14 and CSP-V-800-15, CSP-V-800-16. The work was performed as follows:

A) Modified test connection assembly with valves CSP-V-800-13 and CSP-V-800-14
1) Removed existing test connection assembly
2) Installed new piping material
3) Reinstalled the test connection assembly
4) Made required socket welds
5) Performed visual examination on the final socket welds. Visual examination results acceptable
6) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Modified test connection assembly with valves CSP-V-800-15 and CSP-V-800-16
1) Removed existing test connection assembly
2) Installed new piping material
3) Reinstalled the test connection assembly
4) Made required socket welds
5) Performed visual examination on the final socket welds. Visual examination results acceptable
6) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

PLAN No 2-1289

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 8/19/96 Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

PLAN No 2-1290

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: C30893
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment Supply Purge (CSP) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CSP(1)-1B	WPPSS	CSP(1)-1B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
CSP-V-800-25	Borg Warner	16912	N/A	N/A	1977	Replacement	Yes, Code Class 2
CSP-V-800-26	Borg Warner	16891	N/A	N/A	1977	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Modified existing test connection assembly with valves CSP-V-800-21, CSP-V-800-22 and installed new test connection assembly with valves CSP-V-800-25, CSP-V-800-26. The work was performed as follows:

A) Modified test connection assembly with valves CSP-V-800-21 and CSP-V-800-22
1) Removed existing test connection assembly
2) Installed new piping material
3) Reinstalled the test connection assembly
4) Made required socket welds
5) Performed visual examination on the final socket welds. Visual examination results acceptable
6) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Installed new test connection assembly with valves CSP-V-800-25 and CSP-V-800-26
1) Installed new piping material
2) Installed new valves CSP-V-800-25, Serial No 16912 and CSP-V-800-26, Serial No 16891
3) Made required socket welds
4) Performed visual examination on the final socket welds. Visual examination results acceptable
5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

PLAN No 2-1290

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NPV-1 Code Data Reports for the following new replacement valves

EPN No	Serial No
CSP-V-800-25	16912
CSP-V-800-26	16891

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Signed By _____

Kuldip Singh - Program Lead Engineer (PLE) — Supervisor, Materials And Welding

Date 8/19/96 — Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller — Commissions _____

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

Date _____

*Modified NPV-1 See 8a Remarks OB254

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 PLAN NO. 2-1290

1. Manufactured by Nuclear Valve Div., Borg Warner, 7500 Tyrone Ave., Van Nuys, Calif.
(Name and Address of N Certificate Holder)
2. Manufactured for Bovee & Crail/G.E.R.I., P.O. Box 1040, Richland, Washington 99352
(Name and Address of Purchaser or Owner)
3. Location of Installation Richland, Washington WPPSS Hanford #2 Job Site
(Name and Address)
4. Pump or Valve Gate Valve. Nominal Inlet Size 1 (inch) Outlet Size 1 (inch)

	(a) Model No., Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l Bd. No.	(g) Year Built
(1)	1500#	16912,16942	N/A	76700	2	N/A	1977
(2)		thru 16944					
(3)							
(4)							
(5)		CSP-V-800125, SIN 16912					
(6)							
(7)							
(8)			Ludwig Lueb				
(9)			8/16/78				
(10)							

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

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class N/A (1)
7. Cold Working Pressure 3600 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Gate-Code 1P38; 1P51	A296 CA6NM		*Mat'l Spec. was SA487
Casting 75347		Rex Precision	
Machined 75346		NV Division	
			WBGBR 215 16357
		R.F	
(b) Forgings			
Body Code 1J60; 1K69	SA 105		
Forging 70453		Pacific Forge	
Machined 70476		NV Division	
Assembly 75348		NV Division	
Bonnet-Code 1M28; 1N53	SA 105		
Forged Stock		Compton Forge	
Machined 73973-1		NV Division	
Assembly 73973			

(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.

2

(10/77) This form (EC0037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

CB284

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bonnet			
(d) Other Parts			

8. Hydrostatic test 3400 psi. Disc Differential test pressure 3600 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. 1, Edition 1971, Addenda Winter 1973 (Date), Code Case No. _____. Date December 18, 1981

Signed Nuclear Valve Div., Borg Warner (N Certificate Holder) by _____

Our ASME Certificate of Authorization No. N-1254 to use the N (stamp) symbol expires 10/27/84 (Date)

CERTIFICATION OF DESIGN

Design information on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409

Stress analysis report (Class 1 only) on file at _____

Design specifications certified by (1) David J. Murphy

PE State Washington Reg. No. 12542

Stress analysis certified by (1) _____

PE State _____ Reg. No. _____

(1) Signature not required. List name only.

WBGBR 215 16357

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by Lumbermen's Mutual Casualty of Long Grove, Illinois have inspected the pump, or valve, described in this Data Report on December 18, 1981, and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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

Date December 18, 1981

_____ Commissions NB 1750 A

(Inspector) (Nat'l Bd., State, Prov. and No.)

2-1289 2101

06180

*Modified NPV-1 See 8a Remarks

PLAN No.2-1290

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

Rudolph Swab 8/16/86

1. Manufactured by Nuclear Valve Div., Borg Warner, 7500 Tyrone Ave., Van Nuys, Calif. (Name and Address of N Certificate Holder)
2. Manufactured for Bovee & Crail/G.E.R.I., P.O. Box 1040, Richland, Washington 99352 (Name and Address of Purchaser or Owner)
3. Location of Installation Richland, Washington WPPSS Hanford #2 Job Site (Name and Address)
4. Pump or Valve Gate Valve. Nominal Inlet Size 1 (inch) Outlet Size 1 (inch)

	(a) Model No., Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	1500#	16891 thru 16894		76700	2		1977
(2)							
(3)							
(4)							
(5)							
(6)		CSP-V-B00126, S/N 16891					
(7)							
(8)							
(9)							
(10)							

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

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class N/A (1)
7. Cold Working Pressure 3600 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Gate-Code 1P14-	SA296-CA6NM		*Mat'l Spec. Was SA487
Casting-75347		Rex Precision	
Machined-75346		NV Division	
Other Parts			
Stem-Code 1M35	SA564 Type 630		
Bar Stock		Jorgensen Steel	
Machined-75323		NV Division	
(b) Forgings			
Body-Code 1J60-	SA 105		
Forging-70453		Pacific Forge	
Machined-70476		NV Division	
Assembly-75348		NV Division	
Bonnet-Code 1M28-	SA 105		
Forged Stock		Compton Forge	
Machined-73973-11		NV Division	
Assembly-73973		NV Division	

RECEIVED JUL 01 1982 BECHTEL QUALITY CONTROL

(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.

14920

WBG BR

(10/77) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

NV

Form NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
(d) Other Parts			

9. Hydrostatic test 5400 psi. Disc Differential test pressure 3600 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1., Edition 1971, Addenda Winter 1973 (Date), Code Case No. _____ Date December 18, 1981

Signed Nuclear Valve Div., Borg Warner (N Certificate Holder) by _____

Our ASME Certificate of Authorization No. N-1254 to use the N (N) symbol expires 10/27/84 (Date).

CERTIFICATION OF DESIGN

Design information on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409

Stress analysis report (Class 1 only) on file at _____

Design specifications certified by (1) David J. Murphy

PE State Washington Reg. No. 12542

Stress analysis certified by (1) _____

PE State _____ Reg. No. _____

(1) Signature not required, List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by Lumbermen's Mutual Casualty of Long Grove, Illinois have inspected the pump, or valve, described in this Data Report on December 18, 19 81, 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 December 18, 19 81

_____ Commissions NB 2275 CA

(Inspector) (National Board, State, Prov. and No.)

PLAN No 2-1291

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: C30893
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Process Instrumentation (PI) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-(IR-64)-3B	JCI	PI(1)-ST-(IR-64)-3B	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced (modified) existing air supply line to valve CSP-V-5. The work was performed as follows:

A) Installation of piping material
1) Installed new piping material
2) Made required socket welds
3) Performed visual examination on the final socket welds. Visual examination results acceptable
4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Installation of shear lugs
1) Installed new shear lugs
2) Made required shear lugs to pipe welds
3) Performed visual examination on the final welds. Visual examination results acceptable
4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable

C) Installation of support Serial No 9301572C-005
1) Installed new support material
2) Made required welds
3) Performed visual examination on the final welds. Visual examination results acceptable
4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable
5) Installed new "U" bolt and associated jam nuts

D) Installation of support Serial No 9301572C-006
1) Installed new support material
2) Made required welds
3) Performed visual examination on the final welds. Visual examination results acceptable
4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable
5) Installed new "U" bolt and associated jam nuts

NOTES -
1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class NF(2), 1974 Edition with Winter 1975 Addenda for the supports

PLAN No 2-1291

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 8/19/96 Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

PLAN No 2-1293

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-(IR-64)-1B	JCI	PI(1)-ST-(IR-64)-1B	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced (modified) existing air supply line to valve CSP-V-9. The work was performed as follows:

A) Installation of piping material
   1) Installed new piping material
   2) Made required socket welds
   3) Performed visual examination on the final socket welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Installation of shear lugs
   1) Installed new shear lugs
   2) Made required shear lugs to pipe welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable

C) Installation of support Serial No 9301572C-003
   1) Installed new support material
   2) Made required welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable
   5) Installed new "U" bolt and associated jam nuts

NOTES -

1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class NF(2), 1974 Edition with Winter 1975 Addenda for the supports

PLAN No 2-1293

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By _____ — Supervisor, Materials And Welding

Date 8/19/96

Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1294

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Standby Liquid Control (SLC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC-V-4B	Conax	N/A	90	N/A	1975	Replacement	Yes, Code Class 1
Trigger Body	Conax	4296	N/A	N/A	1993	Replacement	Yes, Code Class 1
Inlet Fitting	Conax	4329	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced parts for the existing valve SLC-V-4B. The replacement work was performed as follows:
   1) Removed existing trigger body assembly from the valve
   2) Installed new trigger body assembly Serial No 4296 in the valve
   3) Removed existing inlet fitting from the valve
   4) Installed new inlet fitting Serial No 4329 in the valve
   5) Performed pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test

NOTES:
1) ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda for valve SLC-V-4B
2) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new trigger body assembly Serial No 4296 and new inlet fitting Serial No 4329

PLAN No 2-1294

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [X] Other [ ] None

Test Pressure: 1197/1220 Psig Test Temperature: 70/97° F

Component Design Pressure: 1400 Psig Temperature: 150° F

9. Remarks: 1) See attached N-2 Code Data Reports for following new valve parts

Valve Part	Serial No
Trigger body assembly	4296
Inlet fitting	4329

2) Test pressure on the down stream side of the valve (RPV Side) - test pressure of 1197 Psig and test temperature of 70° F

3) Test pressure on the up stream side of the valve (SLC-P-1B Side) - test pressure of 1220 Psig and test temperature of 97° F

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By — Supervisor, Materials And Welding

Date 8/11/96

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/8/96 to 8/13/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions 7484, 7484 W NBSI-IS

National Board, State, and Endorsements

Date 8/13/96

FORM N-2 N OR NPT CERTIFICATE HOLDER'S 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

PO&N No. 2-1294

1. Manufactured and certified by Conax Buffalo Corporation, 2300 Walden Ave., Cheektowaga, NY 14225
(name and address of certificate holder)

2. Manufactured for Washington Public Power Supply, Richland, WA
(name and address of purchaser)

3. Location of installation WNP-2, WA
(name and address)

4. Type N-20000 Rev. F (drawing no.) 304SST-SA479 (mat'l spec no.) 75KSI (tensile strength) NA (CRN) 1993 (year built)

5. ASME Code, Section III: 77 (edition) S77 (addenda) 1 (code) NA (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision Date

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.

8. Nom. thickness (in.) *see remarks 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
(1)	4295	4295	(26)		
(2)	4296	4296	(27)		
(3)			(28)		
(4)			(29)		
(5)			(30)		
(6)			(31)		
(7)			(32)		
(8)	SIN 4296		(33)		
(9)			(34)		
(10)	Rudolf Gurb		(35)		
(11)			(36)		
(12)	8/8/96		(37)		
(13)			(38)		
(14)			(39)		
(15)			(40)		
(16)			(41)		
(17)			(42)		
(18)			(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

10. Design pressure 1400 psi Temp. 150 °F. Hydro. test pressure *see remarks (when applicable) at temp. °F.

*Supplemental information in form of lists, sketches or drawings may be used provided (1) size is 8½ 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 AHI.

(6/83)

This form (S00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM NC-1 (back)

NUCLEAR PARTS AND APPURTENANCES*

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

CERTIFICATE OF DESIGN

Design specifications certified by Clyde T. Nieh P. E. state CA Reg. no. 587

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) Trigger Body Sub Assembly conform to the rules of construction of the ASME Code, Section III.

ASME Certificate of Authorization no. N-1850 Expires Sept. 2, 1995

Date 9/20/93 Name Conax Buffalo Corporation Signed Curt M Pratt

(NPT Certificate Holder) (Authorized Representative)

Curt M. Pratt, Quality Engineer

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 H.S.B.I.&I. Co. of Hartford, CT have inspected these items described in this data report on SEPT 21, 1993 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 9/21/93 Signed (Authorized Inspector) Commissions NB 9153 AN

(Part 88 incl. endorsements) State or

SATISFACTORY X UNSATISFACTORY

10-22-93

RECEIPT INSPECTOR / LEVEL / DATE

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. 2-1294

Pg 1 of 1

1. Manufactured and certified by Conax Buffalo Corporation, 2300 Walden Ave., Cheektowaga, NY 14225
(name and address of certificate holder)

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

3. Location of installation WNP-2, WA
(name and address)

4. Type N38017, Rev. F (drawing no.) 304SST SA479 (material spec. no.) 75KSI (nominal strength) NA (CRN) 1993 (year built)

5. ASME Code, Section III: 77 (edition) S77 (addenda) 1 (class) NA (Code Case no.)

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

7. Remarks: Inlet Fitting for explosive actuated valve replacement kit for standby liquid control system. Pressure tested at 2800 PSI for 10 minutes.

8. 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
(1)	4328	4328
(2)	4329	4329
(3)		
(4)		
(5)		
(6)		
(7)		
(8)	S/N 4329	
(9)		
(10)	Certified Sup's	
(11)		
(12)	8/8/96	
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
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(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10. Design pressure 1400 psi Temp. 150 °F. Hydro. test pressure *see remarks (when applicable) at temp. °F.

*Descriptive and information in form of lists, sketches or drawings may be used provided (1) size is 8½ X 11, (2) information in items 3 and 5 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.

FORM N-2 (back)

FORM N-2 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

CERTIFICATE OF DESIGN

Design specifications certified by Clyde T. Nieh P. E. state CA Reg. no. 15587

Design report* certified by Francis J. Domino P. E. state NY Reg. no. 36832

CERTIFICATE OF SHOP COMPLIANCE

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

ASME Certificate of Authorization no. N-1850 Expires Sept. 2, 1995

Date 9/6/93 Name Conax Buffalo Corporation Signed [signature] (Authorized representative)

Curt M. Pratt, Quality Engineer

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 H.S.B.I.& I. Co. of Hartford, CT have inspected these items described in this data report on SEPT 1, 1993, 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 9/21/93 Signed [signature] (Authorized Inspection) Commissions NB 9157 AO (Nat'l Bd. and endorsements, state or prov. and no.)

SATISFACTORY X UNSATISFACTORY ____

Vijay K Bell II 10-27-93

RECEIPT INSPECTOR / LEVEL / DATE

PLAN No 2-1295

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/28/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Standby Liquid Control (SLC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC(2)-3S	WPPSS	SLC(2)-3S-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
SLC-RV-29B	Lonergan	137180-1-2	N/A	N/A	1994	Replaced	Yes, Code Class 2
SLC-RV-29B	Lonergan	139407-1-2	N/A	N/A	1994	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing relief valve SLC-RV-29B. The replacement work was performed as follows:
   1) Removed existing relief valve SLC-RV-29B, Serial No 137180-1-2
   2) Installed new relief valve SLC-RV-29B, Serial No 139407-1-2
   3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet bolted joint. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1974 (12/31/74) Addenda for the refurbished spare relief valve SLC-RV-29B, Serial No 139407-1-2

PLAN No 2-1295

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: Static Head
Component Design Pressure: 150 Psig
Test Temperature: 84° F
Temperature: 150° F

9. Remarks: See attached NV-1 Code Data Report for the new relief valve SLC-RV-29B, Serial No 139407-1-2

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By Carl M King — Supervisor, Materials And Welding
Date 7/30/96
Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1-19-96 to 7-31-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Inspector's Signature
Commissions 7486, 7486W NBSI IS
National Board, State, and Endorsements

Date 7/31/96

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES*

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

1. Manufactured and certified by Kunkle Industries, Inc. Lonergan Valve Division, 8222 Bluffton Road, Fort Wayne, IN 46809 (name and address of NV Certificate Holder) Rudolf Supply 7/27/96.

2. Manufactured for Washington Public Power Supply System, Accts. Payable, MD 055, P.O. 968, Richland, WA 99352-0968 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHS Complex, Whse. #1, North Power Plant Loop, Richland, WA 99352 (name and address)

4. Valve ND50ES421-DG1400 (model no., series no.) Orifice size .394 (in.) Nom. inlet size 1" (in.) Outlet size 2" (in.)

5. ASME Code, Section III, Division 1: 1974 (edition) Winter 1974 (addenda date) 2 (class) N/A (Code Case no.)

6. Type Spring (spring, pilot or power operated) 1400 (set pressure, psig) N/A (blowdown, psi) 100° F (rated temp.) 2100 (hydro. test, psig, inlet) at 33° min. °F

7. Identification 139407-1-1 through 139407-1-2 (Cert. Holder's serial no.) N/A (CRN) A940014 Rev. 0 (drawing no.) N/A (Nat'l. Bd. no.) 1994 (year built)

8. Control ring settings N/A SLC-RV-29B, S/N 139407-1-2

9. Pressure retaining items:

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body	S6601-1, -2	SA-351 CF8M	70 ksi
Bonnet ~~XXXXX~~	T4795-5, -6	SA-351 CF8M	70 ksi
~~XXXXXXXXX~~ 3/8" Plug	18450 / 73028	SA-479 TY316	75 ksi
Nozzle	703685	SA-479 TY316	75 ksi
Disk	97477	SA-479 TY316	75 ksi
Spring~~XXXXXX~~ Step	31828	SA-479 TY316	75 ksi
~~XXXXXXXXXXX~~ Cap	H8506-4, -12	SA-351 CF8M	70 ksi
~~XXXXX~~ Gag Plug Screw	30091	SA-479 TY316	75 ksi
~~X~~pring	20330	ASTM A-313 TY316	*
~~XXXX~~ Ring Pin Screw	30091	SA-479 TY316	75 ksi
~~XXXXXXX~~ Stem	704631	SA-479 TY316	75 ksi

(Continued below)

10. Relieving capacity 63,500 (127 GPM) (steam or fluid, lb/hr) @ 10% (psi) overpressure as certified by the National Board 01/25/85 (date)

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

9. Pressure Retaining Items: (Continued)

Compression Screw	700737	SA-479 TY316	75 ksi
Heavy Hex Nut	8079541/N4C	SA-194 GR 2H	N/A
Stud	8866612	SA-193 GR B7	125 ksi

CERTIFICATION OF DESIGN

Design Specification certified by D. Murphy P.E. State WA Reg. no. 12542

Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

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

NV Certificate of Authorization No. N-2853 Expires November 18, 1994

Date 8-3-94 Name Kunkle Industries, Inc. Lonergan Valve Division (NV Certificate Holder) Signed Debra G. Zeltzer (authorized representative)

*Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ × 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00042) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

E
8140f.

Certificate Holder's Serial No. 139407-1-1 thru 139407-1-2

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Pro
of Michigan and employed by HSBI & I Co.
of Hartford, CT have inspected the valve described in this Data Report on
August 4, 1994, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

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

Date 8-4-94 Signed [signature] (Authorized Inspector) Commissions NB7444(NB)(H), IN 840 [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

PLAN No 2-1297

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/16/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(13)-4CL2	WPPSS	RCIC(13)-4CL2-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
RCIC-V-752B	Borg Warner	54236	N/A	N/A	1979	Replaced	Yes, Code Class 1
RCIC-V-752B	Borg Warner	80123	N/A	N/A	1983	Replacement	Yes, Code Class 1
RCIC-V-752D	Borg Warner	28760	N/A	N/A	1978	Replaced	Yes, Code Class 1
RCIC-V-752D	Borg Warner	80116	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing valves RCIC-V-752B and RCIC-V-752D. The replacement work was performed as follows:
   1) Removed existing valve RCIC-V-752B, Serial No 54236
   2) Removed existing valve RCIC-V-752D, Serial No 28760
   3) Installed new piping material
   4) Installed new replacement valve RCIC-V-752B, Serial No 80123
   5) Installed new replacement valve RCIC-V-752D, Serial No 80116
   6) Made required socket welds
   7) Performed visual examination on the final socket welds. Visual examination results acceptable
   8) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the new replacement valve RCIC-V-752B, Serial No 80123
3) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the new replacement valve RCIC-V-752D, Serial No 80116
4) ASME Section III, Code Class 1 valves for ASME Section III, Code Class 2 application

PLAN No 2-1297

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: See attached NPV-1 Code Data Reports for the following new replacement valves

EPN No	Serial No
RCIC-V-752B	80123
RCIC-V-752D	80116

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/19/96
Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

PLAN NO. C-1.C71

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

Rulaip Sup 5. 8/16/96

1. Manufactured by Nuclear Valve Div., Borg Warner, 7500 Tyrone Ave., Van Nuys, Calif. 3000 George Washington Way
(Name and Address of N Certificate Holder)

2. Manufactured for Washington Public Power Supply Systems, Richland, Washington
(Name and Address of Purchaser or Owner)

3. Location of Installation Richland, Washington WPPSS Hanford #2 Job Site
(Name and Address)

4. Pump or Valve Y Globe Valve. Nominal Inlet Size 3/4 (inch) Outlet Size 3/4 (inch)

	(a) Model No., Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	1500#	80107 thru 80128	N/A	76590-2	1	N/A	1983
(2)							
(3)							
(4)	RUC-V-752B, S/N 80123						
(5)							
(6)	RUC-V-752D, S/N 80116						
(7)							
(8)							
(9)							
(10)							

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

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class N/A (1)

7. Cold Working Pressure 3600 psi at 100°F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Disc-Code 5F55	Stellite #6	Rex Precision	
5F32			
(b) Forgings			
Body-Code 5E99	SA 105	Pacific Forge	

(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.

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting N/A			
(d) Other Parts			
Backseat-Code 5E84	SA 564 Tv630	Jorgensen Steel	

9. Hydrostatic test 5400 psi. Disk Differential test pressure 3600 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1974, Addenda Winter '75 (Date), Code Case No. N/A, Date 11-21-75

Signed Nuclear Valve Div., Borg Warner (N Certificate Holder) by [signature]

Our ASME Certificate of Authorization No. N-1254 to use the N (N) symbol expires 10/27/84 (Date).

CERTIFICATION OF DESIGN

Design information on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409

Stress analysis report (Class 1 only) on file at NVD of Borg Warner, 7500 Tyrone Ave. Van Nuys CA

Design specifications certified by (1) David J. Murphy

PE State Washington Reg. No. 12542

Stress analysis certified by (1) Byron E. Leonard

PE State CA Reg. No. E123

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by Lumbermen's Mutual Casualty of Long Grove, Illinois have inspected the pump, or valve, described in this Data Report on 9/30 1975, 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 11/21/30 19 75

[signature] NBIC

PLAN No 2-1298

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/19/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(16)-1	WPPSS	RCIC(16)-1-P1	N/A	N/A	1984	Replacement	Yes, Code Class 2
RCIC-V-111	Rockwell	WA 972	N/A	N/A	1978	Replaced	Yes, Code Class 1
RCIC-V-112	Rockwell	WA 990	N/A	N/A	1978	Replaced	Yes, Code Class 1
RCIC-V-111	Anchor Darling	EZ 725-1-2	N/A	N/A	1996	Replacement	Yes, Code Class 1
RCIC-V-112	Anchor Darling	EZ 725-1-1	N/A	N/A	1996	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced valves RCIC-V-111 and RCIC-V-112. The replacement work was performed as follows:
   1) Removed existing carbon steel valves RCIC-V-111, Serial No WA 972 and RCIC-V-112, Serial No WA 990 and associated carbon steel piping material
   2) Installed new stainless steel valve RCIC-V-111, Serial No EZ 725-1-2 and RCIC-V-112, Serial No EZ 725-1-2 and associated stainless steel piping material
   3) Made required socket welds
   4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test except for weld FW 64-1. This weld was repaired in accordance with ASME Section XI Plan No 2-1351

NOTES -

1) ASME Section III, Code Class 1 valves for ASME Section III, Code Class 2 application
2) The liquid penetrant (PT) examination on the final socket welds was performed in accordance with the requirements of ASME Section III, Code Class 2, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1
3) The liquid penetrant (PT) examination on the final 3/4" socket weld 64-1 was performed in accordance with the requirements of ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda. Relief Request No 2ISI-13 and Code Case N-416-1 requirements do not apply to joints one (1) inch nominal pipe size (NPS) and smaller
4) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1

PLAN No 2-1298

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 60 Psig
Component Design Pressure: 150 Psig
Test Temperature: 78.8° F
Temperature: 267° F

9. Remarks: See attached NPV-1 Code Data Reports for the following new valves

EPN No	Serial No
RCIC-V-111	EZ 725-1-2
RCIC-V-112	EZ 725-1-1

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 8/19/96

Signed By
Supervisor, Materials And Welding
Date 8/19/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/14/96 to 8/20/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

D. M. Trimble
Inspector's Signature

Commissions 7486, 7486 W NBIB-IS
National Board, State, and Endorsements

Date 8/20/96

PLAN NO. 2-1298

Rev. 0 Sup 3

8/13/96

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

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

Pg. ____ of ____

1. Manufactured and certified by Anchor/Darling Valve Co., 701 First St., Williamsport, PA 17701
(name and address of N Certificate Holder)

2. Manufactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 99352
(name and address of Purchaser or Owner)

3. Location of installation WNP-2 OPS WHS Complex, WHS #1, North Power Plant Loop, Richland, WA
(name and address)

4. Model No., Series No., or Type Swing Check Drawing W96-24652 Rev. -- CRN ---

5. ASME Code, Section III, Division 1: 1986 (edition) | No (addenda date) | 1 (class) | N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 2" (in.) Outlet size 2" (in.)

7. Material: Body SA351-CF8M Bonnet SA351-CF8M Disk SA564-630-1075 Bolting Bonnet Studs: SA453-660B
Bonnet Nuts: SA194-8M

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
EZ725-1-1	N/A	5	3	Heat #34242
EZ725-1-2	N/A	6	6	Heat #34242

RCIC-V-111, SN EZ725-1-2

RCIC-V-112, SN EZ725-1-1

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*Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/86) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NPV-1 (back)

8. Remarks 2"-1878#-Swing Check Valve, Bolted Bonnet

9. Design conditions 2735 (pressure) psi 680 (temperature) °F or valve pressure class 1878 (1)

10. Cold working pressure 4507 psi at 100°F

11. Hydrostatic test 6775 psi. Disk differential test pressure 4958 psi

CERTIFICATION OF DESIGN

Design Specification certified by Mark D. Cowell P.E. State PA Reg. no. 032082

Design Report certified by Ronald S. Farrell P.E. State PA Reg. no. 35216-E

CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. N1712 Expires 4/15/98

Date 4-25-96 Name Anchor/Darling Valve Company (N Certificate Holder) Signed Debra Fredericksen (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 Pennsylvania and employed by Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 4-26 thru 4-29, 19 96, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 4-29-96 Signed Charles Young (Authorized Inspector) Commissions Pennsylvania 2392 (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

(1) For manually operated valves only.

PLAN No 2-1299

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: C30893)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(19)-1	WPPSS	RCIC(19)-1-P1	N/A	N/A	1983	Repaired	Yes, Code Class 2

7. Description Of Work Performed: Cut and rewelded socket welds near valve RCIC-V-28 to correct the misalignment. The repair work was performed as follows:

1) Cut existing socket welds
2) Prepped valve socket end
3) Performed liquid penetrant (PT) examination on the valve socket end. Liquid penetrant (PT) examination results acceptable
4) Reinstalled the items removed
5) Made required socket welds
6) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable
6) Performed VT-3 visual examination on the existing studs for the bolted flanged joint. VT-3 visual examination results were unacceptable
7) Performed VT-3 visual examination on the existing nuts for the bolted flanged joint. VT-3 visual examination results acceptable
8) Reinstalled VT-3 visually examined existing nuts for the bolted flanged joint
9) Installed new studs in place of the existing studs which were determined to be unacceptable during VT-3 visual examination
10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test

NOTES -

1) The liquid penetrant (PT) examination on the final socket welds was performed in accordance with the requirements of ASME Section III, Code Class 2, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1
2) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1

PLAN No 2-129

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ **Pneumatic** ☐ **Nominal Operating Pressure** ☒ **Other** ☐ **None**

Test Pressure: 51 Psig **Test Temperature:** 75° F

Component Design Pressure: 150 Psig **Temperature:** 267° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE) **Signed By** [signature] — Supervisor, Materials And Welding

Date 8/11/96 **Date** 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5/21/96 *to* 8/18/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] — Inspector's Signature

Commissions 7486, 7486 W WB SE-25 — National Board, State, and Endorsements

Date 8/18/96

PLAN No 2-1303

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: C30893
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Control Rod Drive (CRD) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD-V-101/2623	Vogt	306-181441	N/A	N/A	1974	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced wedge (gate) for valve CRD-V-101/2623. The replacement work was performed as follows:

1) Performed liquid penetrant (PT) examination on all external surfaces of the new replacement wedge (gate). Liquid penetrant (PT) examination results acceptable
2) Removed existing wedge (gate) from the valve
3) Installed new replacement wedge (gate) in the valve

PLAN No 2-13

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By _____ — Supervisor, Materials And Welding

Date 8/19/96

Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1304

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD-V-101/5027	Vogt	393-181441	N/A	N/A	1974	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced wedge (gate) for valve CRD-V-101/5027. The replacement work was performed as follows:
   1) Performed liquid penetrant (PT) examination on all external surfaces of the new replacement wedge (gate). Liquid penetrant (PT) examination results acceptable
   2) Removed existing wedge (gate) from the valve
   3) Installed new replacement wedge (gate) in the valve

PLAN No 2-1304

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By _____ — Supervisor, Materials And Welding

Date 8/19/96

Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1309

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/5/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC-V-19	Borg Warner	22295	N/A	N/A	1982	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced stem disc assembly for valve RCIC-V-19. The replacement work was performed as follows:
   1) Cut body to bonnet seal weld
   2) Removed the existing stem disc assembly from the valve
   3) Prepped valve body cut surfaces
   4) Performed liquid penetrant (PT) examination on the body prepped surfaces. Liquid penetrant (PT) examination results acceptable
   5) Prepped valve bonnet cut surfaces
   6) Performed liquid penetrant (PT) examination on the bonnet prepped surfaces. Liquid penetrant (PT) examination results acceptable
   7) Installed new stem disc assembly in the valve
   8) Made required body to bonnet seal weld
   9) Performed liquid penetrant (PT) examination on the final body to bonnet seal weld. Liquid penetrant (PT) examination results acceptable
   10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test

PLAN No 2-13

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [X] Other [ ] None

Test Pressure: 300 Psig
Test Temperature: 84° F
Component Design Pressure: 3600 Psig
Temperature: 100° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding

Date 8/5/96
Date 8/19/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/24/96 to 8/19/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

Inspector's Signature

Commissions 7486, 7486 W NBFS - IS
National Board, State, and Endorsements

Date 8/19/96

PLAN No 2-1310

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(2)-1	WPPSS	RCIC(2)-1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
RCIC-V-67	Borg Warner	14097	N/A	N/A	1976	Replaced	Yes, Code Class 1
RCIC-V-67	Borg Warner	14089	N/A	N/A	1976	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced valve RCIC-V-67. The replacement work was performed as follows:
   1) Removed existing valve RCIC-V-67, Serial No 14097 and associated piping material
   2) Installed new valve RCIC-V-67, Serial No 14089 and associated piping material
   3) Made required socket welds
   4) Performed magnetic particle (MT) examination on the final socket welds. Magnetic particle (MT) examination results acceptable
   5) Performed VT-3 visual examination on the existing studs for the bolted flanged joint. VT-3 visual examination results acceptable
   6) Performed VT-3 visual examination on the existing nuts for the bolted flanged joint. VT-3 visual examination results acceptable
   7) Reinstalled VT-3 visually examined existing studs and nuts for the bolted flanged joint
   8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test

NOTES -

1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application
2) The magnetic particle (MT) examination on the final socket welds was performed in accordance with the requirements of ASME Section III, Code Class 2, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1
3) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1

PLAN No 2-1310

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ *Pneumatic* ☐ *Nominal Operating Pressure* ☒ *Other* ☐ *None*

Test Pressure: 81 Psig *Test Temperature:* 124° F

Component Design Pressure: 125 Psig *Temperature:* 170° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve RCIC-V-67, Serial No 14089

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh *Signed By* _____

Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/14/96 *Date* 8/14/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/26/96 *to* 8/15/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

_____ *Commissions* 7486, 7486 W WSIB IS

Inspector's Signature National Board, State, and Endorsements

Date 8/15/96

PLAN NO. 2-1310 WBG 215 12477

Quality Surv 0AI028

8/8/96.

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

As Required by the Provisions of the ASME Code Rules

REVISED

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Ave., Van Nuys, CA (Name & Address of Manufacturer) Order No. 47713

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 (Name and Address) Order No. 215-3261

3. Owner WPPSS Hanford #2 Job Site RCIC-V-67, S/N 14089.

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification Nuclear Valve Div., P/N 76630-1, 1-1/2 Inch Y Globe Valve, CS

Serial Numbers 14083 thru 14097 (15 Valves)

(Brief description of service for which equipment was designed)

(a) Drawing No. 76630 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No.

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

7. The material, design, construction, and workmanship complies with ASME Code Section III, Class 1

Edition 1971, Addenda Date Winter 1973, Case No.

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Disc - Code 1E82, 1F17, 1H16	Stellite #6		
Casting - 71238	NMS 71043	Rex Precision	
Machined - 71239		NV Division	
(b) Forgings			
Body - Code 1F56, 1J35	SA 105		
Forging - 71224		Compton Forge/Pacific Forge	
Machined - 72467-11		NV Division	
Assembly - 72467-13		NV Division	
Connet - Code 1G86, 1H63	SA 105		
Forged Stock		Airco Viking	
Machined - 71279			

REVISED D

BECHTEL QUALITY CONTROL

BY: B

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1, 2, 5a and 5b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

	Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting				
(d) Other Parts				

8. Hydrostatic test 5400 - 5450 psi.

CERTIFICATION OF DESIGN

Design information on file at NVD of Borg Warner, 7500 Tyrone Avenue., Van Nuys, CA

Stress analysis report on file at NVD of Borg Warner, 7500 Tyrone Avenue, Van Nuys, Ca.

Design specifications certified by David J. Murphy (1) Prof. Eng. State Wash. Reg. No. 12542

Stress analysis report certified by Byron Leonard Jr. (1) Prof. Eng. State CA Reg. No. E123

(1) Signature not required. List name only.

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

Date October 11 19 76 Signed Nuclear Valve Div. of Borg Warner (Manufacturer) By [signature]

Certificate of Authorization No. N-1254 expires October 27, 1978.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of California and employed by Dept. of Bldg. & Safety of City of Los Angeles have inspected the equipment described in this Data Report on October 11 19 76, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

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

Date October 11 19 76

[signature] (Inspector) Commissions Calif 1010 (National Board, State, Province and No.)

This form (E37) is obtainable from the ASME, 345 E. 47th St., New York, N.Y. 10017

PLAN No 2-1311

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-(IR-63)-1B	JCI	PI(1)-ST-(IR-63)-1B	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced (modified) existing air supply line to valve CSP-V-6. The work was performed as follows:

A) Installation of piping material
   1) Installed new piping material
   2) Made required socket welds
   3) Performed visual examination on the final socket welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Installation of shear lugs
   1) Installed new shear lugs
   2) Made required shear lugs to pipe welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable

C) Installation of support Serial No 9301572C-001
   1) Installed new support material
   2) Installed new "U" bolt and associated jam nuts

D) Installation of support Serial No 9301572C-002
   1) Installed new support material
   2) Installed new "U" bolt and associated jam nuts

E) Installation of support Serial No 100-7-021
   1) Installed new support material
   2) Installed new "U" bolt and associated jam nuts

NOTES -

1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class NF(2), 1974 Edition with Winter 1975 Addenda for the supports

PLAN No 2-1311

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/19/96
Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

PLAN No 2-1312

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   (b) Repair Organization P.O. No, Job No, etc.: C875WE
   (c) Type Code Symbol Stamp: VR And NR
   (d) Certificate Of Authorization No.: VR No 590 And NR No 78
   (e) Expiration Date: VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0046	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0046 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Reassembled the relief valve without replacing any ASME pressure boundary (retaining) parts
   3) Reset the relief valve set pressure from 1150 PSIG to 1165 PSIG
   4) Tested the relief valve at new set pressure of 1165 PSIG. Test results acceptable

NOTES -

1) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-1312

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ **Pneumatic** ☐ **Nominal Operating Pressure** ☐ **Other** ☒ **None**

Test Pressure: Psig **Test Temperature:** ° F

Component Design Pressure: Psig **Temperature:** ° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0046, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0046

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE) **Signed By** [signature] — Supervisor, Materials And Welding

Date 8/13/96 **Date** 8/16/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington **and employed by** Arkwright Mutual Insurance Company of Waltham, Massachusetts **have inspected the components described in this Owner's Report during the period** 8/16/96 **to** 8/16/96 **and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.**

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

[signature] — Inspector's Signature

Commissions 7486, 7486 W NSIB-IS — National Board, State, and Endorsements

Date 8/16/96

FORM NVR-1 REPORT OF REPAIR ☒ MODIFICATION ☐ OR REPLACEMENT ☐
OF NUCLEAR PRESSURE RELIEF DEVICES

PCAN No. 2-1312

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) Rudolph Ruiz (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) 7/31/96

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way Richland, WA 99352 (name and address)

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland (address)

4. Name, address and identification of nuclear power plant Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way, Richland, WA 99352

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0046 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1980 (year built)
d: Construction Code 1971 (edition) N/A (addenda) N/A (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1989 (edition) N/A (addenda) N/A (Code Case(s))

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities N/A

10. Opening pressure: 1165 Blowdown(if applicable) _____ Set pressure and blowdown adjustment made at Western Repair Center (location) using steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Disassembled, lapped seats, inspected, replaced gaskets, assembled, certified set pressure on steam

12. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conform to Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB 102, current edition.

Certificate of Authorization no. 590 to use the "VR" stamp expires 1/11, 19 98.
Certificate of Authorization no. 78 to use the "NR" stamp expires 4/12, 19 98.

Date 3-29 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) T.P Nederostek (authorized representative) SR. ENGR. (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-29, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification 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.

3-29, 19 96. Signed Robert Elman (Inspector) Commissions CA 1716 (Nat. Board No.(including endorsements)state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

NB-168
Rev 2

~~NAS-RV-1G~~

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1312

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

QC-44D
8/3/96

DATA REPORT
Safety and Safety Relief Valves

FOR INFORMATION ONLY

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No N63790-00-0046 Drawing No. DS-A-63790 Rev. C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Inch Pipe Size -- Inch Inlet 6 Inch Outlet 10 Inch

6. Set Pressure (psig) 1150 575° F (Rated Temperature)

Stamped Capacity 865, 725 @ 3 % Overpressure -- Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0065	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0028	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.		
Disc Insert	N93185-34-0077	ASME SA637 Gr. 718
Nozzle	N93184-32-0048	ASME SA182 Gr. F316
Disc Holder *K55484-35-0094	*N89714-34-0082	AMS 5662B
Spring Washers K62858-35-0028	K62856-35-0084 K62857-35-0049	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0053	ASME SA193 Gr. B6
Spindle Point K62873-37-0139	N89720-43-0136	ASME SA564 Type 630
c. Spring K62858-35-0028	*N89722-0002	ASTM A304-66 Gr. 4161H
d. Bolting		7X00380095
e. Spindle Ball K62873-37-0139	N93213-0206	Stoody #6
Thrust Bearing Adapter	N93409-32-0048	ASME SA193 Gr. B6
Bonnet Stud (J17)	N93207-0549 thru 0560	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0769 thru 0780	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0551 thru 0562	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0555 thru 0566	ASTM SA194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button K63618-32-0045	N93411-32-0045	ASME SA193 Gr. B6

Valve originally built against Crosby Order No. N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached. N103790-00-0046

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711.
Class 1.

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.A. Calavano

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company
Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093
Design specifications certified by[1] Boyd P. Brooks
PE State California Reg. No. 13655
Stress report certified by[1] W.D. Greenlaw
PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/9, 1981 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 11/9 1981.
Signed John E. Moore (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380096

PLAN No 2-1313

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   (b) Repair Organization P.O. No, Job No, etc.: C875WE
   (c) Type Code Symbol Stamp: VR And NR
   (d) Certificate Of Authorization No.: VR No 590 And NR No 78
   (e) Expiration Date: VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0047	N/A	N/A	1981	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0047 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Reassembled the relief valve without replacing any ASME pressure boundary (retaining) parts
   3) Tested the relief valve at set pressure of 1175 PSIG. Test results acceptable

NOTES -

1) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-131

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ **Pneumatic** ☐ **Nominal Operating Pressure** ☐ **Other** ☒ **None**

Test Pressure: Psig **Test Temperature:** °F

Component Design Pressure: Psig **Temperature:** °F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0047, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0047

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE) ***Signed By*** — Supervisor, Materials And Welding

Date 8/3/96 ***Date*** 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington ***and employed by*** Arkwright Mutual Insurance Company of Waltham, Massachusetts ***have inspected the components described in this Owner's Report during the period*** 8/1/96 ***to*** 8/16/96 ***and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.***

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

Inspector's Signature — ***Commissions*** 7486, 7486 W NSIB-IS — National Board, State, and Endorsements

Date 8/16/96

FORM NVH-1 REPORT OF REPAIR or MODIFICATION

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-1313

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) Rwalp Swb (P.O. no., job no., etc.)

200 S. Highland Springs Ave., Banning, CA 92220 (address) 7/31/96

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way Richland, WA 99352 (name and address)

3. Owner Washington Public Power Supply System, WNP-2 (name)

3000 Geo. Washington Way, Richland (address)

4. Name, address and identification of nuclear power plant Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way, Richland, WA 99352

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve

b: Name of manufacturer Crosby

c: Identifying nos. HB-65-BP (type) N63790-00-0047 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)

d: Construction Code 1971 (edition) N/A (addenda) N/A (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1989 (edition) N/A (addenda) N/A (Code Case(s))

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities N/A

10. Opening pressure: 1175 Blowdown(if applicable) _____ Set pressure and blowdown adjustment made at Western Repair Center (location) using Steam (test medium)

Description of work:(Include name and identifying number of replacement parts) Disassembled, lapped seats, inspected, replaced gaskets, assembled. Certified set pressure on steam.

12. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB 102, current edition.

Certificate of Authorization no. 590 to use the "VR" stamp expires 1/11, 19 98.

Certificate of Authorization no. 78 to use the "NR" stamp expires 4/12, 19 98.

Date 3-29 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) Thomas D Nedenstich (authorized representative) SR ENGR (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-29, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification 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.

3-29, 19 96 Signed Karen Shaw (Inspector) Commissions NA 1716 (Nat. Board No.(including endorsements)state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

NB-16 Rev. 2

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS PLAN. NO. 2-134

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0047 Drawing No. DS-A-63790 Rev.C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Inch Pipe Size --- Inch Inlet 6 Inch Outlet 10 Inch

6. Set Pressure (psig) 1175 575° F (Rated Temperature)

Stamped Capacity 884,314 @ 3 %Overpressure --- Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0066	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0029	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.		
Disc Insert	N93185-34-0078	ASME SA637 Gr. 718
Nozzle	N93184-32-0049	ASME SA182 Gr. F316
Disc Holder *K55484-35-0098	*N89714-34-0136	AMS 5662B
Spring Washers K62858-35-0029	K62856-35-0085 K62857-35-0050	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0054	ASME SA193 Gr. B6
Spindle Point K62873-37-0148	N89720-43-0147	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0029	*N89722-0003	ASTM A304-66 Gr. 4161 H
d. Bolting		ZX00380110
e. Spindle Ball K62873-37-0148	N93213-0215	Stoody #6
Thrust Bearing Adapter	N93409-32-0049	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0561 thru 0572	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0781 thru 0792	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0563 thru 0574	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0567 thru 0578	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button K63618-33-0055	N93411-33-0055	ASME SA193 Gr. B6

...dification consists of replacement of the ... Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.

~~Multi-Use~~ Cutaway Gate 4/8
NIe3790-00-0047

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711. Class 1

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.O. Casavant

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company 43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 1/9, 19 81 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 1/9 19 81.

FOR INFORMATION ONLY

Signed [signature] (Inspector) Commissions MASS 1269 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Di...

ZX00380111

PLAN No 2-1314

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   (b) Repair Organization P.O. No, Job No, etc.: C875WE
   (c) Type Code Symbol Stamp: VR And NR
   (d) Certificate Of Authorization No.: VR No 590 And NR No 78
   (e) Expiration Date: VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0048	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0048 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Reassembled the relief valve
   3) Installed one (1) new stud for the relief valve inlet joint
   4) Tested the relief valve at set pressure of 1175 PSIG. Test results acceptable

NOTES -

1) Supply System performed VT-1 visual examination on one (1) new stud for the relief valve inlet joint. VT-1 visual examination results acceptable
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
4) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-131

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0048, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0048

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By — Supervisor, Materials And Welding

Date 8/3/96

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 8/1/96 to 8/1/97 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions 7486, 7486 w NSIB-IJ

National Board, State, and Endorsements

Date 8/16/96

FORM NVR-1 REPORT OF REPAIR ☒ MODIFICATION ☐ OR REPLACEMENT ☐
OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-1314

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) Rudolph Swab (P.O. no., job no., etc.) 7/31/96
200 S. Highland Springs Ave., Banning, CA 92220 (address)

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way Richland, WA 99352 (name and address)

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland (address)

4. Name, address and identification of nuclear power plant Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way, Richland, WA 99352

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0048 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1980 (year built)
d: Construction Code 1971 (edition) N/A (addenda) N/A (Coce Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1989 (edition) N/A (addenda) N/A (Code Case(s

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) N/A (addenda) N/A (Code Case(s);

9. Design responsibilities N/A

10. Opening pressure: 1175 Blowdown(if applicable) _____ Set pressure and blowdown adjustmen made at Western Repair Center (location) using steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Disassembled, lapped seats, inspected, replaced inlet stud, assembled. Certified set pressure on steam.

12. Remarks: Inlet stud - PO #231692, Item #003, MC #54400514

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conform to Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB 102, current edition.

Certificate of Authorization no. 590 to use the "VR" stamp expires 1/11, 19 98.
Certificate of Authorization no. 78 to use the "NR" stamp expires 4/12, 19 98.

Date 3-29 1996 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) Thomas D McDermott (authorized representative) SR. ENGR (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued b the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-29, 1996 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification 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.

3-29, 1996. Signed Russ Ethen (Inspector) Commissions CA 1716 (Nat. Board No.(including endorsements)state or province and numbe

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

NB-1 Rev

AS-RV-1A

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1314

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves

Randy Sweet 8/3/96

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0048 Drawing No. DS-A-63790 Rev. C

Type Safety Relief Orifice Size R Pipe Size Inlet 6 Inch Outlet 10 Inch
Safety, Safety Relief, Pilot, Power Actuated

6. Set Pressure (psig) 1175 575° F
Rated Temperature

Stamped Capacity 884,314 @ 3 % Overpressure -- Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 1100 psig (Body Only)
(Apolicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0067	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0030	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. Disc Insert	N93185-34-0079	ASME SA637 Gr. 718
Nozzle	N93184-33-0052	ASME SA182 Gr. F316
Disc Holder *K55484-35-0081	*N89714-34-0126	AMS 5662B
Spring Washers K62858-35-0030	K62856-35-0086 K62857-35-0051	ASTM A105-71Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0055	ASME SA193 Gr. B6
Spindle Point K62873-35-0048	*N89720-34-0065	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0030	*N89722-0004	ASTM A304-66 Gr. 4161H
d. Bolting		ZX0038011 3
e. Spindle Ball K62873-35-0048	N93213-0048	Stellite #6
Thrust Bearing Adapter	N93409-32-0050	ASME SA193 Gr. B6
Bonnet Stud (T17)	N93207-0573 thru 0584	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0793 thru 0804	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0575 thru 0586	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0579 thru 0590	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-33-0056	ASME SA193 Gr. B6

Valve originally built against Crosby Order No N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

N1.3790-00-0048

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711.
Class 1

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R. A. Casavant

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/24, 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 for Nuclear Power Plant Components.

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

Date 11/24 19 80.

Signed [signature] (Inspector) Commissions MA55126 G (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380114

PLAN No 2-1315

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
(b) Repair Organization P.O. No, Job No, etc.: C875WE
(c) Type Code Symbol Stamp: VR And NR
(d) Certificate Of Authorization No.: VR No 590 And NR No 78
(e) Expiration Date: VR - January 11, 1998 And NR - April 12, 1998
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0052	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Spare main steam relief valve Serial No N63790-00-0052 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work
2) Removed existing disc insert from the relief valve
3) Installed new disc insert in the relief valve
4) Reassembled the relief valve
5) Tested the relief valve at set pressure of 1185 PSIG. Test results acceptable

NOTES -

1) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-1315

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [ ] **Nominal Operating Pressure** [ ] **Other** [X] **None**

Test Pressure: Psig **Test Temperature:** ° F

Component Design Pressure: Psig **Temperature:** ° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0052, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0052

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By** [signature]

Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/3/96 **Date** 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 8/16/96 *to* 8/16/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] **Commissions** 7486, 7486W NSIB-US

Inspector's Signature National Board, State, and Endorsements

Date 8/16/96

FORM NVR-1 REPORT OF REPAIR ☒ MODIFICATION ☐ OR REPLACEMENT ☐ OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-1315

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) Rudolf Swab (P.O. no., job no., etc.) 7/31/96
200 S. Highland Springs Ave., Banning, CA 92220 (address)

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way Richland, WA 99352 (name and address)

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland (address)

4. Name, address and identification of nuclear power plant Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way, Richland, WA 99352

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0052 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1980 (year built)
d: Construction Code 1971 (edition) N/A (addenda) N/A (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1989 (edition) N/A (addenda) N/A (Code Case(s))

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities N/A

10. Opening pressure: 1185 Blowdown(if applicable) N/A Set pressure and blowdown adjustment made at Western Repair Center (location) using Steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Disassembled, lapped seats, inspected, replaced disc insert, assembled. Certified set pressure on steam.

12. Remarks: Disc insert S/N N93185-56-0239, MC #54401795

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB 102, current edition.

Certificate of Authorization no. 590 to use the "VR" stamp expires 1/11, 19 98.
Certificate of Authorization no. 78 to use the "NR" stamp expires 4/12, 19 98.

Date 3-29 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) Thomas D Niederstadt (authorized representative) SR Engr (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-29, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification 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.

3-29, 19 96, Signed Ralph Elmer (Inspector) Commissions CA 1716 (Nat. Board No.(including endorsements) state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

NB-166
Rev 2

~~MS-RV-2D~~

~~MS-545-1~~

PLAN NO. 2-1315

Rudolf Sup's

8/31/96

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES — Q.C.-44D
As Required by the Provisions of the ASME Code Rules

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured by Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-SP-FN Order No. N94275 Contract Date 3/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification HPL #B22-F013 Serial No. ~~N63290-00-0052~~ Drawing No. DS-A-63790 Rev. C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Pipe Size -- Inlet 6 inch Outlet 10 inch

6. Set Pressure (psig) 1185 — 575° F Rated Temperature

Stamped Capacity 891,730 @ 3 %Overpressure -- Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 — 975 psig (Assembled Valve) Outlet 1100 psig (Body Only) (Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

		Serial No. Identification	Material Specification Including Type or Grade
a.	Bar Stock & Forgings		
	Body	N93183-35-0071	ASTM A105-71 Gr. II ASME SA105 Gr. II
	Bonnet	N93407-35-0034	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.			
	Disc Insert	N93185-34-0084	ASME SA637 Gr. 718
	Nozzle	N93184-33-0056	ASME SA182 Gr. F316
	Disc Holder K55484-35-0091	*N89714-34-0124	AMS 5662B
	Spring Washers K62858-35-0034	K62856-35-0090 K62857-35-0055	ASTM A105-71 Gr. II ASME SA105 Gr. II
	Adjusting Bolt	N93410-33-0059	ASME SA193 Gr. B6
	Spindle Point K62873-35-0052	*N89720-34-0068	ASTM A564-71 Type 630 ASME SA564 Type 630
c.	Spring K62858-35-0034	*N89722-0010	ASTM A304-66 Gr. 4161H
d.	Bolting		
e.	Spindle Ball K62873-35-0052	N93213-0052	Stellite #6
	Thrust Bearing Adapter	N93409-33-0054	ASME SA193 Gr. B6
	Bonnet Stud (117, BW5)	N93207-0621 thru 0632	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
	Bonnet Stud Nut (187)	N93230-0841 thru 0852	ASME SA194 Gr. 2H
	Inlet Stud (BW6)	N93216-0623 thru 0634	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
	Inlet Stud Nut (BW8)	N93218-0627 thru 0638	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
	Adjusting Bolt Button K63618-33-0060	N93411-33-0060	ASME SA193 Gr. B6

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FOR REGULATION ONLY

~~HS KV — 0x2~~

S/N N63790-00-00052

Valve originally built against Crosby Order No. N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711, Class 1.

Date 11-9-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.C. Brown

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company, 43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W. D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/10, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 11/10, 1980.

Signed (Inspector)[1] Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

MAB

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FOR INFORMATION ONLY

PLAN No 2-1316

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   (b) Repair Organization P.O. No, Job No, etc.: C875WE
   (c) Type Code Symbol Stamp: VR And NR
   (d) Certificate Of Authorization No.: VR No 590 And NR No 78
   (e) Expiration Date: VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0055	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0055 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Removed existing disc insert from the relief valve
   3) Installed new disc insert in the relief valve
   4) Reassembled the relief valve
   5) Tested the relief valve at set pressure of 1195 PSIG. Test results acceptable

NOTES -

1) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-1316

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — **Test Temperature:** °F

Component Design Pressure: Psig — **Temperature:** °F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0055, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0055

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Date 8/3/96

Signed By Carl M Knig — Supervisor, Materials And Welding

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 8/16/96 *to* 8/16/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

R. W. Gossett — Inspector's Signature

Commissions 7486, 7486W NBIB-IS — National Board, State, and Endorsements

Date 8/16/96

FORM NVR-1 REPORT OF REPAIR ☒ MODIFICATION ☐ OR REPLACEMENT ☒ OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN NO. 2-1316

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) Rudolph Swab (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) 7/31/96

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way (name and address) Richland, WA 99352

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland (address)

4. Name, address and identification of nuclear power plant Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way, Richland, WA 99352

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0055 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1980 (year built)
d: Construction Code 1971 (edition) N/A (addenda) N/A (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1989 (edition) N/A (addenda) N/A (Code Case(s))

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities N/A

10. Opening pressure: 1195 Blowdown(if applicable) N/A Set pressure and blowdown adjustment made at Western Repair Center (location) using Steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Disassembled, lapped seats, inspected, replaced disc insert, assembled. Certified set pressure on steam.

12. Remarks: Disc insert S/N N93185-56-0235, MC 54401795

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conform to Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB 102, current edition.

Certificate of Authorization no. 590 to use the "VR" stamp expires 1/11, 19 98.
Certificate of Authorization no. 78 to use the "NR" stamp expires 4/12, 19 98.

Date 3-29, 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) Thomas P. Nellenbach (authorized representative) SR. Engr (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-29, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification 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.

3-29, 19 96. Signed [signature] (Inspector) Commissions CA 1716 (Nat. Board No.(including endorsements) state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

NB-164
Rev 2

AA-SRV-3A

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1316

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

Rudolf Suess 8/31/96

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Ave., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply Systems Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL∅B22-FO13 Serial No. N63790-00-0055 Drawing No. DS-A-63790 Rev. C

Type Safety Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size R Inch Pipe Size — Inch Inlet 6 Inch Outlet 10 Inch

6. Set Pressure (psig) 1195 575° F
Rated Temperature

Stamped Capacity 899,185 @ 3 %Overpressure — Blowdown (psig) 2% to 11%

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 1100 psig (Body Only)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. ~~Castings~~ Bar Stock & Forgings		
Body	N93183-35-0074	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0037	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Machined Parts Purchased as Castings or Forgings~~ ~~Supplied Materials~~ Disc Insert	N93185-34-0087	ASME SA637 Gr. 718
Nozzle	N93184-33-0059	ASME SA182 Gr. F316
Disc Holder K55484-45-0191	N89714-37-0219	AMS 5662B
Spring Washers K62858-35-0037	K62856-35-0093 K62857-35-0058	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0062	ASME SA193 Gr. B6
Spindle Point K62873-35-0055	*N89720-34-0063	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0037	*N89722-0013	ASTM A304-66 Gr. 4161H
d. Bolting		7X0038O140
e. ~~Machined Parts Purchased as Castings or Forgings~~ Spindle Ball K62873-35-0055	N93213-0055	Stellite #6
Thrust Bearing Adapter	N93409-32-0057	ASME SA193 Gr. B6
Bonnet Stud (BW5)	N93207-0657 thru 0668	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0877 thru 0888	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0659 thru 0670	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0663 thru 0674	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-33-0064	ASME SA193 Gr. B6

modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

N63790-00-00055

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 & 1711.
Class 1 (Date)

Date 11-5-80 Signed Crosby Valve & Gage Co. by R.A. Casavant
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1878 to use the NV

symbol expires September 30, 1983.
(Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 12/5 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 12/5 1980.

Signed John T. Mc Carthy Commissions MASS 1266
(Inspector) (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380141

PLAN No 2-1317

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/3/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   (b) Repair Organization P.O. No, Job No, etc.: C875WE
   (c) Type Code Symbol Stamp: VR And NR
   (d) Certificate Of Authorization No.: VR No 590 And NR No 78
   (e) Expiration Date: VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0057	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0057 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Removed existing disc insert from the relief valve
   3) Installed new disc insert in the relief valve
   4) Removed existing nozzle from the relief valve
   5) Installed new nozzle in the relief valve
   6) Reassembled the relief valve
   7) Tested the relief valve at set pressure of 1195 PSIG. Test results acceptable

NOTES -

1) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-1317

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [ ] **Nominal Operating Pressure** [ ] **Other** [X] **None**

Test Pressure: Psig — **Test Temperature:** ° F

Component Design Pressure: Psig — **Temperature:** ° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0057, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0057

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Date 8/3/96

Signed By Carl M Kemp — Supervisor, Materials And Welding

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 8/16/96 *to* 8/16/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

J. W. Taylor — Inspector's Signature

Commissions 7446, 7446 W NSIB-II — National Board, State, and Endorsements

Date 8/16/96

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN NO. 2-1317

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) Kwaip Sngh (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) 7/31/96

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way Richland, WA 99352 (name and address)

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland (address)

4. Name, address and identification of nuclear power plant Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way, Richland, WA 99352

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0057 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1980 (year built)
d: Construction Code 1971 (edition) N/A (addenda) N/A (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: 1989 (edition) N/A (addenda) N/A (Code Case(s

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) N/A (addenda) N/A (Code Case(s).

9. Design responsibilities N/A

10. Opening pressure: 1195 Blowdown(if applicable) N/A Set pressure and blowdown adjustmen made at Western Repair Center (location) using Steam (test medium)

Description of work:(include name and identifying number of replacement parts) Disassembled, lapped seats, inspected, replaced disc insert & nozzle, assembled. Certified set pressure on steam

Remarks: Disc insert S/N N93185-54-0224, MC 54401795
Nozzle S/N N93184-54-0168, MC 54401781

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conform to Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB 102, current edition.

Certificate of Authorization no. 590 to use the "VR" stamp expires 1/11, 19 98.
Certificate of Authorization no. 78 to use the "NR" stamp expires 4/12, 19 98.

Date 3-29 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) Thomas P Nedomatil (authorized representative) SR. ENG'R. (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued b the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-29, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty expressed or implied, concerning the repair, modification 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.

3-29, 19 96. Signed [signature] (Inspector) Commissions CA 1716 (Nat. Board No.(including endorsement(s)state or province and numbe

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229

NB-1 Rev

Kudath Singh 5/4/95

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1317

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-44D

Kudath Singh 8/3/96

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. HB-65-BP-FN Order No. N94275 Contract Date 4/24/79 National Board No. N/A

2. Manufactured For General Electric Company, 175 Curtner Avenue., San Jose, CA 95125 Order No. 205-AJ986
Name and Address

3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address

4. Location of Plant Hanford Reservation, Richland, Washington 99352

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0057 Drawing No. DS-A-63790 Rev.

Type Safety Relief Orifice Size R Pipe Size — Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch

6. Set Pressure (psig) 1195 575° F
Rated Temperature

Stamped Capacity 899,185 @ 3 %Overpressure — Blowdown (psig) 2 % to [illegible]

Hydrostatic Test (psig) Inlet 2370 Outlet 1100 psig (Body Only) 975 psig (Assembled Valve)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. ~~Casting~~ Bar Stock & Forgings		
Body	N93183-35-0076	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0039	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Machined Parts~~ ~~Trim~~ Disc Insert	N93185-34-0089	ASME SA637 Gr. 718
Nozzle	N93184-33-0061	ASME SA182 Gr. F316
Disc Holder *K55484-35-0083	*N89714-34-0093	AMS 5662B
Spring Washers K62858-35-0039	K62856-35-0095 K62857-35-0060	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0064	ASME SA193 Gr. B6
Spindle Point K62873-35-0057	*N89720-34-0073	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0039	*N89722-0015	ASTM A304-66 Gr. 4161 H
d. Soldering		ZX00380090
e. ~~Ball~~ Spindle Ball K62873-35-0057	N93213-0057	Stellite #6
Thrust Bearing Adapter	N93409-32-0059	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0681 thru 0692	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0901 thru 0912	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0683 thru 0694	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0687 thru 0698	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button K63618-33-0066	N93411-33-0066	ASME SA193 Gr. B6

modification consists of replacement of the [illegible],
Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.

MS-RV-4B
Cudlip Eng's 5/4
N[illegible]

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 1711.

Class 1

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.A. Casavant

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date).

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company 43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by[1] W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 12-9, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 12-9 1980.

Signed [signature] (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Di[illegible]

ZX00380091

PLAN No 2-1319

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(21)-2UG	WPPSS	SW(21)-2UG-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced pipe piece associated with valve SW-V-821A. The replacement work was performed as follows:
   1) Removed existing pipe piece associated with valve SW-V-821A
   2) Installed new replacement pipe piece associated with valve SW-V-821A
   3) Made required socket welds
   4) Performed visual examination on the final socket welds. Visual examination results acceptable

PLAN No 2-1319

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Signed By _____

Kuldip Singh - Program Lead Engineer (PLE) — Supervisor, Materials And Welding

Date 8/19/96 — Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller — Commissions _____

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

Date _____

PLAN No 2-1322

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/5/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Feed Water (RFW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW-V-10A	Anchor Darling	1N 260	N/A	N/A	1977	Repair	Yes, Code Class 1

7. **Description Of Work Performed:** Performed weld built on the disc stud for valve RFW-V-10A. The repair work was performed as follows:
   1) Weld built up the disc stud
   2) Machined the weld built up surfaces of the disc stud
   3) Performed magnetic particle (MT) examination on the final machined surfaces of the disc stud. Unacceptable magnetic particle (MT) linear indication was revealed in the disc stud
   4) Removed unacceptable magnetic particle (MT) linear indication in the disc stud by mechanical means
   5) Performed magnetic particle (MT) examination on the disc stud excavation. Magnetic particle (MT) examination results acceptable
   6) Weld repaired the cavity in the disc stud
   7) Machined the weld built up surfaces of the disc stud
   8) Performed magnetic particle (MT) examination on the final machined surfaces of the disc stud. Magnetic particle (MT) examination results acceptable
   9) Machined the seal ring seating surfaces of the bonnet
   10) Performed magnetic particle (MT) examination on the final machined surfaces of the seal ring seating surfaces. Magnetic particle (MT) examination results acceptable
   10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test

PLAN No 2-1322

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] *Pneumatic* [ ] *Nominal Operating Pressure* [X] *Other* [ ] *None*

Test Pressure: 1020 Psig *Test Temperature:* 194° F

Component Design Pressure: 2790 Psig *Temperature:* 100° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh *Signed By*

Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/5/96 *Date* 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5/17/96 *to* 8/19/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Commissions 7484, 7486 w NBIS-IS

Inspector's Signature National Board, State, and Endorsements

Date 8/19/96

PLAN No 2-1323

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/5/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Feed Water (RFW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW-V-10B	Anchor Darling	1N 257	N/A	N/A	1977	Repair	Yes, Code Class 1

7. **Description Of Work Performed:** Performed weld built on the disc stud for valve RFW-V-10B. The repair work was performed as follows:
   1) Weld built up the disc stud
   2) Machined the weld built up surfaces of the disc stud
   3) Performed magnetic particle (MT) examination on the final machined surfaces of the disc stud. Magnetic particle (MT) examination results acceptable
   4) Machined the seal ring seating surfaces of the bonnet
   5) Performed magnetic particle (MT) examination on the final machined surfaces of the seal ring seating surfaces. Magnetic particle (MT) examination results acceptable
   6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test

PLAN No 2-1323

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None

Test Pressure: 1020 Psig
Component Design Pressure: 2790 Psig
Test Temperature: 194° F
Temperature: 100° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Date 8/5/96

Signed By — Supervisor, Materials And Welding
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/7/96 to 8/19/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7486, 7486-W NSIB-IS
National Board, State, and Endorsements

Date 8/19/96

PLAN No 2-1324

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Residual Heat Removal (RHR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(3)-2A	WPPSS	RHR(3)-2A-P1	N/A	N/A	1983	Repaired	Yes, Code Class

7. **Description Of Work Performed:** Unacceptable magnetic particle (MT) linear indication was revealed in pipe to lug weld (toe of the weld on the lug) for support RHR-121 during Inservice Inspection (ISI) of the weld. The unacceptable magnetic particle (MT) linear indication was removed as follows:
   1) Removed unacceptable magnetic particle (MT) linear indication by mechanical means
   2) Uniformly blended the excavated area into the surrounding surfaces
   3) Performed magnetic particle (MT) examination on the blended the excavated area. Magnetic particle (MT) examination results acceptable

PLAN No 2-1324

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/11/96 Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/3/96 to 8/8/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Commissions 7486, 7486-W NBSI-IS
Inspector's Signature National Board, State, and Endorsements

Date 8/13/96

PLAN No 2-1326

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/6/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Supply Purge (CSP) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CSP-V-93	Target Rock	1	N/A	N/A	1983	Repaired	Yes, Code Class 2
Spare Disc	Target Rock	824	N/A	N/A	1989	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Cut body to bonnet seal weld for valve CSP-V-93 to troubleshoot the valve. The repair and replacement work was performed as follows:
   1) Cut body to bonnet seal weld
   2) Removed the existing disc from the valve
   3) Installed new disc Serial No 824 in the valve
   4) Made required body to bonnet seal weld
   5) Performed liquid penetrant (PT) examination on the final body to bonnet seal weld. Liquid penetrant (PT) examination results acceptable

PLAN No 2-132

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: See attached N-2 Code Data Report for the new disc, Serial No 824

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 8/6/96

Signed By
Supervisor, Materials And Welding
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/14/96 to 8/19/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7486, 7486W NSIB-I
National Board, State, and Endorsements

Date 8/19/96

PLAN NO. 2-1326 Receip Sup 8/13/96.

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

As Required by the Provisions of the ASME Code, Section III

Not To Exceed One Day's Production

Pg. 1 of 1

1. Manufactured and certified by Target Rock Corp., 1965E Broadhollow Rd, E. Farmingdale, NY 11735
(name and address of NPT Certificate Holder)

2. Manufactured for Washington Public Power Supply System, Richland, WA
(name and address of purchaser)

3. Location of installation Washington Nuclear Plant 2, Richland, WA
(name and address)

4. Type 202337-1 Rev. E (drawing no.) SA-479 316 (mat'l. spec. no.) 75 KSI (tensile strength) N/A (CRN) 1989 (year built)

5. ASME Code, Section III: 1974 (edition) W 75 (addenda date) 2 (class) N/A (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks: Spare Parts for a completed valve, Models 79TT-001, 83TT-001

DISC S/N 824

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

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

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	779	N/A
(2)	816	N/A
(3)	788	N/A
(4)	824	N/A
(5)	782	N/A
(6)	760	N/A
(7)	762	N/A
(8)	N/A	N/A
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10. Design pressure N/A psi. Temp. N/A °F. Hydro. test pressure 165 (when applicable) at temp. °F AMB

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

FORM N-2 (back)

Mfr. Serial No. See Front

CERTIFICATION OF DESIGN

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

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

CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization No. 1948 Expires 12-9-89

Date 4/4/89 Name Target Rock Corporation Signed E. Bajada
(NPT Certificate Holder) (authorized representative)

E. Bajada, Q.A. Manager

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 Commercial Union Insurance Company of Boston, Mass. have inspected these items described in this Data Report on 4/4/89, 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 4/4/89 Signed William A. Rakiend NEW YORK STATE COMMISSION NO. 2288
(Authorized Inspector) Commissions
(Nat'l. Bd. (incl. endorsements) state or prov. and no.)

PLAN No 2-1327

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/30/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC-V-63	Velan	0594	N/A	N/A	1977	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced body to bonnet studs and nuts for valve RCIC-V-63. The replacement work was performed as follows:
   1) Performed VT-3 visual examination on the valve body accessible internal surfaces. VT-3 visual examination results acceptable
   2) Performed VT-3 visual examination on the valve bonnet accessible internal surfaces. VT-3 visual examination results acceptable
   3) Performed VT-1 visual examination on the new studs for valve body to bonnet joint. VT-1 visual examination results acceptable
   4) Performed VT-1 visual examination on the new nuts for valve body to bonnet joint. VT-1 visual examination results acceptable
   5) Performed VT-3 visual examination on the existing studs for valve body to bonnet joint. VT-3 visual examination results acceptable
   6) Performed VT-3 visual examination on the existing nuts for valve body to bonnet joint. VT-3 visual examination results acceptable
   7) Reinstalled VT-3 visually examined existing studs
   8) Reinstalled VT-3 visually examined existing nuts
   9) Installed four (4) VT-1 visually examined new studs
   10) Installed four (4) VT-1 visually examined new nuts
   11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test

PLAN No 2-1327

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [X] Other [ ] None

Test Pressure: 1020 Psig
Component Design Pressure: 1337 Psig
Test Temperature: 194° F
Temperature: 575° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 7/30/96
Date 7/31/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 8-11-96 to 7-30-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Inspector's Signature
Commissions 7486, 7486W NBIS-IS
National Board, State, and Endorsements

Date 7/30/96

PLAN No 2-1328

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/30/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Feed Water (RFW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW-V-32A	Anchor Darling	1N 109	N/A	N/A	1975	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced studs and nuts for the stuffing box and the gland flange joints for valve RFW-V-32A. The replacement work was performed as follows:
   1) Removed all existing studs and nuts for the stuffing box joint
   2) Installed six (6) new studs and six (6) new nuts for the stuffing box joint
   3) Removed all existing studs and nuts for the gland flange joint
   4) Installed two (2) new studs and two (2) new nuts for the gland flange joint
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test

PLAN No 2-1328

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [X] Other [ ] None

Test Pressure: 920 Psig
Component Design Pressure: 2790 Psig
Test Temperature: 98° F
Temperature: 100° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 7/30/96
Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5-14-96 to 7-30-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection

[signature]
Inspector's Signature

Commissions 7486, 7486W NB SI IS
National Board, State, and Endorsements

Date 7/30/96

PLAN No 2-1329

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/30/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Feed Water (RFW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW-V-32B	Anchor Darling	1N 110	N/A	N/A	1975	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced studs and nuts for the stuffing box and the gland flange joints for valve RFW-V-32B. The replacement work was performed as follows:
   1) Removed existing studs and nuts for the stuffing box joint
   2) Performed VT-3 visual examination on the existing studs for the stuffing box joint. VT-3 visual examination results acceptable
   3) Performed VT-3 visual examination on the existing nuts for the stuffing box joint. VT-3 visual examination results acceptable
   4) Reinstalled VT-3 visually examined existing studs the stuffing box joint
   5) Reinstalled VT-3 visually examined existing nuts the stuffing box joint
   6) Installed two (2) new studs and two (2) new nuts for the stuffing box joint
   7) Removed all existing studs and nuts for the gland flange joint
   8) Installed two (2) new studs and two (2) new nuts for the gland flange joint
   9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test

PLAN No 2-1329

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 920 Psig Test Temperature: 98° F
Component Design Pressure: 2790 Psig Temperature: 100° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 7/30/96 Date 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5-14-96 to 7-30-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection

[signature] Commissions 7486, 7486 W NB S I IS
Inspector's Signature — National Board, State, and Endorsements

Date 7/30/96

PLAN No 2-1332

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/16/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Air System (CAS)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
D-220-3500-09.0-RCIC-PCV-15	JCI	D-220-3500-09.0-RCIC-PCV-15	N/A	N/A	1982	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing tubing associated with valve CAS-V-100/51. The replacement work was performed as follows:
   1) Removed existing tubing
   2) Installed new tubing
   3) Made required socket welds
   4) Performed visual examination on the final socket welds. Visual examination results acceptable

PLAN No 2-1332

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/19/96

Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1333

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/6/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-IR-63-10	JCI	PI(1)-ST-IR-63-10	N/A	N/A	1983	Repaired	Yes, Code Class 2
PI-EFC-67	Dragon	GW 1102	N/A	N/A	1978	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Cut existing reducing insert to valve PI-EFC-67 socket weld to provide excess to troubleshoot the valve. The repair and replacement work was performed as follows:
   1) Cut existing reducing insert to valve socket weld
   2) Removed the existing poppet assembly (disc) from the valve
   3) Prepped valve socket end cut surfaces
   4) Performed liquid penetrant (PT) examination on the valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable
   5) Installed new poppet assembly (disc) in the valve
   6) Made required reducing insert to valve socket weld
   7) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

NOTES -

1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the piping system
2) ASME Section III, Code Class 1, 1974 Edition with Winter 1976 (12/30/96) Addenda for valve PI-EFC-67
3) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application

PLAN No 2-1333

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Date 8/6/96

Signed By — Supervisor, Materials And Welding

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/20/96 to 8/19/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions 7486, 7486-W NBEI-IJ

National Board, State, and Endorsements

Date 8/19/96

PLAN No 2-1334

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-X-72B* PI-EFC-X78A	JCI Dragon	PI(1)-ST-X-72B* GW 1102	N/A N/A	N/A N/A	1982 1978	Repaired Replacement	Yes, Code Class 2 Yes, Code Class 1

7. **Description Of Work Performed:** Cut existing pipe to valve PI-EFC-X78A socket weld to provide excess to troubleshoot the valve. The repair and replacement work was performed as follows:
   1) Cut existing pipe to valve socket weld
   2) Removed the existing poppet assembly (disc) from the valve
   3) Prepped valve socket end cut surfaces
   4) Performed liquid penetrant (PT) examination on the valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable
   5) Installed new poppet assembly (disc) in the valve
   6) Made required pipe to valve socket weld
   7) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

NOTES -

1) * The line going from SR-13 to X-72B was rerouted to go from SR-13 to X-78A in accordance with ASME Section XI Plan No 2-0268. The rerouting was in accordance with ASME Section III, Code Class 2 requirements
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the piping system
3) ASME Section III, Code Class 1, 1974 Edition with Winter 1976 (12/30/96) Addenda for valve PI-EFC-X78A
4) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application

PLAN No 2-1334

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/11/96

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/20/96 to 8/13/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7481, 7486-W NBSI-IS — National Board, State, and Endorsements

Date 8/13/96

PLAN No 2-1335

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/6/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X-87A	JCI	PI(1)-4S-X-87A	N/A	N/A	1982	Repaired	Yes, Code Class 2
PI-EFC-X87A	Dragon	GW 1041	N/A	N/A	1978	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Cut existing pipe to valve PI-EFC-X87A socket weld to provide excess to troubleshoot the valve. The repair and replacement work was performed as follows:
   1) Cut existing pipe to valve socket weld
   2) Removed the existing poppet assembly (disc) from the valve
   3) Prepped valve socket end cut surfaces
   4) Performed liquid penetrant (PT) examination on the valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable
   5) Installed new poppet assembly (disc) in the valve
   6) Made required pipe to valve socket weld
   7) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

NOTES -

1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the piping system
2) ASME Section III, Code Class 1, 1974 Edition with Winter 1976 (12/30/96) Addenda for valve PI-EFC-X87A
3) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application

PLAN No 2-1335

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Signed By [signature]

Kuldip Singh - Program Lead Engineer (PLE) — Supervisor, Materials And Welding

Date 8/6/96 — Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/20/96 to 8/20/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Commissions 7484, 7484 w WSEB - IS

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

Date 8/20/96

PLAN No 2-1336

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/6/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Sampling Radioactive (PSR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PSR-V-X83/2	Valcor	8	N/A	N/A	1982	Repaired	Yes, Code Class 2

7. **Description Of Work Performed:** Cut body to bonnet seal weld for valve PSR-V-X83/2 to troubleshoot the valve. The repair work was performed as follows:
   1) Cut body to bonnet seal weld
   2) Made required body to bonnet seal weld
   3) Performed liquid penetrant (PT) examination on the final body to bonnet seal weld. Liquid penetrant (PT) examination results acceptable

PLAN No 2-1336

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 8/6/96 Date 8/22/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/24/96 to 8/20/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Commissions 7486, 7486 W NSIB --IS
Inspector's Signature National Board, State, and Endorsements

Date 8/20/96

PLAN No 2-1337

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/6/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Sampling Radioactive (PSR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PSR-V-X84/2	Valcor	10	N/A	N/A	1982	Repaired	Yes, Code Class 2

7. **Description Of Work Performed:** Cut body to bonnet seal weld for valve PSR-V-X84/2 to troubleshoot the valve. The repair work was performed as follows:
   1) Cut body to bonnet seal weld
   2) Made required body to bonnet seal weld
   3) Performed liquid penetrant (PT) examination on the final body to bonnet seal weld. Liquid penetrant (PT) examination results acceptable

PLAN No 2-1337

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/6/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/26/96 to 8/20/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7486, 7486W NSIB-IS
National Board, State, and Endorsements

Date 8/20/96

PLAN No 2-1338

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/30/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC-V-63	Velan	0594	N/A	N/A	1977	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced bonnet for valve RCIC-V-63. The replacement work was performed as follows:
   1) Removed existing bonnet from valve RCIC-V-64
   2) Machined valve RCIC-V-64 bonnet stem bore surfaces
   3) Performed PT examination on the final machined surfaces. PT examination results acceptable
   4) Performed VT-3 visual examination on valve RCIC-V-64 bonnet accessible internal surfaces. VT-3 visual examination results acceptable
   5) Removed existing bonnet from valve RCIC-V-63
   6) Installed valve RCIC-V-64 bonnet on valve RCIC-V-63

NOTES -

1) Information for valves RCIC-V-63 and valve RCIC-V-64

Valve EPN No	Valve Serial No	Valve Bonnet Serial No	ASME Section III Code Class, Edition And Addenda
RCIC-V-63	0594	8883	Code Class 1, 1971 Edition with Summer 1973 Addenda
RCIC-V-64	0590	8884	Code Class 1, 1971 Edition with Summer 1973 Addenda

2) VT-3 visual examination on valve RCIC-V-63 body accessible internal surfaces was performed in accordance with ASME Section XI Plan No 2-1327
3) VT-1 visual examination on the new studs for valve RCIC-V-63 body to bonnet joint was performed in accordance with ASME Section XI Plan No 2-1327
4) VT-1 visual examination on the new nuts for valve RCIC-V-63 body to bonnet joint was performed in accordance with ASME Section XI Plan No 2-1327
5) VT-3 visual examination on the existing studs for valve RCIC-V-63 body to bonnet joint was performed in accordance with ASME Section XI Plan No 2-1327
6) VT-3 visual examination on the existing nuts for valve RCIC-V-63 body to bonnet joint was performed in accordance with ASME Section XI Plan No 2-1327
7) VT-2 visual examination on the valve body to bonnet joint for valve RCIC-V-63 was performed in accordance with ASME Section XI Plan No 2-1327
8) Bonnet removed from valve RCIC-V-63 was installed on valve RCIC-V-64 in accordance with ASME Section XI Plan No 2-1339

PLAN No 2-1338

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐* Other ☐ None

Test Pressure: Psig — **Test Temperature:** ° F

Component Design Pressure: Psig — **Temperature:** ° F

9. Remarks: See attached NPV-1 Code Data Reports for the following valves

EPN No	Serial No
RCIC-V-63	0594
RCIC-V-64	0590

* Pressure test and associated VT-2 visual examination on the valve body to bonnet joint for valve RCIC-V-63 was performed in accordance with ASME Section XI Plan No 2-1327

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/30/96 *Date* 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5-23-96 *to* 7-30-96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection*

[signature] — Inspector's Signature

Commissions 7486, 7486W NB S I IS — National Board, State, and Endorsements

Date 7/30/96

PLANT NO. 2-1338 000594

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

(As Required by the Provisions of the ASME Code, Section III, Div. 1) RCIC-V-123

1. Manufactured by VELAN ENGINEERING COMPANIES 2125 Ward Avenue, Montreal, Que.
(Name and Address of Manufacturer)
2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM Richland, Washington USA
(Name and Address of Purchaser or Owner)
3. Location of Installation WPPSS Nuclear Project No. 2 Handford Plant
(Name and Address)
4. Pump or Valve 10"-900# BB GATE VALVE. Nominal Inlet Size 9.671" (inch) Outlet Size 9.671"

	(a) Model No., Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	B16-07054B-26LN	#0594	N/A	P2-3311-N14	1	N/A	1977
(3)	"			Rev. D			
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. _____
(Brief description of service for which equipment was designed)

6. Design Conditions 1337 (Pressure) psi 575 (Temperature) °F or Valve Pressure Class _____ (1)
7. Cold Working Pressure 2220 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
VALVE RCIC-V-63, S/N 0594.			
INSTALLED BONNET S/N 8884 REMOVED FROM VALVE RCIC-V-64, S/N 0590 ON VALVE RCIC-V-63, S/N 0594			Rudolf Zupo 7/28/96
(b) Forgings			
BODY S/N: 0594	SA-350 LF-2	Cameron Iron Works, Inc.	
H/C: K-4734			
BONNET S/N: 8883	SA-350 LF-2	Galt-British Forge Ltd.	
H/C: 214816			
WEDGE S/N: 6087	SA-105	Galt-British Forge Ltd.	
H/C: D-4824			

(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.

(1/76) This form (ED0037) may be obtained from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
Studs Code: V-43	SA-193/GR.B7	Bowsteel Distributors Ltd.	
H/C : 51115			
Nuts Code: V-20	SA-194/GR.2H	Ingersoll Fasteners	
H/C : 3420			
Hardfacing	STellite "6"	Deloro Stellite	
(d) Other Parts			
WELD ROD H/C: 08P238T	SFA-5.18E70S-3	Chemetron Corporation	
H/C: 493S3182	SFA-5.1E7018	Chemetron Corporation	

9. Hydrostatic test Shell: 4175 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 1971, Addenda Summer, 1973 (Date), Code Case No. N/A, Date ____

Signed VELAN ENGINEERING COMPANIES (Manufacturer) by J.T. Kmetyko Manager QC Doc.

Our ASME Certificate of Authorization No. N-649 to use the (N) (N) (NPV) symbol expires 20 May (Date)

CERTIFICATION OF DESIGN

Design information on file at VELAN ENGINEERING COMANIES Montreal, Quebec

Stress analysis report (Class 1 only) on file at ____

Design specifications certified by (1) David Murphy

PE State Wash., USA Reg. No. ____

Stress analysis certified by (1) S. Ishitsky

PE State PQ, Canada Reg. No. 22115

(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 Quebec and employed by Travelers of Quebec have inspected the pump, or valve, described in this Data Report on May 20 19 77 and state that to the best of my knowledge and belief, the Manufacturer 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 May 20 19 77

(Inspector)

Commissions 7947 (Nat'l Bd., State, Prov. and No.)

PLAN NO. Z-1338 000540

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
(As Required by the Provisions of the ASME Code, Section III, Div. 1) RCIC-V-64

1. Manufactured by VELAN ENGINEERING COMPANIES 2125 Ward Avenue, Montreal, Que.
(Name and Address of Manufacturer)
2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM Richland, Washington USA
(Name and Address of Purchaser or Owner)
3. Location of Installation WPPSS Nuclear Project No. 2 Handford Plant
(Name and Address)
4. Pump or Valve 10"-900# BB GATE VALVE. Nominal Inlet Size 9.671" (inch) Outlet Size 9.671"

	(a) Model No., Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l Bd. No.	(g) Year Built
(1)	B16-07054B-26LN	#0590	N/A	P2-3311-N14 Rev. D	1	N/A	1977
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. (Brief description of service for which equipment was designed)

6. Design Conditions 1337 (Pressure) psi 575 (Temperature) °F or Valve Pressure Class (1)
7. Cold Working Pressure 2220 psi at 100°F.
8. Pressure Retaining Pieces

RVP-P.P.I.A.
by: MC Date 5-26-76

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
VALVE RCIC-V-64 S/N 0590			
REMOVED BONNET S/N 8884 FROM VALVE RCIC-V-64, S/N 0590 AND INSTALLED ON VALVE RCIC-V-63, S/N 0594			
		Rudolph Swops 7/28/76	
(b) Forgings			
BODY S/N: 0590	SA-350 LF-2	Cameron Iron Works Inc.	
H/C: K-4734			
BONNET S/N: 8884	SA-350 LF-2	Galt-British Forge Ltd.	
H/C: 214816			
WEDGE S/N: 5089	SA-105	Galt-British Forge Ltd.	
H/C: D-4824			

(1) For manually operated valves only.

FOR INFORMATION 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.

(1/76) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			1/29/89.
Studs Code: V-45	SA-193/GR.B7	Bowsteel Distributors Ltd.	
H/C : 51115			
Nuts Code: V-20	SA-194/GR.2H	Ingersoll Fasteners	
H/C : 3420			
(d) Other Parts			
WELD ROD H/C: 08P238T	SFA-5.18E70S-3	Chemetron Corporation	
H/C: 401T348	SFA-5.18E70S-3	Chemetron Corporation	
H/C: 493S3182	SFA-5.1E7018	Chemetron Corporation	
Hardfacing	Stellite "6"	Deloro	

9. Hydrostatic test Shell: 4175 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 1971, Addenda Summer, 1973 (Date), Code Case No. N/A. Date

Signed VELAN ENGINEERING COMPANIES (Manufacturer) by J.T.Kmetyko Manager QC Doc.

Our ASME Certificate of Authorization No. N-649 to use the (N) (N) (NPV) symbol expires 20 May 177 (Date)

CERTIFICATION OF DESIGN

Design information on file at VELAN ENGINEERING COMANIES Montreal, Quebec

Stress analysis report (Class 1 only) on file at

Design specifications certified by (1) David Murphy

PE State Wash., USA Reg. No.

Stress analysis certified by (1) S. Ishitsky

PE State PQ, Canada Reg. No. 22115

(1) Signature not required. List name only.

FOR INFORMATION ONLY

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Quebec and employed by Canadair of Quebec have inspected the pump, or valve, described in this Data Report on May 20 19 77 and state that to the best of my knowledge and belief, the Manufacturer 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 May 20 1977

(Inspector) Commissions 7947 (Nat'l Bd., State, Prov. and No.)

PLAN No 2-1339

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC-V-64	Velan	0590	N/A	N/A	1977	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced bonnet for valve RCIC-V-64. The replacement work was performed as follows:
   1) Removed existing bonnet Serial No 8883 from valve RCIC-V-63
   2) Removed existing bonnet Serial No 8884 from valve RCIC-V-64
   3) Performed VT-3 visual examination on bonnet Serial No 8883 (Bonnet valve RCIC-V-63) accessible internal surfaces. VT-3 visual examination revealed cracks on the bonnet back seat and galling on the bonnet stem bore surfaces
   4) Performed VT-3 visual examination on the existing studs for valve RCIC-V-64 body to bonnet joint. VT-3 visual examination results acceptable
   5) Performed VT-3 visual examination on the existing nuts for valve RCIC-V-64 body to bonnet joint. VT-3 visual examination results acceptable
   6) Installed valve RCIC-V-63 bonnet Serial No 8883 on valve RCIC-V-64
   7) Reinstalled VT-3 visually examined studs and nuts for valve RCIC-V-64 body to bonnet joint

NOTES -

1) Information for valves RCIC-V-63 and valve RCIC-V-64

Valve EPN No	Valve Serial No	Valve Bonnet Serial No	ASME Section III Code Class, Edition And Addenda
RCIC-V-63	0594	8883	Code Class 1, 1971 Edition with Summer 1973 Addenda
RCIC-V-64	0590	8884	Code Class 1, 1971 Edition with Summer 1973 Addenda

2) Bonnet removed from valve RCIC-V-64 was installed on valve RCIC-V-63 in accordance with ASME Section XI Plan No 2-1338

PLAN No 2-1339

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: See attached NPV-1 Code Data Reports for the following valves

EPN No	Serial No
RCIC-V-63	0594
RCIC-V-64	0590

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 8/11/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/24/96 to 8/13/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

[signature] — Inspector's Signature
Commissions 7486, 7486W NBIS-IS — National Board, State, and Endorsements
Date 8/13/96

PLAN NO. 2-1339

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

(As Required by the Provisions of the ASME Code, Section III, Div. 1) RCIC-V-64

1. Manufactured by VELAN ENGINEERING COMPANIES (Name and Address of Manufacturer) 2125 Ward Avenue, Montreal, Que.
2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM (Name and Address of Purchaser or Owner) Richland, Washington USA
3. Location of Installation WPPSS Nuclear Project No. 2 Handford Plant (Name and Address)
4. Pump or Valve 10"-900# BB GATE VALVE. Nominal Inlet Size 9.671" (inch) Outlet Size 9.671"

	(a) Model No., Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'L Bd. No.	(g) Year Built
(1)	B16-07054B-26LN	#0590	N/A	P2-3311-N14 Rev. D	1	N/A	1977
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. (Brief description of service for which equipment was designed)

6. Design Conditions 1337 (Pressure) psi 575 (Temperature) °F or Valve Pressure Class (1)
7. Cold Working Pressure 2220 psi at 100°F.
8. Pressure Retaining Pieces

RVP-P.P.I.A. by: GC Date 8/9/76

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
VALVE RCIC-V-64, S/N 0590			
INSTALLED BONNET S/N 8883 REMOVED			
FROM VALVE RCIC-V-63, S/N 0594 ON			
VALVE RCIC-V-64, S/N 0590			Kuldip Singh 8/9/76
(b) Forgings			
BODY S/N: 0590 H/C: K-4734	SA-350 LF-2	Cameron Iron Works Inc.	
BONNET S/N: 8884 H/C: 214816	SA-350 LF-2	Galt-British Forge Ltd.	
WEDGE S/N: 6089 H/C: 0-4824	SA-105	Galt-British Forge Ltd.	

(1) For manually operated valves only.

FOR INFORMATION 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.

(1/76) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

FORM NPV-1 (Back) RCIC-V-64 000590

Mark No.	Material Spec. No.	Manufacturer	Remarks
		Curdip Euro	1/25/89.
(c) Bolting			
Studs Code: V-45 H/C : 51115	SA-193/GR.B7	Bowsteel Distributors Ltd.	
Nuts Code: V-20 H/C : 3420	SA-194/GR.2H	Ingersoll Fasteners	
(d) Other Parts			
WELD ROD H/C: 08P238T	SFA-5.18E70S-3	Chemetron Corporation	
H/C: 401T348	SFA-5.18E70S-3	Chemetron Corporation	
H/C: 493S3182	SFA-5.1E7018	Chemetron Corporation	
Hardfacing	Stellite "6"	Deloro	

9. Hydrostatic test Shell: 4175 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 1971, Addenda Summer, 1973 (Date), Code Case No. N/A. Date

Signed VELAN ENGINEERING COMPANIES (Manufacturer) by J.T.Kmetyko Manager QC Doc.

Our ASME Certificate of Authorization No. N-649 to use the (N) (N) (NPV) symbol expires 20 May 177 (Date)

CERTIFICATION OF DESIGN

Design information on file at VELAN ENGINEERING COMANIES Montreal, Quebec

Stress analysis report (Class 1 only) on file at

Design specifications certified by (1) David Murphy

PE State Wash., USA Reg. No.

Stress analysis certified by (1) S. Ishitsky

PE State PQ, Canada Reg. No. 22115

(1) Signature not required. List name only.

FOR INFORMATION ONLY

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Quebec and employed by Province of Quebec have inspected the pump, or valve, described in this Data Report on May 20 19 77 and state that to the best of my knowledge and belief, the Manufacturer 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 May 20 1977

(Inspector) Commissions 7967 (Nat'l Bd., State, Prov. and No.)

PLAN NO. 2-1339 000594

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

(As Required by the Provisions of the ASME Code, Section III, Div. 1) RCIC-V-63

1. Manufactured by VELAN ENGINEERING COMPANIES 2125 Ward Avenue, Montreal, Que.
(Name and Address of Manufacturer)
2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM Richland, Washington USA
(Name and Address of Purchaser or Owner)
3. Location of Installation WPPSS Nuclear Project No. 2 Handford Plant
(Name and Address)
4. Pump or Valve 10"-900# BB GATE VALVE. Nominal Inlet Size 9.671" (inch) Outlet Size 9.671"

	(a) Model No., Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l Bd. No.	(g) Year Built
(1)	B16-07054B-26LN	#0594	N/A	P2-3311-N14	1	N/A	1977
(3)				Rev. D			
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. _____
(Brief description of service for which equipment was designed)

6. Design Conditions 1337 (Pressure) psi 575 (Temperature) °F or Valve Pressure Class _____ (1)
7. Cold Working Pressure 2220 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
VALVE RCIC-V-63, S/N 0594			
REMOVED BONNET S/N 8883 FROM VALVE			
RCIC-V-63, S/N 0594 AND INSTALLED ON			
VALVE RCIC-V-64, S/N 0590			Ralph Ewe 8/8/96
(b) Forgings			
BODY S/N: 0594	SA-350 LF-2	Cameron Iron Works, Inc.	
H/C: K-4734			
BONNET S/N: 8883	SA-350 LF-2	Galt-British Forge Ltd.	
H/C: 214816			
WEDGE S/N: 6087	SA-105	Galt-British Forge Ltd.	
H/C: D-4824			

(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.

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
Studs Code: V-43	SA-193/GR.B7	Bowsteel Distributors Ltd.	
H/C : 51115			
Nuts Code: V-20	SA-194/GR.2H	Ingersoll Fasteners	
H/C : 3420			
Hardfacing	STellite "6"	Deloro Stellite	
(d) Other Parts			
WELD ROD H/C: 08P238T	SFA-5.18E70S-3	Chemetron Corporation	
H/C: 493S3182	SFA-5.1E7018	Chemetron Corporation	

9. Hydrostatic test Shell: 4175 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 1971, Addenda Summer, 1973 (Date), Code Case No. N/A, Date ____

Signed VELAN ENGINEERING COMPANIES (Manufacturer) by J.T. Kmetyko Manager QC Doc.

Our ASME Certificate of Authorization No. N-649 to use the (N) (N) (NPV) symbol expires 20 May / (Date)

CERTIFICATION OF DESIGN

Design information on file at VELAN ENGINEERING COMANIES Montreal, Quebec

Stress analysis report (Class 1 only) on file at ____

Design specifications certified by (1) David Murphy

PE State Wash., USA Reg. No. ____

Stress analysis certified by (1) S. Ishitsky

PE State PQ, Canada Reg. No. 22115

(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 Quebec and employed by Province of Quebec have inspected the pump, or valve, described in this Data Report on May 20 19 77 and state that to the best of my knowledge and belief, the Manufacturer 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 May 20 1977

(Inspector)

Commissions 7947 (Nat'l Bd., State, Prov. and No.)

PLAN No 2-1340

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Feed Water (RFW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW(1)-4A	WPPSS	RFW(1)-4A-P2	N/A	N/A	1983	Replacement	Yes, Code Class 1
RFW-V-120	Borg Warner	28770	N/A	N/A	1976	Replaced	Yes, Code Class 1
RFW-V-120	Borg Warner	13905	N/A	N/A	1977	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing valve RFW-V-120. The replacement work was performed as follows:
   1) Removed existing valve RFW-V-120, Serial No 28770
   2) Installed new replacement valve RFW-V-120, Serial No 13905
   3) Made required socket weld
   4) Performed visual examination on the final socket weld. Visual examination results acceptable
   5) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

NOTES -

1) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the Reactor Feed Water (RFW) piping system
2) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the new replacement valve RFW-V-120, Serial No 13905

PLAN No 2-1340

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve RFW-V-120, Serial No 13905

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 8/19/96 Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

INFORMATION ONLY NBG 88 215 12185

0B181

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

As Required by the Provisions of the ASME Code Rules

PLAN No. 2-1340
Rudolph Rupp
8/17/96.

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Avenue, Van Nuys, Ca. Order No. 47713
(Name & Address of Manufacturer)

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 Order No. 215-3261
(Name and Address)

3. Owner WPPSS Hanford #2 Job Site RFW-V-120, S/N 13905

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification Nuclear Valve Div., P/N 76590, 3/4 Inch Globe Valve, CS
Serial Numbers 13892 thru 13916 (25 Valves)
(Brief description of service for which equipment was designed)

(a) Drawing No. 76590 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No.

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

7. The material, design, construction, and workmanship complies with ASME Code Section III. Class 1

Edition 1971. Addenda Date Winter '73. Case No.

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Disc - Code 1N90, 1N89	Stellite #6		
Casting - 73876		Rex Precision	
Machined - 73877		NV Division	
(b) Forgings			
Body - Code 1N80	SA 105		
Forging - 75235		Pacific Forge	
Machined - 75236		NV Division	
Assembly - 73899		NV Division	

RECEIVED
NOV 03 '88
BECHTEL QUALITY CONTROL
BY: B

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1, 2, 3a and 3b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

2.

2 1 2 8 7 0 3 2 8

INFORMATION ONLY

WBG 3R 215 T2185 0B181

FORM NPV-1 (back)

REVIEWED

NOV 03 1977

BECHTEL QUALITY CONTROL

BY: B

	Mark No.	Material Spec. No.	Manufacturer
(c)	Bolting		
(d)	Other Parts		
	Stem - Code. 1M12	SA564 Ty.630	
	Bar Stock		Allen-Fry Steel
	Machined - 73875		Emco, Inc.
	Backseat - Code 3EE	SA564 Ty.630	
	Bar Stock		Ducommun Metals
	Machined - 73886		NV Division

6. Hydrostatic test 5400 - 5450 psi.

CERTIFICATION OF DESIGN

Design information on file at Nuclear Valve Div. of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca.

Stress analysis report on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, CA

Design specifications certified by David J. Murphy (1) Prof. Eng. State Wash. Reg. No. 12542

Stress analysis report certified by Byron Leonard Jr. (1) Prof. Eng. State CA Reg. No. E123

(1) Signature not required. List name only.

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

Date February 1 19 77 Signed Nuclear Valve Div. of Borg Warner (Manufacturer) By Carol M. Parker

Certificate of Authorization No. N-1254 expires October 27, 1978

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of California and employed by Dept. of Bldg. & Safety of City of Los Angeles have inspected the equipment described in this Data Report on February 1 19 77, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

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

Date February 1 19 77

(Inspector) Commissions (National Board, State, Province and No.)

2 1 2 9 7 0 3 2 9

PLAN No 2-1341

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/16/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-IR-63-10	JCI	PI(1)-ST-IR-63-10	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing tubing block clamp for support Serial No 9301571B-010 between valves CSP-V-901 and PI-EFC-X67. The replacement work was performed as follows:
   1) Removed existing tubing block clamp
   2) Installed new tubing block clamp
   3) Installed new cap screws for the tubing block clamp

NOTES -

1) ASME Section III, Code Class NF(2), 1974 Edition with Winter 1975 Addenda for the tubing block clamp

PLAN No 2-1341

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 8/19/96 Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

PLAN No 2-1344

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/16/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X-77Ad	JCI	PI(1)-4S-X-77Ad	N/A	N/A	1983	Replacement	Yes, Code Class 1
PSR-V-X77A/3	Target Rock	3	N/A	N/A	1982	Replaced	Yes, Code Class 1
PSR-V-X77A/3	Target Rock	3	N/A	N/A	1986	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing valve PSR-V-X77A/3. The replacement work was performed as follows:
   1) Removed existing valve PSR-V-X77A/3, Model No 82M-001, Serial No 3
   2) Installed new replacement valve PSR-V-X77A/3, Model No 86Q-001, Serial No 3
   3) Made required socket welds
   4) Performed visual examination on the final socket welds. Visual examination results acceptable
   5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

NOTES -

1) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) System
2) ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda for the new replacement valve PSR-V-X77A/3, Model No 86Q-001, Serial No 3

PLAN No 2-1344

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve PSR-V-X77A/3, Model No 86Q-001, Serial No 3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/19/96

Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

INFORMATION ONLY

PLAN No. 2-1344

Revised 5/85 S/N 3 and 5 Upgraded

Rudolph Bush 8/16/96

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

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

1. Manufactured and certified by Target Rock Corporation, 1966E Broadhollow Rd., Farmingdale NY 11735
(name and address of N Certificate Holder)
2. Manufactured for Washington Public Supply System, Richland, Washington
(name and address of Purchaser or Owner)
3. Location of installation Plant 2 Richland, Washington
(name and address)
4. Model No., Series No., or Type *860-001-1 / 860-001 Drawing 1032110-7 Rev. C CRN N/A
5. ASME Code Section III: 1980 (Edition) W81 (Addenda date) 1 (Class) N/A (Code Case no.)
6. Pump or valve Valve Nominal inlet size 1 (in.) Outlet size 1 (in.)
7. Material: Body SA 182 F316L Bonnet SA479 316 Disk SA564 630 Bolting N/A

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
1	N/A	4816A	3013	1348
2	N/A	4799A	3003	1399
* 3	N/A	4839A	3010	1391
4	N/A	4841A	3001	1397
* 5	N/A	4851A	2981	1391
6	N/A	4815A	3009	1365

PSR-V-X77A/3, SN 3

E. Bajada, Q.A. Manager 5/10/87
Date

W. A. Holand, ANII, 5/10/87
Date

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form

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

5-10-87

INFORMATION ONLY

FORM NPV-1 (back)

S/N 3 AND 5 UPGRADED
Kulaip 7/15/94

Mfr. Serial No. See Front

8. Remarks Indicator Tube- SA-479.316, S/N's- 3138,3140,3165,3168,3210,3164

Respectively

9. Design conditions * 1550 psi (pressure) * 575 °F (temperature) or valve pressure class *1500 (1)
45 psi 340 °F 900

10. Cold working pressure 1800 * 3000 psi at 100°F

11. Hydrostatic test 2700 * 4500 psi psi Temp. N/A °F Disk differential test pressure 1980 * 3000 psi psi

CERTIFICATION OF DESIGN

Design Specification certified by David M. Bosi Prof. Eng. state Washington Reg. No. 20941
Design Report certified by Martin Goldstone Prof. Eng. state New York Reg. No. 31940

CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. 1917 Expires 12-9-86

Date 4-30-86 Name Target Rock Corporation (N Certificate Holder) Signed (representative)

C. Hanson, Q.A. Manager

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 Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 4/30 19 86, 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 4/30 19 86

William J. McDaniel (Inspector)

NEW YORK STATE COMMISSION NO. 2288

Commissions ALSO COMMISSIONED IN Penn., Ohio & Conn. (Nat'l Bd., Incl. endorsements) State, Prov. and No.)

(1) For manually operated valves only.

2 3 4 6 1 1 8

PLAN No 2-1345

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-IR-63-10	JCI	PI(1)-ST-IR-63-10	N/A	N/A	1983	Repaired	Yes, Code Class 2
PI-EFC-67	Dragon	GW 1102	N/A	N/A	1978	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Cut existing reducing insert to valve PI-EFC-67 socket weld to provide access to troubleshoot the valve. The repair and replacement work was performed as follows:
   1) Cut existing reducing insert to valve socket weld
   2) Removed the existing poppet assembly (disc) from the valve
   3) Prepped valve socket end cut surfaces
   4) Performed liquid penetrant (PT) examination on the valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable
   5) Installed new poppet assembly (disc) in the valve
   6) Made required reducing insert to valve socket weld
   7) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

NOTES -

1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the piping system
2) ASME Section III, Code Class 1, 1974 Edition with Winter 1976 (12/30/96) Addenda for valve PI-EFC-67
3) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application

PLAN No 2-1345

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By _____ — Supervisor, Materials And Welding

Date 8/13/96

Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/29/96 to 8/13/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

_____ — Inspector's Signature

Commissions 7486, 7486W NB 5I-II — National Board, State, and Endorsements

Date 8/13/96

PLAN No 2-1346

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/7/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** None - Spare Valve
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Target Rock	4	N/A	N/A	1986	Repaired	Yes, Code Class 1
Spare Disc	Target Rock	2064	N/A	N/A	1992	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Cut body to bonnet seal weld for spare Target Rock valve Serial No 4, Model No 86Q-001-1. The spare valve was refurbished for future use for the plant. The repair and replacement work was performed as follows:
   1) Cut body to bonnet seal weld
   2) Removed the existing disc from the valve
   3) Prepped valve body cut surfaces
   4) Performed liquid penetrant (PT) examination on the body prepped surfaces. Liquid penetrant (PT) examination results acceptable
   5) Prepped valve bonnet cut surfaces
   6) Performed liquid penetrant (PT) examination on the bonnet prepped surfaces. Liquid penetrant (PT) examination results acceptable
   7) Installed new disc Serial No 2064 in the valve
   8) Made required body to bonnet seal weld
   9) Performed liquid penetrant (PT) examination on the final body to bonnet seal weld. Liquid penetrant (PT) examination results acceptable

PLAN No 2-1346

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new disc, Serial No 2064

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/7/96

Date 8/22/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/31/96 to 8/20/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature]

Inspector's Signature

Commissions 7486, 7486W WSIB-IS

National Board, State, and Endorsements

Date 8/20/96

INFORMATION ONLY

PLAN No. 21346
Rudolf Suess 8/5/96

FORM NPV-1 (Back)

Rev. 8/N-2 and 4 Upgraded

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

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

1. Manufactured and certified by Target Rock Corporation, 1966E Broadhollow Rd., Farmingdale NY 11735
(name and address of N Certificate Holder)
2. Manufactured for Washington Public Supply System, Richland, Washington
(name and address of Purchaser or Owner)
3. Location of installation Plant 2 Richland, Washington
(name and address)
4. Model No., Series No., or Type 860-001 *860-001-1 Drawing 1032110-7 Rev. C CRN N/A
5. ASME Code Section III: 1980 Edition W81 Addenda date 1 Class N/A Code Case no.
6. Pump or valve Valve Nominal inlet size 1 (in.) Outlet size 1 (in.)
7. Material: Body SA 182 F316L Bonnet SA479 316 Disk SA564 630 Bolting N/A

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
1	N/A	4816A	3013	1348
2	N/A	4799A	3003	1300
3	N/A	4839A	3010	1351
4	N/A	4843A	3004	1307
5	N/A	4857A	2981	1304
6	N/A	4815A	3008	1365

SPARE VALVE S/N 4

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form

Robert H. Scherrer for E. Bajada, Q.A. Manager, 4/23/85 Date

W. A. Holand, ANI 4/25/85 Date

2 3 4 6 U U 7

(6/85) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

INFORMATION ONLY

S/N 2 AND 4 UPGRADED

FORM NPV-1 (back)

Mfr. Serial No. See Front

8. Remarks Indicator Tube SA-479 316, S/N's- 3138, 3140, 3165, 3168, 3210, 3164

Respectively

9. Design conditions 45 (pressure) psi * 1550 psi 340 (temperature) °F * 575°F or valve pressure class 900 * 1500 (1)

10. Cold working pressure 1800 * 3000 psi at 100°F

11. Hyorostatic test 2700 * 4500 psi psi Temp. N/A °F Disk differential test pressure 1980 * 3300 psi psi

CERTIFICATION OF DESIGN

Design Specification certified by David M. Bosi Prof. Eng. state Washington Reg. No. 20941

Design Report certified by Martin Goldstone Prof. Eng. state New York Reg. No. 32940

CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. 1017 Expires 12-6-86

Date 4-30-86 Name Tarzer Rock Corporation (N Certificate Holder) Signed (Representative) V. Thomas, Gen. Manager

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 Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 4/30 19 86, 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 4/30 19 86.

William M. Ballard (Inspector)

NEW YORK STATE COMMISSION NO. 2288

Commissions ALSO COMMISSIONED IN Penn. Ohio & Conn. (Nat'l Bd., (Incl. endorsements) State, Prov. and No.)

(1) For manually operated valves only.

2 3 1 4 6 J 0

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

PLAN No. 2-1346

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

Not To Exceed One Day's Production

1. Manufactured and certified by Target Rock Corp.; 1966E Broadhollow Rd; E. Farmingdale, NY 11735
(name and address of certificate holder)

2. Manufactured for Washington Public Power Supply System; Richland, WA 99352
(name and address of purchaser)

Rudolph Ruck 8/5/96

3. Location of installation WNP-2; North Power Plant Loop; Richland, WA 99352
(name and address)

4. Type 202539-1 (drawing no.) | SA-564 630 (matl. spec. no.) | 140 ksi (tensile strength) | N/A (CRN) | 1992 (year built)

5. ASME Code, Section III: 1974 (edition) | Winter 1975 (addenda) | 1 (class) | None (Code Case no.)

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

7. Remarks: Spare parts for completed valve assembly Model No. 32M-001

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A

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

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	2064	N/A
(2)	2076	N/A
(3)	2087	N/A
(4)	2096	N/A
(5)	2099	N/A
(6)	2102	N/A
(7)	N/A	N/A
(8)		
(9)		
(10)		
(11)	DISC S|N 2064 INSTALLED	
(12)		
(13)	IN SPARE VALVE	
(14)		
(15)	S|N 4	
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
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(43)		
(44)		
(45)		
(46)	SATISFACTORY [illegible]	
(47)	[illegible] 12-5-92	
(48)	[illegible] DATE	
(49)		
(50)		

10. Design pressure N/A psi Temp. N/A °F. Hydro. test pressure 1285 psig (when applicable) at temp. °F. Ambient

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ X ; (2) information in items 2 and 3 on this data report is included on each sheet; (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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

FORM N-2 (back)

Mfr. Serial No. See Front

CERTIFICATE OF DESIGN

Design specifications certified by G. L. Mayfield (when applicable) P. E. state OR Reg. no. 7140

Design report* certified by J. Miazza (when applicable) P. E. state NY Reg. no. 51883

CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization no. 1948 Expires 12-12-92

Date 11/20/91 Name Target Rock Corporation (NPT Certificate Holder) Signed E. Bruida (authorized representative)
E. Champey; Director, O.A.

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 Commercial Union Insurance Company of Boston, Mass. have inspected these items described in this data report on 11/20/91 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 11/20/91 Signed William P. McLaud (Authorized Inspector) Commissions N.Y. STATE COMMISSION NO. 2288 ALSO COMMISSIONED IN PENN., OHIO & CONN. (Nat'l. Bd., incl. endorsements state or prov. and no.)

SATISFACTORY X UNSATISFACTORY ____

Winkbell TI 12-15-97

INSP. INSPECTOR / ISHI / DATE

PLAN No 2-1347

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X-77Ad	JCI	PI(1)-4S-X-77Ad	N/A	N/A	1983	Replacement	Yes, Code Class 1
PSR-V-X77A/4	Target Rock	2	N/A	N/A	1982	Replaced	Yes, Code Class 1
PSR-V-X77A/4	Target Rock	4	N/A	N/A	1986	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing valve PSR-V-X77A/4. The replacement work was performed as follows:
   1) Removed existing valve PSR-V-X77A/4, Serial No 2, Model No 82M-001
   2) Installed spare replacement valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001
   3) Made required socket weld
   4) Cut the socket weld to correct the orientation of the newly installed valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001
   5) Prepped valve socket end - One (1) valve socket end
   6) Performed liquid penetrant (PT) examination on the prepped valve socket end. Liquid penetrant (PT) examination results acceptable
   7) Reinstalled spare replacement valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001
   8) Made required socket weld
   9) Performed visual examination on the final socket weld. Visual examination results acceptable
   10) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

NOTES -

1) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda for the spare replacement valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001
3) The spare replacement valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001 was previously refurbished in accordance with ASME Section XI Plan No 2-1346

PLAN No 2-1347

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: See attached NPV-1 Code Data Report for the spare replacement valve PSR-V-X77A/4, Serial No 16, Model No 79TT-001

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 8/19/96 Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

INFORMATION ONLY

PLAN NO. 2-1347

Rudolf Swab 8/17/96

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

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

8/N 2 and 4 Upgraded Revised

1. Manufactured and certified by Target Rock Corporation, 1966E Broadhollow Rd., Farmingdale NY 11735
(name and address of N Certificate Holder)
2. Manufactured for Washington Public Supply System, Richland, Washington
(name and address of Purchaser or Owner)
3. Location of installation Plant 2 Richland, Washington
(name and address)
4. Model No., Series No., or Type *86Q-001-1 86Q-001 Drawing 1032110-7 Rev. C CRN N/A
5. ASME Code Section III: 1980 Edition W81 Addenda date 1 Class N/A Code Case no.
6. Pump or valve Valve Nominal inlet size 1 (in.) Outlet size 1 (in.)
7. Material: Body SA 182 F316L Bonnet SA479 316 Disk SA564 630 Bolting N/A

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
1	N/A	4816A	3013	1348
* 2	N/A	4799A	3003	1399
3	N/A	4839A	3010	1391
* 4	N/A	4847A	3004	1397
5	N/A	4851A	2984	1394
6	N/A	4815A	3009	1365

PSR-V-X7 A 4, S/N 4

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Rudolph E. Bajada, Q.A. Manager, 4/23/85 Date

W. A. Noland, ANI 4/25/85 Date

(6/85) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

2 3 4 6 U U 8 7

INFORMATION ONLY

S/N 2 AND 4 UPGRADED
7/15/94

FORM NPV-1 (back)

Mfr. Serial No. See Front

8. Remarks Indicator Tube- SA-479 316, S/N's- 3138, 3140, 3165, 3168, 3210, 3164

Respectively

9. Design conditions 45 (pressure) * 1550 psi 340 (temperature) * 575°F or valve pressure class 900 * 1500 (1)

10. Cold working pressure 1800 * 3000 psi at 100°F

11. Hydrostatic test 2700 * 4500 psi Temp. N/A °F Disk differential test pressure 1980 * 3300 psi

CERTIFICATION OF DESIGN

Design Specification certified by David M. Bosi Prof. Eng. state Washington Reg. No. 20941

Design Report certified by Martin Goldstone Prof. Eng. state New York Reg. No. 32940

CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. 1947 Expires 12-2-86

Date 4-30-86 Name Targer Rock Corporation (N Certificate Holder) Signed (representative)

R. Abruzzo, Q.A. Manager

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 Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 4/30 19 86, 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 4/30 19 86.

William A. Ballard Commissions NEW YORK STATE COMMISSION NO. 2288

(Inspector) ALSO COMMISSIONED IN Penn, Ohio & Conn. (Nat'l Bd., (incl. endorsements) State, Prov. and No.)

(1) For manually operated valves only.

PLAN No 2-1348

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/30/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2	WPPSS	SW(22)-2-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3
SW-RV-001B	Crosby	N67441-00-0002	N/A	N/A	1983	Replaced	Yes, Code Class 3
SW-RV-001B	Crosby	N67441-00-0004	N/A	N/A	1991	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing relief valve SW-RV-001B. The replacement work was performed as follows:
   1) Removed existing relief valve SW-RV-001B, Serial No N67441-00-0002
   2) Installed new relief valve SW-RV-001B, Serial No N67441-00-0004

NOTES -

1) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 3, 1974 Edition with Summer 1975 Addenda for the new relief valve SW-RV-001B, Serial No N67441-00-0004

PLAN No 2-1348

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig **Test Temperature:** ° F

Component Design Pressure: Psig **Temperature:** ° F

9. Remarks: See attached NV-1 Code Data Report for the new relief valve SW-RV-001B, Serial No N67441-00-0004

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/30/96 *Date* 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5-21-96 *to* 7-30-96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection*

[signature] — Inspector's Signature

Commissions 7486, 7486 W NB&I IS — National Board, State, and Endorsements

Date 7/30/96

PLAN NO. 2-1348.

SW-RV-001B

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Quality Surveillance 7/28/96

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44C-1

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, MA 02093
Name and Address

Model No. JR-WR Order No N14550 Contract Date 11/20/90 National Board No. --

2. Manufactured For Washington Public Power Supply System
PO Box 968 Richland, WA 99352-0968 Order No. 213219
Name and Address

3. Owner Washington Public Power Supply System
Name and Address

4. Location of Plant Hanford 2

5. Valve Identification E12B001 Serial No. N67441-00-0004 Drawing No. DS-C-67441 Rev. 0

Type Relief Orifice Size 0.280 Inch Pipe Size -- Inch Inlet 3/4 Inch Outlet 1 Inch
Safety, Safety Relief, Pilot, Power Actuated

6. Set Pressure (PSIG) 275 480° F
Design Rated Temperature

Stamped Capacity 15 GPM WTR @ 70°F @ 10 % Overpressure -- Blowdown (PSIG) 15% of SP

Hydrostatic Test (PSIG) Inlet 750 Complete Valve 225

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 3 Edition 1974, Addenda Date Summer 1975, Case No. --

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body		
~~Bonnet~~ Cylinder	N91851-36-0027	ASME SA 216 Gr. WCB
b. Bar Stock and Forgings		
Support Rods		
~~Nozzle~~ Base	N91850-40-0033	ASME SA 479 Type 316
Disc	N91855-47-0093	ASME SB 164 Cl. A
Spring Washers	N92220-38-0090 N92220-38-0092	ASME SA 193 Gr. B6
Adjusting Bolt	N92221-35-0030	ASME SA 193 Gr. B6
Spindle K61719-41-0036	N92219-41-0036	ASME SA 193 Gr. B6

VERIFIED & ACCEPTED [signature]
REG. INSPECTOR
LEVEL II DATE 4-8-91

CROSBY VALVE & GAGE COMPANY

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX4691-0006	ASTM B 166
d. Bolting		
e. Other Parts such as Pilot Components		

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

Date March 22, 19 91 Signed Crosby Valve & Gage Co. By Lawrence Hines
Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1992

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Arkwright Mutual Insurance Company have inspected the equipment described in this Data Report on March 22 19 91 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date March 22 19 91 Factory Mutual System

Kenneth B. Hobbins Commissions MA-1418
(Inspector) (National Board, State, Province and No.)

VERIFIED & ACCEPTED Rudolf Richter
ACG. INSPECTOR
LEVEL II DATE 4-8-91

2 4 3 3 3 3 9

PLAN No 2-1349

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Recirculation Cooling (RRC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC-V-19	Target Rock	7	N/A	N/A	1983	Repaired	Yes, Code Class 1
Spare Disc	Target Rock	2102	N/A	N/A	1992	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Cut body to bonnet seal weld for valve RRC-V-19 to troubleshoot the valve. The repair and replacement work was performed as follows:
   1) Cut body to bonnet seal weld
   2) Removed the existing disc from the valve
   3) Installed new disc Serial No 2102 in the valve
   4) Made required body to bonnet seal weld
   5) Performed liquid penetrant (PT) examination on the final body to bonnet seal weld. Liquid penetrant (PT) examination results acceptable

PLAN No 2-1349

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: See attached N-2 Code Data Report for the new disc, Serial No 2102

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 8/12/96 Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/13/96 to 8/13/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

Commissions 7486, 7486-w, NB-5212-IS
Inspector's Signature National Board, State, and Endorsements

Date 8/13/96

PLAN NO. 2-1547.

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

Pulaski Supply 8/9/96.

1. Manufactured and certified by Target Rock Corp.; 1966E Broadhollow Rd; E. Farmingdale, NY 11735 (name and address of certificate holder)

2. Manufactured for Washington Public Power Supply System; Richland, WA 99352 (name and address of purchaser)

3. Location of installation WNP-2; North Power Plant Loop; Richland, WA 99352 (name and address)

4. Type	(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)	(year built)
	202539-1	SA-564 630	140 ksi	N/A	1992

5. ASME Code, Section III:	(edition)	(addenda)	(class)	(Code Case no.)
	1974	Winter 1975	1	None

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

7. Remarks: Spare parts for completed valve assembly Model No. 82M-001

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A

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

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	2064	N/A
(2)	2076	N/A
(3)	2087	N/A
(4)	2096	N/A
(5)	2099	N/A
(6)	2102	N/A
(7)	N/A	N/A
(8)		
(9)		
(10)		
(11)	SPARE DISC S/N 2102	
(12)		
(13)	FOR VALVE RRC-V-19.	
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
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	Part or Appurtenance Serial Number	National Board Number in Numerical Order
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(46)	SATISFACTORY [illegible]	
(47)	[illegible] 12-15-97	
(48)	INSPECTOR SIGN / DATE	
(49)		
(50)		

10. Design pressure N/A psi Temp. N/A °F. Hydro. test pressure 4285 psig (when applicable) at temp. °F. Ambient

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

FORM N-2 (back)

Mfr. Serial No. See Front

CERTIFICATE OF DESIGN

Design specifications certified by G. L. Mayfield (when applicable) P. E. state OR Reg. no. 7140

Design report* certified by J. Miazza (when applicable) P. E. state NY Reg. no. 51883

CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization no. 1948 Expires 12-12-92

Date 11/20/92 Name Target Rock Corporation (NPT Certificate Holder) Signed E. Briada Jr. (authorized representative)
E. Champéy; Director, O.A.

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 Commercial Union Insurance Company of Boston, Mass. have inspected these items described in this data report on 11/19/92 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 11/20/92 Signed William P. McCarthy (Authorized Inspector) Commissions N.Y. STATE COMMISSION NO. 228
ALSO COMMISSIONED IN PENN., OHIO & CON
(Nat'l. Bd. (incl. endorsements) state or prov. and no.)

SATISFACTORY X UNSATISFACTORY ____

William P. McCarthy IT 12-15-92

INSPECTOR / ISHEI / DATE

PLAN No 2-1350

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/30/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Residual Heat Removal (RHR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2B	WPPSS	RHR(1)-2B-P1	N/A	N/A	1984	Replacement	Yes, Code Class 2
RHR-RV-1B	Crosby	N60597-00-0003	N/A	N/A	1979	Replaced	Yes, Code Class 2
RHR-RV-1B	Crosby	N60597-00-0020	N/A	N/A	1993	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing relief valve RHR-RV-1B. The replacement work was performed as follows:
   1) Machined the raised face of the discharge flange for the new relief valve RHR-RV-1B, Serial No N60597-00-0020
   2) Removed existing relief valve RHR-RV-1B, Serial No N60597-00-0003
   3) Installed new relief valve RHR-RV-1B, Serial No N60597-00-0020

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda for the new relief valve RHR-RV-1B, Serial No N60597-00-0020

PLAN No 2-1350

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — **Test Temperature:** ° F

Component Design Pressure: Psig — **Temperature:** ° F

9. Remarks: See attached NV-1 Code Data Report for the new relief valve RHR-RV-1B, Serial No N60597-00-0020

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/30/96 **Date** 7/30/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company (Arkwright Technical Services) of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 6-8-96 *to* 7/30/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection*

[signature] — Inspector's Signature

Commissions 7486, 7486W NB5E IS — National Board, State, and Endorsements

Date 7/30/96

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN No. 2-1350

Q.C. 441-1

FORM NV-1, FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules
DATA REPORT
Safety and Safety Relief Valves

RHR-RV-1B
Quality Surv 7/28/86

1. Manufactured by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address of N Certificate Holder)
Model No. JR-WR Order No. NV3000057 Contract Date 16 MAR 1993 National Board No. —

2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY Order No. 231121 C/N 2
(Name and Address)

3. Owner WASHINGTON PUBLIC POWER SUPPLY RICHLAND, WA 99352
(Name and Address) —

4. Location of Plant WNP-2 OPS WHS COMPLEX,WHS #1 NORTH POWER PLANT LOOP,RICHLAND WA

5. Valve Identification SPARE Serial No. N60597-00-0020 Drawing No. DS-C-60597 REV.E

Type RELIEF (Safety, Safety Relief, Pilot,Power Actuated) Orifice Size 0.280 (Inch) Pipe Size — (Inch) Inlet 3/4 (Inch) Outlet 1 (Inch)

6. Set Pressure 500 150 F
Rated Temperature
Stamped Capacity 20 GPM WTR @ 70 DEG @ 10 % Overpressure — Blowdown (psig) 425 PSIG
Hydrostatic Test (PSIG) Inlet 750 Complete Valve 225

7. The material, design, construction and workmanship comply with ASME Code, Section III

Class 2 Edition 1974, Addenda Date SUMMER 1975, Case No. —

		Serial No. Identification	Material Specification Including Type or Grade
a.	Castings		
	Body	—	—
	Bonnet	—	—
b.	Bar Stock & Forgings		
	Support Rods	—	—
	Nozzle	—	—
	Disc	N91855-48-0095 N92220-39-0094	ASME SB164 CL.A
	Spring Washers	N92220-39-0095	ASME SA193 GR.B6
	Adjusting Bolt	N92221-36-0031	ASME SA193 GR.B6
	Spindle	N92219-42-0038	ASME SA193 GR. B6
c.	Spring	NX3119-0030	ASTM B166
d.	Bolting	—	—
e.	Other Pieces		
	BASE	N91850-41-0034	ASME SA479 T316
	CYLINDER	N91851-37-0028	ASME SA216 GR. WCB

Q.C.-441-1

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

Date 27 Aug 93 Signed Crosby Valve & Gage Company by Lawrence J. Lucia
Manufacturer

Certificate of Authorization No. 1878 expires 30 SEP 95

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Arkwright -Boston Manufacturers Mutual Insurance Company have inspected the equipment described in this Data Report on August 27, 1993 and state that to the best of my knowledge and belief, the Manufacturer has constructed thisequipment in accordance with the applicable Subsections of ASME Section III

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

Factory Mutual System

Date 8-27, 1993.

Signed [signature] Commissions MA-1418 'N'
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN No 2-1351

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/7/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(16)-1	WPPSS	RCIC(16)-1-P1	N/A	N/A	1984	Repaired	Yes, Code Class 2

7. Description Of Work Performed: Repaired socket weld between valves RCIC-V-111 and RCIC-V-112. The repair work was performed as follows:

1) Cur existing socket weld
2) Made required socket weld
3) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

PLAN No 2-1351

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By _____ — Supervisor, Materials And Welding

Date 8/7/96

Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/3/96 to 8/20/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

_____ Commissions 7114, 7114-W NB-I-II

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

Date 8/20/96

PLAN No 2-1352

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X-73d	JCI	PI(1)-4S-X-73d	N/A	N/A	1983	Replacement	Yes, Code Class 2
PI-VX-268	Target Rock	13	N/A	N/A	1980	Replaced	Yes, Code Class 2
PI-VX-268	Target Rock	16	N/A	N/A	1991	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing valve PI-VX-268. The replacement work was performed as follows:
   1) Removed existing valve PI-VX-268, Serial No 13
   2) Installed new replacement valve PI-VX-268, Serial No 16
   3) Made required socket welds
   4) Performed visual examination on the final socket welds. Visual examination results acceptable
   5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

NOTES -

1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the new replacement valve PI-VX-268, Serial No 16

PLAN No 2-1352

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve PI-VX-268, Serial No 16

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By _____
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/19/96 Date 8/20/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Date _____

PLAN NO. 2-1352

Rudolf Gupta 8/17/96

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

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735
(name and address of N Certificate Holder)
2. Manufactured for Washington Public Power, Richland, WA 99352
(name and address of Purchaser or Owner)
3. Location of Installation WNP-2, Richland, WA 99352
(name and address)
4. Model No., Series No., or Type 79TT-001 Drawing 90Z-552-001 Rev. - CRN N/A
5. ASME Code Section III: 1974 (Edition) W 1975 (Addenda date) 2 (Class) N/A (Code Case no.)
6. Pump or valve Valve Nominal inlet size 1 (in.) Outlet size 1 (in.)
7. Material: Body SA-182 F316L Bonnet SA-479 316 Disk SA-479 316 Bolting SA-479 316
Indicator Tube

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.	(f) Indicator Tube Serial No.
15	N/A	4735A	3513	835	4016
16	N/A	4748A	3558	994	3982
17	N/A	4764A	3506	961	4015
18	N/A	4734A	3609	915	3946
N/A	N/A	N/A	N/A	N/A	N/A

PI-VX-26B, SN 16

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ in. × 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.

8

FORM NPV-1 (back)

Mfr. Serial No. N/A

8. Remarks

9. Design conditions 45 (pressure) psi 340 (temperature) °F or valve pressure class N/A (1)

10. Cold working pressure 1545 psi at 100°F

11. Hydrostatic test 2345 psi Temp. Ambient °F Disk differential test pressure — psi

CERTIFICATION OF DESIGN

Design Specification certified by Stanley Fox Prof. Eng. state WA Reg. No. 16168

Design Report certified by — Prof. Eng. state — Reg. No. —

CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. 1947 Expires 12-12-92

Date 4/30/91 Name Target Rock Corporation (N Certificate Holder)

Signed for E. Bajada, Q.A. Manager (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 Commercial Union Ins. Co of Boston, Mass. have inspected the pump, or valve, described in this Data Report on April 30 19 91, 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 April 30 19 91.

Inspector

Commissions NYS 2360 (Nat'l Bd., incl. endorsements) State, Prov. and No.)

(1) For manually operated valves only.

PLAN No 2-1357

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. Owner: Washington Public Power Supply System (WPPSS) **Date:** 8/10/96
Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: Hanford Reservation, Benton County, Washington
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352 .
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Process Instrumentation (PI) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-X-73C*	JCI	PI(1)-ST-X-73C*	N/A	N/A	1982	Repaired	Yes, Code Class 2
PI-EFC-X42C	Dragon	GW 1104	N/A	N/A	1978	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Cut existing pipe to valve PI-EFC-X42C socket weld to provide excess to troubleshoot the valve. The repair and replacement work was performed as follows:

1) Cut existing pipe to valve socket weld
2) Removed the existing poppet assembly (disc) from the valve
3) Prepped valve socket end cut surfaces
4) Performed liquid penetrant (PT) examination on the valve socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable
5) Installed new poppet assembly (disc) in the valve
6) Made required pipe to valve socket weld
7) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

NOTES -

1) * The line going from SR-14 to X-73C was rerouted to go from SR-14 to X-42C accordance with ASME Section XI Plan No 2-0268
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the piping system
3) ASME Section III, Code Class 1, 1974 Edition with Winter 1976 (12/30/96) Addenda for valve PI-EFC-X42C
4) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application

PLAN No 2-1357

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 8/11/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/6/96 to 8/8/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature]
Inspector's Signature

Commissions 7486, 7486 W NB ST-IS.
National Board, State, and Endorsements

Date 8/13/96

PLAN No 2-1358

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/7/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: C30893
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Recirculation Cooling (RRC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC(51)-4	WPPSS	RRC(51)-4-P1	N/A	N/A	1983	Repaired	Yes, Code Class 1

7. **Description Of Work Performed:** Repaired valve RRC-V-67A bonnet vent line with a cracked socket weld. The repair work was performed as follows:
   1) Cut two (2) existing pipe to elbow socket welds
   2) Prepped elbow socket ends. Two (2) elbow socket ends
   3) Performed liquid penetrant (PT) examination on the prepped elbow socket ends. Liquid penetrant (PT) examination results acceptable
   4) Installed new pipe
   5) Made required socket welds
   6) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable
   7) Performed VT-3 visual examination on the existing studs for the bolted flanged joint. VT-3 visual examination results acceptable
   8) Performed VT-3 visual examination on the existing nuts for the bolted flanged joint. VT-3 visual examination results acceptable
   9) Reinstalled VT-3 visually examined existing studs and nuts for the bolted flanged joint

PLAN No 2-1358

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/7/96
Date 8/12/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/6/96 to 8/20/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7486, 7486-W NSIB-I
National Board, State, and Endorsements

Date 8/20/96

WO No WU 5401

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/15/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B35-G001C	WPPSS	B35-G001C-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Deleted (removed) snubbers for the following supports for the Main Steam (MS) System. The work was performed as follows

Support Mark No	Modification Action	ASME NF Class	Comment
MS-SC-4	Deleted	NF(1)	Removed One (1) Snubber
MS-SC-5	Deleted	NF(1)	Removed One (1) Snubber
MS-SC-6	Deleted	NF(1)	Removed One (1) Snubber
MS-SC-8	Deleted	NF(1)	Removed One (1) Snubber
MS-SC-10	Deleted	NF(1)	Removed One (1) Snubber

NOTES -

1) ASME Section III, Code Class NF(1), 1971 Edition with Winter 1973 Addenda for the piping supports

WO No WU 5401

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/16/96
Date 8/16/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/16/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7486, 7486W NSIB-FS
National Board, State, and Endorsements

Date 8/16/96

WO No WU 5401

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/15/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(18)-2-5	WPPSS	MS(18)-2-5-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3
MS(18)-2-6	WPPSS	MS(18)-2-6-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3
MS(18)-2-7	WPPSS	MS(18)-2-7-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3
MS(18)-2-8	WPPSS	MS(18)-2-8-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3
MS(18)-2-9	WPPSS	MS(18)-2-9-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Deleted (removed) snubbers for the following supports for the Main Steam (MS) System. The work was performed as follows

Support Mark No	Modification Action	ASME NF Class	Comment
MSRV-1C-1	Deleted	NF(3)	Removed One (1) Snubber
MSRV-1C-3	Deleted	NF(3)	Removed One (1) Snubber
MSRV-1C-4	Deleted	NF(3)	Removed One (1) Snubber
MSRV-1C-7	Deleted	NF(3)	Removed One (1) Snubber
MSRV-2C-1	Deleted	NF(3)	Removed One (1) Snubber
MSRV-2C-3	Deleted	NF(3)	Removed One (1) Snubber
MSRV-2C-5	Deleted	NF(3)	Removed One (1) Snubber
MSRV-2C-6	Deleted	NF(3)	Removed One (1) Snubber
MSRV-3C-1	Deleted	NF(3)	Removed One (1) Snubber
MSRV-3C-3	Deleted	NF(3)	Removed One (1) Snubber
MSRV-3C-5	Deleted	NF(3)	Removed One (1) Snubber
MSRV-3C-6	Deleted	NF(3)	Removed One (1) Snubber
MSRV-4C-1	Deleted	NF(3)	Removed One (1) Snubber
MSRV-4C-3	Deleted	NF(3)	Removed One (1) Snubber
MSRV-4C-5	Deleted	NF(3)	Removed One (1) Snubber
MSRV-4C-8	Deleted	NF(3)	Removed One (1) Snubber
MSRV-4C-9	Deleted	NF(3)	Removed Two (2) Snubbers
MSRV-5C-1	Deleted	NF(3)	Removed One (1) Snubber
MSRV-5C-3	Deleted	NF(3)	Removed One (1) Snubber
MSRV-5C-5	Deleted	NF(3)	Removed One (1) Snubber
MSRV-5C-9	Deleted	NF(3)	Removed One (1) Snubber

NOTES -

1) ASME Section III, Code Class NF(3), 1971 Edition with Winter 1973 Addenda for the piping supports

WO No WU 5401

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/16/96
Date 8/16/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/16/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7486, 7486 W NIS-2 +S
National Board, State, and Endorsements

Date 8/16/96

WO No WU 5401

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/16/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Exhaust Purge (CEP) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CEP(1)-1A	WPPSS	CEP(1)-1A	N/A	N/A	1984	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Deleted (removed) snubbers for the following supports for the Containment Exhaust Purge (CEP) System. The work was performed as follows

Support Mark No	Modification Action	ASME NF Class	Comment
CEP-905S	Deleted	NF(2)	Removed One (1) Snubber
CEP-907S	Deleted	NF(2)	Removed One (1) Snubber

NOTES- 2 ea

1) ASME Section III, Code Class NF(2), 1971 Edition with Winter 1973 Addenda for the piping supports

WO No WU 5401

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding

Date 8/16/96
Date 8/16/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/16/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature
Commissions 7486, 7486 W NIS-2-IS
National Board, State, and Endorsements

Date 8/16/96

WO No TG 9806

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/23/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Hydraulic (HY) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HY(1)-6S-A	WPPSS	HY(1)-6S-A-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
HY(1)-6S-B	WPPSS	HY(1)-6S-B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Deleted Hydraulic (HY) process piping lines by removing the piping material and associated valves and supports. The work was performed in accordance with BDC No 94-0057-0A and WO No TG 9806. The Containment Vessel Penetrations X76b, X76c, X76e, X76f, X77b, X77c, X77e and X77f pertaining to the deleted Hydraulic (HY) process piping lines were spared in place by installing cover plates (plugs). The cover plates (plugs) were installed by welding for Containment Vessel Penetrations X76b, X76c, X76e and X76f in accordance with ASME Section XI Plan No 2-1232 and for Containment Vessel Penetrations X77b, X77c, X77e and X77f in accordance with ASME Section XI Plan No 2-1233

NOTES -

1) The ASME Section III, Code Class 2 jurisdictional boundary for Hydraulic (HY) process piping lines for Code Systems HY(1)-6S-A-P1 and HY(1)-6S-B-P1 is as shown on Flow Diagram M-530-1

WO No TG 9806

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By _____ — Supervisor, Materials And Welding

Date 8/24/96

Date 8/26/96

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

WO No XY 82

File No KS-083

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

CRD CHANGE OUT DURING R-11, PPM No 10.5.7

WO No	Core Location	CRD Removed Serial Number	Code Edition And Addenda	CRD Replaced Serial Number	Code Edition And Addenda	Year Built
XY 8207	06-31	5399	1971/-	7202	1971/-	1975
XY 8208	10-43	7047	1971/-	7364	1971/-	1975
XY 8209	06-27	6383	1971/-	A8915	1974/W75	1991
XY 8210	10-19	5491	1971/-	7144	1971/-	1975
XY 8211	10-47	A8561	1974/W75	A8977	1974/W75	1991
XY 8212	14-19	5982	1971/-	7330	1971/-	1971
XY 8213	14-27	A8503	1974/W75	A9169	1974/W75	1992
XY 8214	14-47	A8659	1974/W75	A9346	1974/W75	1992
XY 8216	22-39	7165	1971/-	A9126	1974/W75	1991
XY 8218	22-55	6299	1971/-	6340	1971/-	1974
XY 8219	26-03	6534	1971/-	A9100	1974/W75	1992
XY 8221	26-23	7324	1971/-	6343	1971/-	1974
XY 8223	38-31	6672	1971/-	4970	1971/-	1974
XY 8224	38-35	7200	1974/W75	A8745	1974/W75	1988
XY 8225	38-39	2996	1971/-	6404	1971/-	1975
XY 8228	42-11	6137	1971/-	6126	1971/-	1974
XY 8229	42-23	6449	1971/-	6588	1971/-	1975
XY 8230	46-15	7367	1971/-	7143	1971/-	1975
XY 8231	46-31	7157	1971/-	A9120	1974/W75	1991
XY 8248	46-11	7331	1971/-	A9173	1974/W75	1992

NOTES -

1) Performed VT-1 visual examination on all new cap screws, SA-540 Gr B23, Class 4, Heat No 52613, Heat Code No Q4X. VT-1 visual examination results acceptable. Removed all the existing cap screws and installed VT-1 visually examined cap screws - Eight (8) cap screws for each core location

Prepared By - Kuldip Singh

August 12, 1994

WO No XY 82

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/13/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 2
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drives (CRD's)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1. See below for Code Edition, Addenda and Code Cases
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD's	General Electric	See Below	N/A	N/A	See Below	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced twenty (20) Control Rod Drives (CRD's). The replacement work was performed in accordance with plant procedure PPM No 10.5.7 " Control Rod Drive Removal And Replacement Using General Electric (GE) Equipment" as follows:

1) Removed all the existing cap screws for each Control Rod Drive (CRD) bolted flanged connection for all the core locations listed below - Eight (8) cap screws for each core location
2) Removed twenty (20) existing Control Rod Drives (CRD's)
3) Performed VT-1 visual examination on all the new replacement cap screws. VT-1 visual examination results acceptable
4) Installed replacement Control Rod Drives (CRD's)
5) Installed VT-1 visually examined new replacement cap screws for each Control Rod Drive (CRD) bolted flanged connection for all the core locations listed below - Eight (8) cap screws for each core location
6) Torqued the cap screws for the Control Rod Drive (CRD) bolted flanged connections to the required torque values
7) Performed VT-2 visual examination during pressure test on Control Rod Drive (CRD) bolted flanged connections to confirm pressure boundary integrity. Leakage was observed during pressure test and was evaluated to be acceptable

WO* No	Core Loc.	CRD Removed Serial Number	Code Edition And Addenda	Year Built	Code Case	CRD Replaced Serial Number	Code Edition And Addenda	Year Built	Code Case
8207	06-31	5399	1971/-	1974	1361-1	7202	1971/-	1975	Note 2
8208	10-43	7047	1971/-	1975	1361-1	7364	1971/-	1975	Note 2

See Sheet 2 of 2 for continuation

NOTES -

1) * All the Work Order (WO) numbers are prefixed with "XY"
2) ASME Section III Code Cases for the replacement Cylinder Tube And Flange (CT&F) assemblies and Control Rod Drives (CRD's) are as listed on the attached N-2 Code Data Reports
3) New replacement cap screws, ASME Section III, Code Class 1, SA-540 Gr B23, Class 4

WO No XY 82

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ **Pneumatic** ☐ **Nominal Operating Pressure** [*] **Other** ☐ **None**

Test Pressure: 1020 Psig **Test Temperature:** 194° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached N-2 Code Data Reports for the following replacement Cylinder Tube And Flange (CT&F) assemblies and Control Rod Drives (CRD's):

Serial No	Serial No	Serial No	Serial No	Serial No
7202	A8977	A9126	4970	6568
7364	7330	6340	A8745	7143
A8915	A9169	A9100	6404	A9120
7144	A9346	6343	6126	A9173

2) * The pressure test was performed in accordance with plant procedure PPM No 7.4.0.5.25 "Reactor Pressure Vessel Leakage Test" on CRD bolted flanged connections to confirm pressure boundary integrity

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By**

Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/13/96 **Date** 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/19/96 *to* 8/26/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Commissions 7486, 7486 W NIS-2

Inspector's Signature National Board, State, and Endorsements

Date 8/26/96

WO No XY 82

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/13/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 2 of 2
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drives (CRD's)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1. See below for Code Edition, Addenda and Code Cases
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD's	General Electric	See Below	N/A	N/A	See Below	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Continuation from Sheet 1 of 2

WO* No	Core Loc.	CRD Removed Serial Number	Code Edition And Addenda	Year Built	Code Case	CRD Replaced Serial Number	Code Edition And Addenda	Year Built	Code Case
8209	06-27	6383	1971/-	1974	1361-1	A8915	1974/W75	1991	Note 2
8210	10-19	5491	1971/-	1974	1361-1	7144	1971/-	1975	Note 2
8211	10-47	A8561	1974/W75	1988	1361-2	A8977	1974/W75	1991	Note 2
8212	14-19	5982	1971/-	1974	1361-1	7330	1971/-	1971	Note 2
8213	14-27	A8502	1974/W75	1987	1361-2	A9169	1974/W75	1992	Note 2
8214	14-47	A8659	1974/W75	1988	1361-2	A9346	1974/W75	1992	Note 2
8216	22-39	7165	1971/-	1975	1361-1	A9126	1974/W75	1991	Note 2
8218	22-55	6299	1971/-	1974	1361-1	6340	1971/-	1974	Note 2
8219	26-03	6534	1971/-	1974	1361-1	A9100	1974/W75	1992	Note 2
8221	26-23	7324	1971/-	1975	1361-1	6343	1971/-	1974	Note 2
8223	38-31	6672	1971/-	1975	1361-1	4970	1971/-	1974	Note 2
8224	38-35	7200	1974/S75	1975	None	A8745	1974/W75	1988	Note 2
8225	38-39	2996	1971/-	1975	1361-1	6404	1971/-	1975	Note 2
8228	42-11	6137	1971/-	1975	1361-1	6126	1971/-	1974	Note 2
8229	42-23	6449	1971/-	1975	1361-1	6558	1971/-	1975	Note 2
8230	46-15	7367	1971/-	1975	1361-1	7143	1971/-	1975	Note 2
8231	46-31	7157	1971/-	1975	1361-1	A9120	1974/W75	1991	Note 2
8248	46-11	7331	1971/-	1975	1361-1	A9173	1974/W75	1992	Note 2

NOTES -

1) See notes on Sheet 1 of 2

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

As required by the Provisions of the ASME Code Rules

WO No. XY 8207

Quality Surv 8/13/75

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 7202 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 minimum.

FOR INFORMATION ONLY

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

Date June 13 19 75 Signed GE, BWRSD - REM By Wm. J. Reuden
(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. 14468

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14468

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

E. R. Smith
Inspector's Signature

Commissions NC 723, PA IC 1766, Ohio
National Board, State, Province and No.

2X00368150

761E3870C2
7202

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

FOR INFORMATION ONLY

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

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

14. Design pressure[2] _____ 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 Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

[1] If Postweld Heat-Treated.
[2] [illegible]

7X0036815

WO No. XY 8208

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

As required by the Provisions of the ASME Code Rules

Rudolf Gwyn 8/13/96

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 7364 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 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 July 28 19 75 Signed GE, BWRSD - REM (Manufacturer) By W. J. Heidelberg

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

E. L. Sherrill
Inspector's Signature

Commissions NC 723, PA NC 1766, Ohio
National Board, State, Province and No.

ZX0036827

761E387G2
7364

FORM U-2 (back)

Items 1–8 inc. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

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

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

FOR INFORMATION ONLY

Items 9 and 10 to be completed for tube sections

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

Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

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

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

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

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

14. Design pressure[2] ____ 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 Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

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

[1] If Postweld Heat-Treated.

[2] [illegible] material at temperature when subject to [illegible]

1X0036827

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

WO No. X4 8209

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Rudolph Lewis 8/13/96

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A8915 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

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

Date: 10/23/91 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ASME QA Representative)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 10/22, 1991, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

10/23, 1991 Jerome P Evers NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

FORM N-2 (back)

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

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. 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 ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

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

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

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

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

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

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top,bottom,ends								
(b)	Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8209

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

Rudolph Swab 9/13/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A8915 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: . Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.

(Brief description of service for which component was designed)

1. Cap 166B9274P001
   SA182 - F304
   3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
   SA312 - TP316
   3/4" sch 40 - seamless pipe
   0.113" wall thickness
   1.065" max. dia.

3. Plug 159A1176P001
   SA182 - F304
   1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
   SA182 - F304
   3.37" thick x 9 5/8" OD

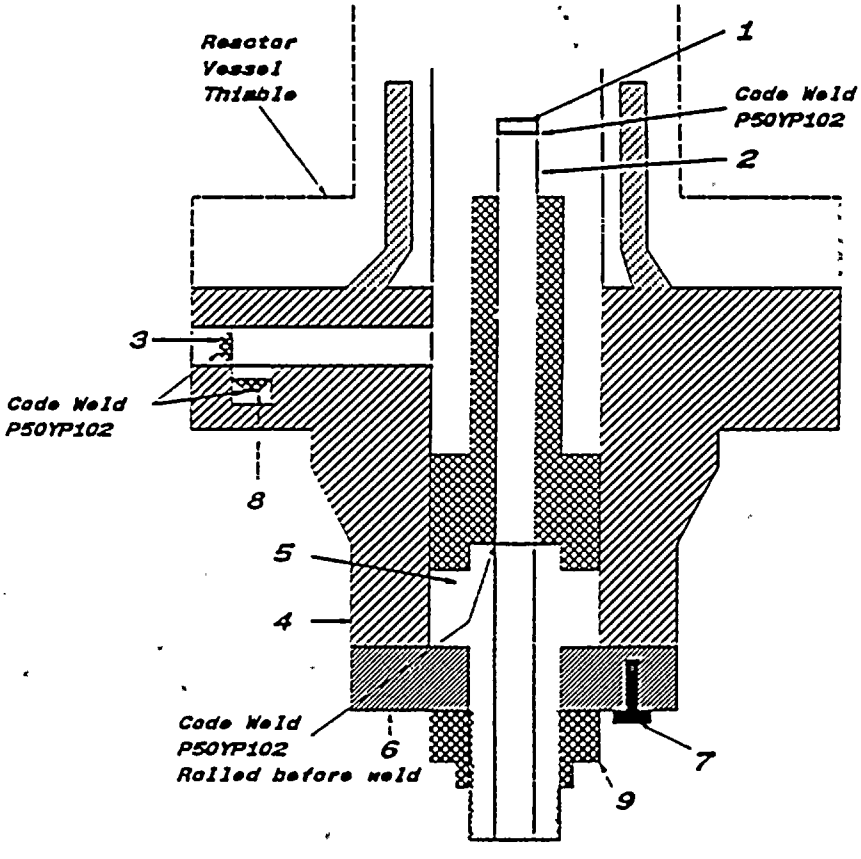
5. Base 137C5311P001
   SA182 - F304
   7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
   137C8151P001, P002
   SA182 - F304
   1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
   SA193 - B6
   6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
   SA182 - F304
   0.38" thick x 1.307" dia.

9. Nut 137C5934P001
   XM - 19 SA479
   1.30" thick x 2.62" dia.



WO No. XY 8210

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

As required by the Provisions of the ASME Code Rules

Redlip Corp 8/13/96

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 7144 V 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 1625 psi minimum.
(Brief description of service for which component was designed)

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 May 28 19 75 Signed GE, BWRSD - REM By _____
(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 May 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 May 28 19 75

E.L. Shirrill Commissions NC 723, PA, NC 1766, Ohio
Inspector's Signature National Board, State, Province and No.

105D5240G2
7144

FORM U-2 (back)

Items 1 to 8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

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

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] 1250 psi at 575[3] °F

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

Items 9 and 10 to be completed for tube sections

FOR INFORMATION ONLY

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

Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

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

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

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

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

14. Design pressure[2] ____ 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 Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

ZX00367366

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

[1] If Postweld Heat-Treated.

WO No. XY 8211

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

Khalid Bug 5
8/13/91

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A8977 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

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

Date: 11/18/91 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (GE QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Biorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 11/15, 1991, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

11/18, 1991 Jerome P Evans NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

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

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

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

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

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top,bottom,ends								
(b)	Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with concident 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

WO No. XY 8211

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
Richard Swyb 8/13/86

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A8977 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

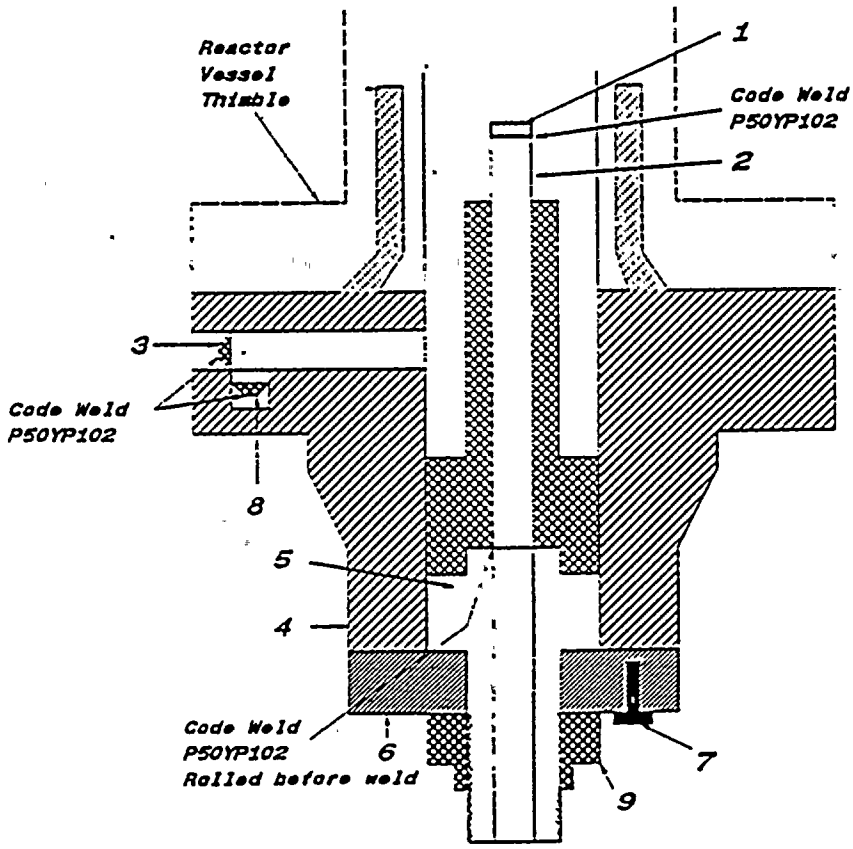
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No. XY 8212

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

As required by the Provisions of the ASME Code Rules

Rudolf Sup 3
8/13/96

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 7330 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 minimum.
(Brief description of service for which component was designed)

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 July 30 19 75 Signed GE, BWRSD - REM By
(Manufacturer)

ification 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 30 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 30 19 75

E. B. Sherrill
Inspector's Signature

Commissions NC 723, PA. EC 1766, Ohio
National Board, State, Province and No.

ZX00367823

FORM N-2 (back)

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

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

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

Items 9 and 10 to be completed for tube sections FOR INFORMATION ONLY

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

Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

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

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

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

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

14. Design pressure[2] ____ 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 Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

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

[1] If Postweld Heat-Treated.
[2] Use other internal or external pressure if more severe than design pressure or temperature when applicable.

ZX00367824

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

WO No. XY 8213

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Rudolph Sept 8/13/91

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9169 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

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

Date: 12/22/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (GC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

0C22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

0C22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/16, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12/22, 1992 Inspector's Signature NC 1231, Ohio, WC 3686 PA
Date National Board, State, Province And No.

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

(07/90)

S/N: A41673 Quality Equip

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers. 7/28/84

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

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

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

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFIC ≡ HOLDERS' DATA REPORT FOR NUC .R PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO No. X4 8213

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9169 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

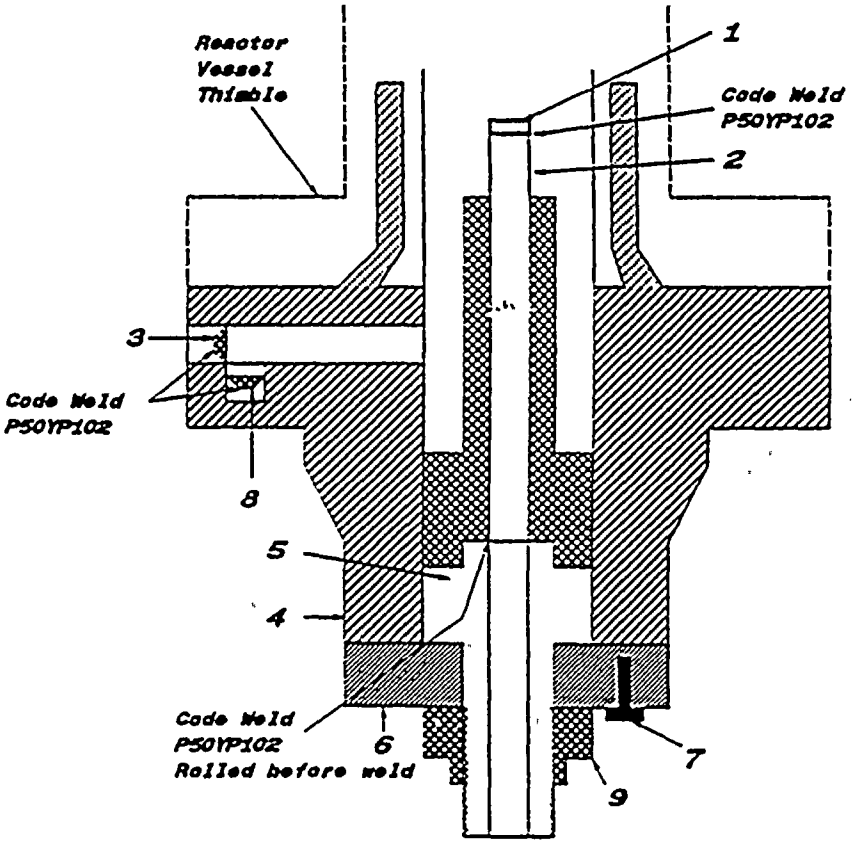
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No. XY 8214

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

Quality Supb 8/13/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9346 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.

(Brief description of service for which component was designed)

Sheet 1 of 2

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

Date: 12/22/92 Signed GE - NEBG - NF & CM - QA By

(NPT Certificate Holder) (ASME Representative)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

OC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

OC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/17, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12/22, 1992 Inspector's Signature NC 1231, Ohio, WC 3686 PA

Date National Board, State, Province And No.

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

(07/90)

S/N A 9346

Rudolph Gupb

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers. 7/28/94

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

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

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

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO No. X4 8214

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Dwight Smyth 8/13/96

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9346 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1 .

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

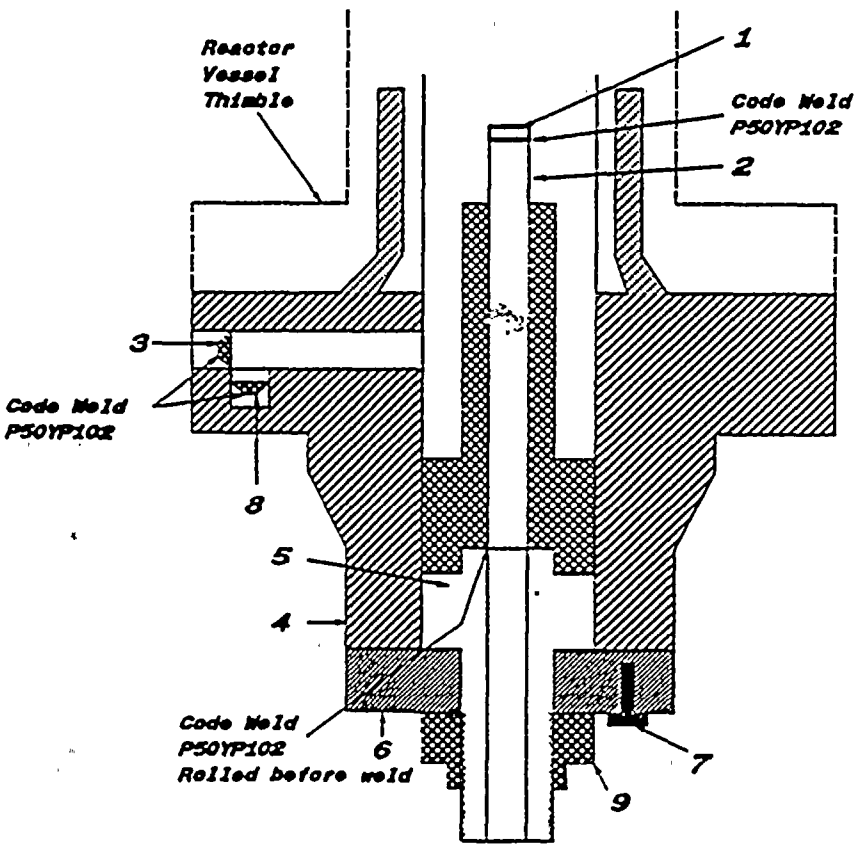
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No. XY 8216

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

Vendor Supplied 8713196

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9126 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

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

Date: 11/18/91 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (QC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

0C22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

0C22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 11/15, 1991, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

11/18, 1991 Jerome P Evers NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

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

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

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

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

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top,bottom,ends								
(b)	Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8216

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

Rudolph Swope 8/13/86

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9126 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 . Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

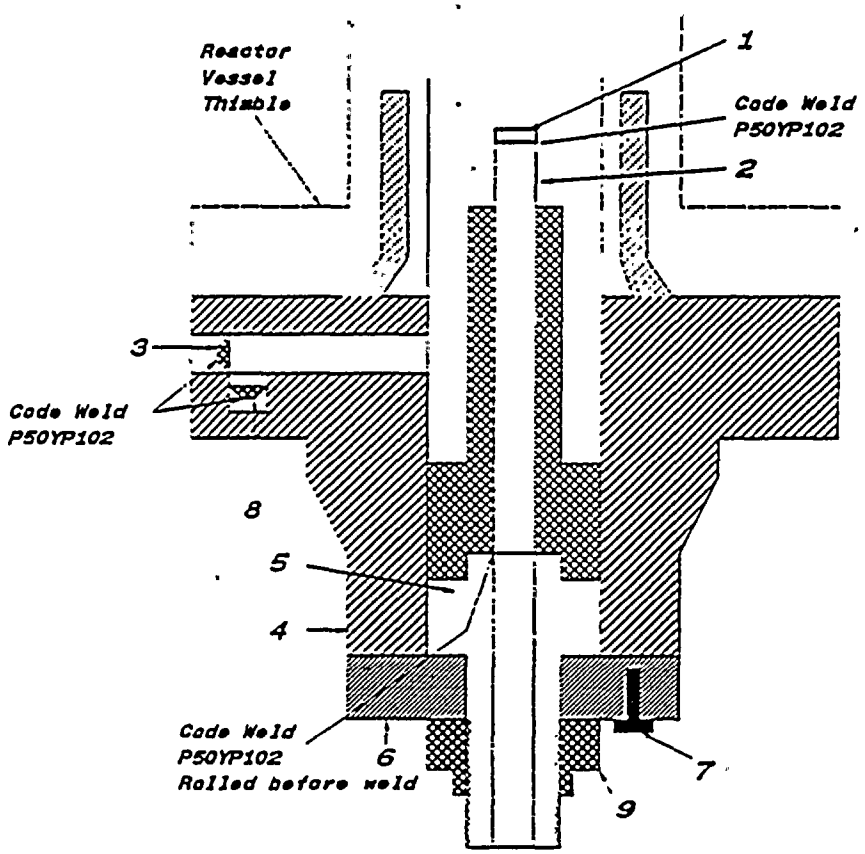
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No. XY 8218

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

As required by the Provisions of the ASME Code Rules

Ralph Swab 8/13/96

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 6340 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 1625 psi
(Brief description of service for which component was designed)
minimum.

[illegible]

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

Date December 30 19 74 Signed GE, BWRSD - REM By [signature]
(Manufacturer)

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 30 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 30 19 74

E B Sherrill
Inspector's Signature

Commissions NC 723, PA, NC 1766, Ohio
National Board, State, Province and No.

ZX0036751

761E387G002
6340

FORM No. (Sheet 1)

Items 1 to 3 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

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

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. 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 ____
(Smooth or Finned)

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

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

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight ____
Charpy Impact ____ ft-lb
14. Design pressure[2] ____ psi at ____ °F at temp. of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

ZX00367513

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

[1] If Postweld Heat-Treated.

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

WO No. XY 8219

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Duraip Swamy 8/13/96

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9100 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

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

Date: 12/22/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ISC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

OC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

OC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/16, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12/22, 1992 — Date
Inspector's Signature
NC 1231, Ohio, WC 3686 PA — National Board, State, Province And No.

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

(07/90)

S/N A'9100

FORM N-2 (back)

Rudolph Gulp 7/28/94

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

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

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

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

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

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.
2 - Use other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFI[illegible]E HOLDERS' DATA REPORT FOR NUC[illegible]AR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO No. X4 8219

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Philip Bruno 5/13/96

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9100 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

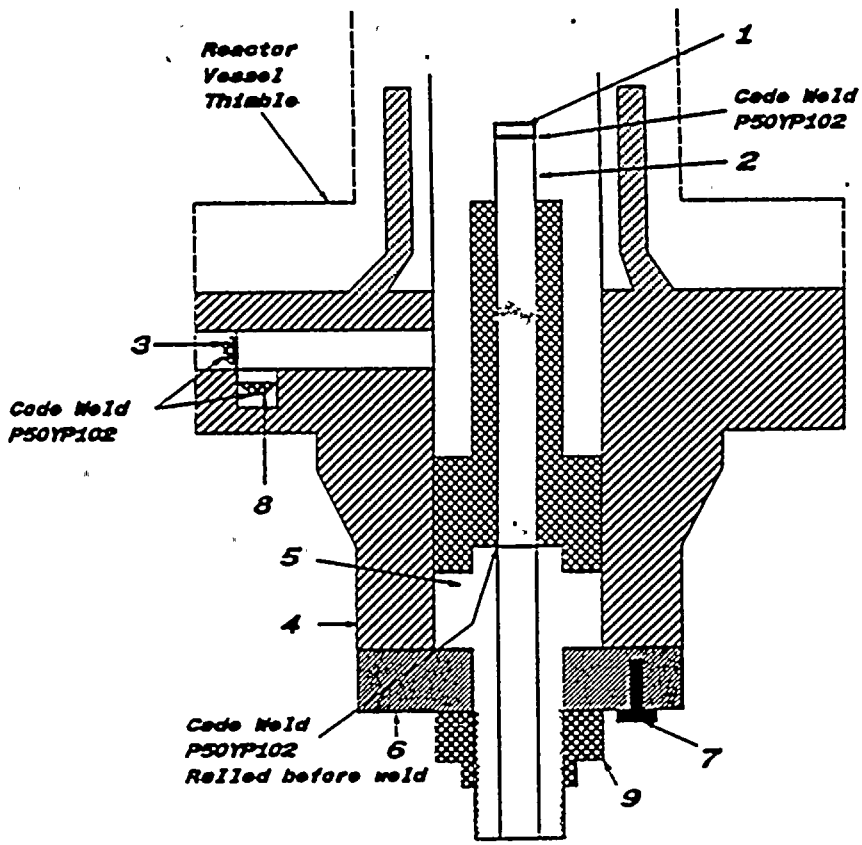
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No. XY 8221

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

As required by the Provisions of the ASME Code Rules

Quality Surveys 8/13/26

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 6343 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 minimum.
(Brief description of service for which component was designed)

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 October 28 19 74 Signed GE, BWRSD - REM By Wm. J. Henderson
(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 October 28 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 October 28 19 74

E. L. Sherrill Commissions NC 723, PA. NC 1766, Ohio
Inspector's Signature National Board, State, Province and No.

ZX0036720

761E387G002
6343

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

FOR INFORMATION ONLY
Not Certified

Items 9 and 10 to be completed for tube sections

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

Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

14. Design pressure[2] _____ 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 Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

ZX0036729

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

[1] If Postweld Heat-Treated.
[2] 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 WO No. X4 8223

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 4970 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 1320 psi minimum.
(Brief description of service for which component was designed)

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

Date November 11 19 74 Signed GE, BWRSD - REM By Wm. L. Henderson
(Manufacturer)

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on November 11 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date November 11 19 74

E L Sherrill Commissions NC 722 PA NB 1766 Ohio
Inspector's Signature National Board, State, Province and No.

ZX9036819

FORM N-2 (back)

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

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

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

FOR INFORMATION ONLY

Items 9 and 10 to be completed for tube sections

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

Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

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

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

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

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

14. Design pressure[2] ____ 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 Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

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

ZX0036819

[1] If Postweld Heat-Treated.
[2] List other principal or external pressures and the coincident temperatures when applicable.

WO NO. XY 8224 ~~Unit # 8253~~
Buildup Sup 6
6/17/89.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* 8/13/76
As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)
(b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holders's S/N of Part: A8745 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: CYLINDER TUBE & FLANGE

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75 Case No. 1361-2 Class 1

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

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

DATE: 12/31, 19 88 Signed GE-NEBG-NF&CM-QA By
(NPT Certificate Holder)

Certificate Of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA
DC22A6253 Rev. 0
Design specification certified by BJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570
DC22A6254 Rev. 0.
Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. M018646

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 12-31 1988, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

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

12-31, 19 88 L. F. Chandler NC 779, PA WC2L60, OHIO
DATE Inspector's Signature National Board, State, Province and No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

(10/77)

VERIFIED & ACCEPTED W J Miller III 1-18-89
R.I. Inspector Date

S/N 4 8745
Enclip Engrs
1/19/89.

FORM N-2 (back)

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

4. Shell: Material_____ T.S._____ Nominal Thickness___ in. Corrosion Allowance____ in Dia.____ ft.___ in. Length__ ft.____ in.
(Kind & Spec.No) (Min.ofRange Specified)

5. Seams: Long_____ H.T.[1]_____ R.T._____ Efficiency_____ %

Girth_____ H.T.[1]_____ R.T._____ No. of Courses_____

6. Heads: (a) Material_____ T.S._____ (b)Material_____ T.S._____

Location (Top Bottom,Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv.or conc.)
(a)								
(b)								

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

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

8. Design Pressure[2] 1250 psi at 575 °F Drop Weight_____ Charpy Impact_____ ft-lb at temp. of_____ °f

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l._____ Dia._____ Thickness__ in. Attachment_____
(Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)
Floating. Material_____ Dia._____ Thickness___ in. Attachment_____

10. Tubes: Material_____ O.D.____ inches Thickness_____ or gage. Number____ Type_____
(Str. or U)

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

11. Shell: Material____ T.S.____ Nominal Thickness__ in. Corrosion Allowance__ in. Dia.__ ft.__ in__ Length__ ft.__ in.
(Kind&Spec.No.) (Min.ofRange Specified)

12. Seams: Long_____ H.T.[1]_____ R.T._____ Efficiency_____ %
Girth_____ H.T.[1]_____ R.T._____ No. of Courses_____

13. Heads (a) Material_____ T.S._____ (b)Material_____ T.S._____

Location (a)Top, Bottom, End	Tickness	Crown Radius	Knucle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Fat Diameter	Side to Press (Conv.or Conc.)
(b)Channel								

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

Drop Weight_____
Charpy Impact_____ ft-lb
14. Design pressure[2]_____ psi at_____ °F at temp. of_____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number_____ Size_____ Location_____

16. Nozzles:

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

17. Inspection Openings: Manholes, No.____ Size____ Location____
Handles, No.____ Size____ Location____
Threaded, No.____ Size____ Location____

18. Supports: Shirt____ Lugs____ Legs____ Other____ Attached____
(Yes or No) (Number) (Number) (Describe) (Where & How)

[1] If Postweld Heat-Treated.

[2] List other internal or external pressure with conincident temperature when applicalbe.

W O No. XY 8224
Richard Bures 8/13/96

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)

(b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holders's S/N of Part: A8745 Nat'l Bd. N. N/A

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: CYLINDER TUBE & FLANGE

(C) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class 1

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 2 of 2

1. Cap 167A2343P1
SA182-F304
3/8 thick X 1 1/16 OD

2. Indicator Tube 104B1336P3
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.

3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD

4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD

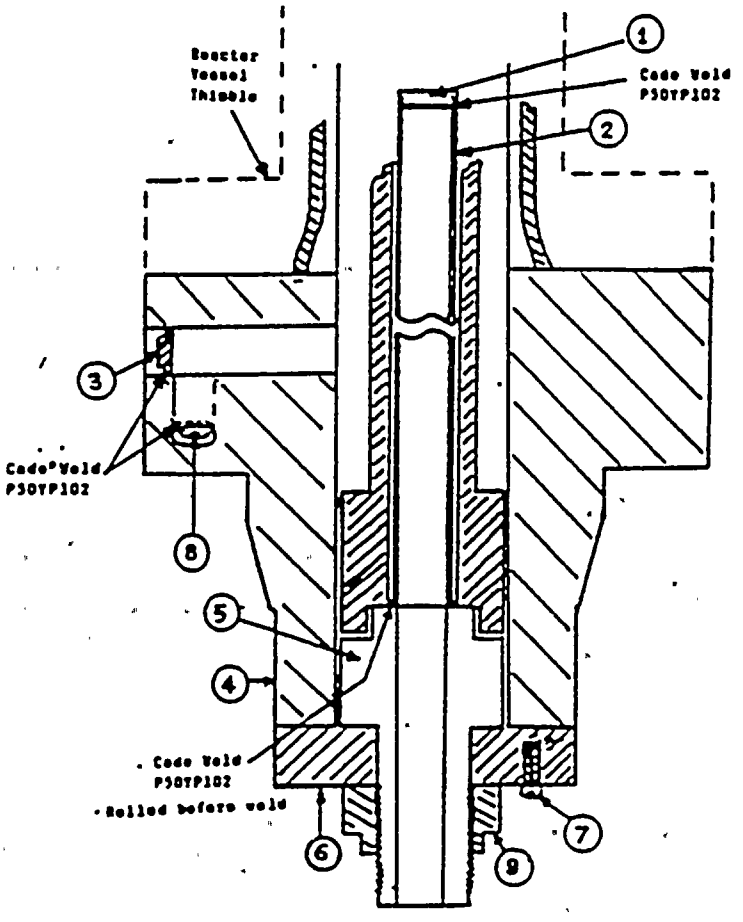
5. Head 129B3539P3, P5
SA182-F304
7/8 thick x 2.875 Dia.

6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID

7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle

8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.

9. Nut 114B5460P1
SA193-B8A
1.30 thick x 2.62 dia.



WO No. XY 8225

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

As required by the Provisions of the ASME Code Rules

Build Sup 6 8/13/96.

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 6404 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 minimum.
(Brief description of service for which component was designed)

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
(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 January 24 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 24 19 75

E L Shemwell
Inspector's Signature

Commissions NC 723, PA. NC 1766, Ohio
National Board, State, Province and No.

ZX00367569

761E387G002
6404

FORM No. (Back)

Items 1 to Incl. to be completed for single wall vessels, jackets of jacketed vessels, or sheets of heat exchangers.

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

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight ____
Charpy Impact ____ ft.-lb.
at temp. of ____ °F

FOR REGISTERED ONLY

Items 9 and 10 to be completed for tube sections

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

Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ inches or guge. Number ____ Type ____ (Str. or U)

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

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

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight ____
Charpy Impact ____ ft.-lb.
14. Design pressure[2] ____ psi at ____ °F at temp. of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

ZX00367570

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

[1] If Postweld Heat-Treated.

WO No. XY 8228

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

As required by the Provisions of the ASME Code Rules

Revised Sup 5 8/13/96

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 6126 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 minimum.
(Brief description of service for which component was designed)

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 October 28 19 74 Signed GE, BWRSD - REM By
(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 October 28 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 October 28 19 74

E L Shevild Commissions NC 723, PA. NC 1766, Ohio
Inspector's Signature National Board, State, Province and No.

ZX00367188

761E387G002
6126

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight _____,
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

14. Design pressure[2] _____ 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 Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

ZX00367189

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

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8229

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

As required by the Provisions of the ASME Code Rules

Rudolph Bunch 8/13/96

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 6588 V 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 minimum.
(Brief description of service for which component was designed)

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 July 30 1975 Signed GE, BWRSD - REM (Manufacturer) By H. E. Sadler

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 30 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 July 30 1975

E. L. Stewart
Inspector's Signature

Commissions NC 723, PA. NC 1766, Ohio
National Board, State, Province and No.

ZX00367933

761E387G2
6588

FORM N-2 (Back)

Items 1–8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

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

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

7. Jacket Closure: ____ (Describe as ogee endweld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

FOR INFORMATION ONLY

Items 9 and 10 to be completed for tube sections

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

Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

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

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

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

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

14. Design pressure[2] ____ 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 Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

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

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with coincident temperature when applicable.

IX0036793-4

WO No. XY 8230

FORM N-2 MANUFACTURER. ATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

Rudolph Swe 5
8/13/96

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 7143 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.

FOR REFERENCE ONLY

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

Date June 18 19 75 Signed GE, BWRSD - REM By
(Manufacturer)

rtificate 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

E L Shovill
Inspector's Signature

Commissions NC 723, PA, NC 1766, Ohio
National Board, State, Province and No.

7X0036750

761E387G2
7143

FORM N-2 (back)

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

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

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

7. Jacket Closure ____
(Describe as ogee end weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure[2] 1250 psi at 575[1] °F Drop Weight ____ Charpy Impact ____ ft-lb at temp. of ____ °F

FOR INFORMATION ONLY

Items 9 and 10 to be completed for tube sections

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

Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

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

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

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

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

14. Design pressure[2] ____ 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 Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

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

[1] If Postweld Heat-Treated.

7X00367506

WO No. XY 8231

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

Thrudp Engs 8/18/92

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9120 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

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

Date: 11/18/91 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (SC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151 .

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Biorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 11/15, 1991, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

11/18, 1991 Jerome P Ennis NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

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

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

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I.

WO No. XY 8231

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Richard Swyb 8/13/96

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9120 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 . Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

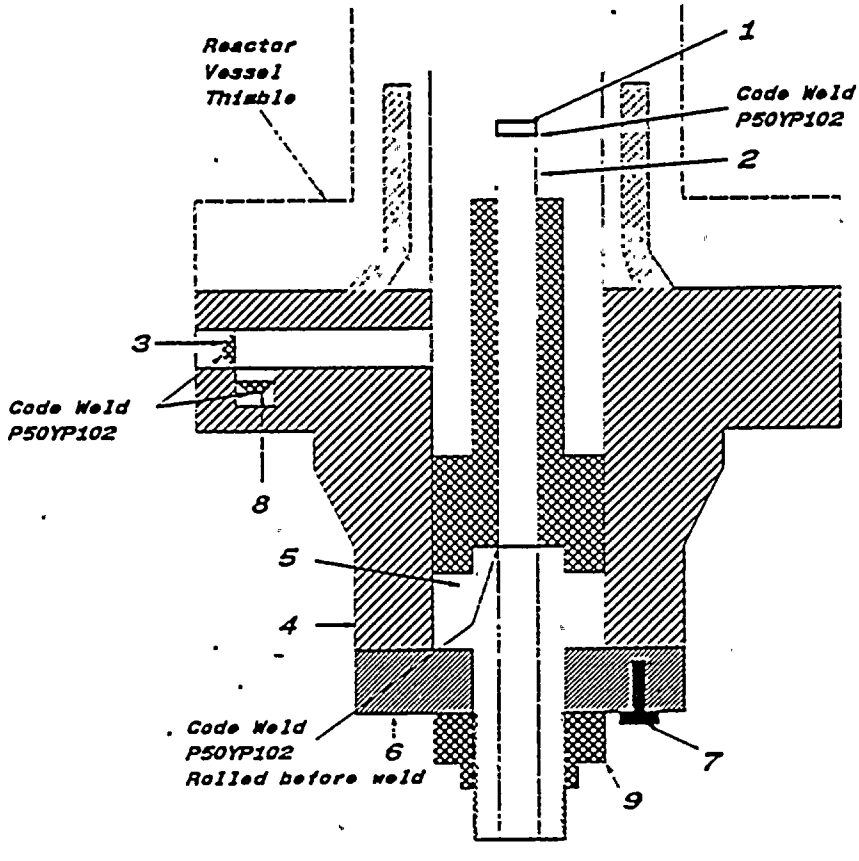
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



FORM 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

WO No. X48248

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

Dulaip Singh 8/13/96

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9173 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

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

Date: 12/22/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

OC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

OC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/16, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12/22, 1992 Date — Inspector's Signature — NC 1231, Ohio, WC 3686 PA — National Board, State, Province And No.

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

(07/90)

S/N A9173

FORM N-2 (back)

Kuldip Singh

7/28/94

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

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

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

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY8248

FORM N-2 NPT CERTIFI(.E HOLDERS' DATA REPORT FOR NUC. .R PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Philip Sachs 9/13/86

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9173 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

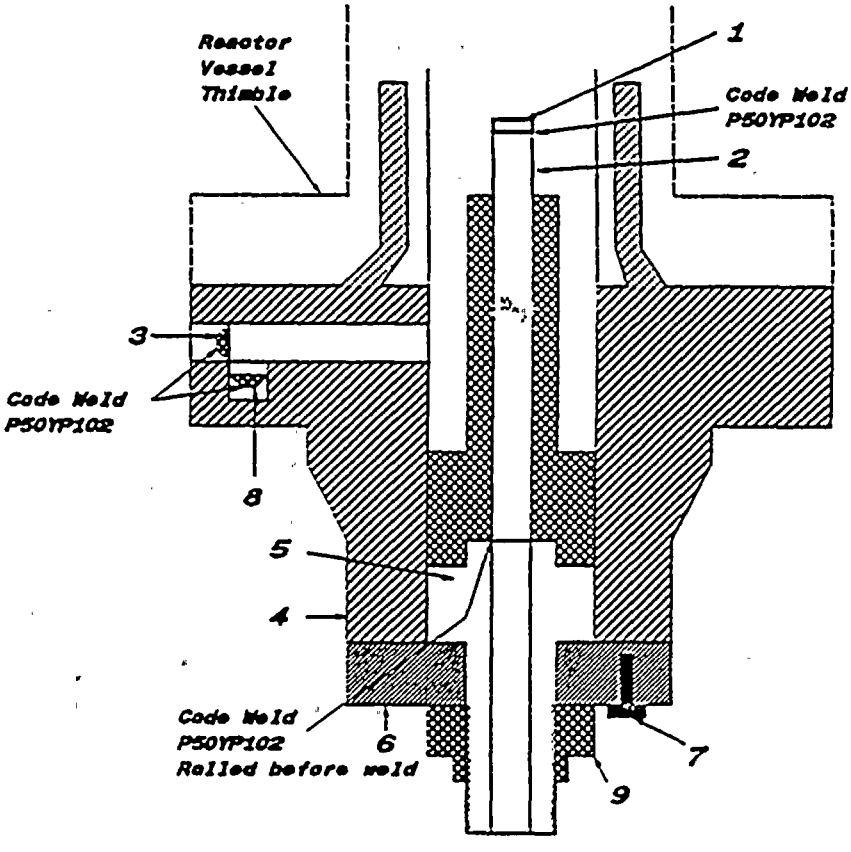
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WASHINGTON PUBLIC POWER SUPPLY SYSTEM

CRD OVERHAUL DURING R-11, PPM No 10.5.4

WO No	Cylinder S/N	Piston S/N	PT Report No	PT Results	Replacement Item S/N	Reason For Replacement
XY 8305	5399	Note 1	4-96-22-01	A	None	Not Applicable
XY 8306	7047	Note 1	4-96-22-02	A	None	Not Applicable
XY 8307	6383	Note 1	4-96-22-06	R	Cylinder S/N A9128	Unacceptable PT
XY 8308	5491	Note 1	4-96-22-09	A	None	Not Applicable
XY 8309	A8562	Note 1	4-96-22-01	A	None	Not Applicable
XY 8310	5982	Note 1	4-96-22-03	A	None	Not Applicable
XY 8311	A8503	Note 1	4-96-22-01	A	None	Not Applicable
XY 8312	A8659	Note 1	4-96-22-03	A	None	Not Applicable
XY 8314	7165	Note 1	Note 2	Note 2	Cylinder S/N A9280	Note 2
XY 8316	6299	Note 1	4-96-22-02	A	None	Not Applicable
XY 8317	6534	Note 1	4-96-22-04	R	Cylinder S/N A9159	Unacceptable PT
XY 8319	7324	Note 1	Note 2	Note 2	Cylinder S/N A9447	Note 2
XY 8321	6672	Note 1	4-96-22-11	R	Cylinder S/N A9138	Unacceptable PT
XY 8322	7200	Note 1	4-96-22-12	A	None	Not Applicable
XY 8323	2996	Note 1	4-96-22-13	R	Cylinder S/N A9420	Unacceptable PT
XY 8326	6137	Note 1	4-96-22-05	R	Cylinder S/N A9348	Unacceptable PT
XY 8327	6449	Note 1	4-96-22-10	A	None	Not Applicable
XY 8328	7367	Note 1	4-96-22-11	R	Cylinder S/N A9155	Unacceptable PT
XY 8329	7157	Note 1	4-96-22-07	R	Cylinder S/N A9350	Unacceptable PT
XY 8337	7331	Note 1	4-96-22-08	R	Cylinder S/N A9172	Unacceptable PT
XY 8304	A9120	N/A	N/A	N/A	N/A	Note 3

Cylinder - Cylinder Tube And Flange (CT&F) Piston - Piston Tube Assembly A - Accept R - Reject

NOTES -

1) Piston Tube serial number not recorded on the attachment to PPM No 10.5.4

2) Liquid penetrant (PT) examination not performed. A rejectable indication observed during visual examination

3) Replaced one (1) ring flange cap screw, H/C RK 2, See PER No 296-0283

Prepared By - Kuldip Singh
August 12, 1996

WO No XY 8304

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	A9120	N/A	N/A	1991	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Installed one (1) ring flange cap screw for Control Rod Drive (CRD) assembly Serial No A9120.

NOTES -

1) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for Cylinder Tube And Flange (CT&F) Serial No A9120

WO No XY 8304

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By — Supervisor, Materials And Welding
Date 8/12/96
Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/26/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

Inspector's Signature
Commissions 7116, 7486 w NBEI-B
National Board, State, and Endorsements

Date 8/26/96

WO No XY 8307

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6383	N/A	N/A	1974	Replaced	Yes, Code Class 1
CT&F	General Electric	A9128	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 6383. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6383. Liquid penetrant (PT) examination results unacceptable
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9128
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9128
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6383, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9128, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9128

WO No XY 8307

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ **Pneumatic** ☐ **Nominal Operating Pressure** ☐ **Other** ☒ **None**

Test Pressure: Psig **Test Temperature:** ° F

Component Design Pressure: Psig **Temperature:** ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9128

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By**

Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/12/96 **Date** 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/19/96 *to* 8/26/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Commissions 7486, 7486 W NSIB-ZI

Inspector's Signature National Board, State, and Endorsements

Date 8/26/96

(WO No. XY 8307

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

Rudolph Smith 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

   2117 Castle Hayne Road, Wilmington, North Carolina 28401
   (Name and Address of NPT Certificate Holder)

   (b) Manufactured for : WNP 2 Richland, Washington 99352
   (Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9128 Nat'l Bd. No. N/A

   (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

   (b) Description of Part Inspected: Cylinder Tube & Flange

   (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
   (Brief description of service for which component was designed)

Sheet 1 of 2

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

Date: 01/28/93 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 1/25, 1993, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

1/28, 1993 Date — Inspector's Signature — NC 1231, Ohio, WC 3686 PA National Board, State, Province And No.

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

(07/90)

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

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

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

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolte
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 ___ f
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes. No. _____ Size _____ Location _____
Handholes. No. _____ Size _____ Location _____
Threaded. No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with concident temperature when applicable.

WO No. XY 8307

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

Rudolf Swob 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9128 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

(Brief description of service for which component was designed)

1. Cap 166B9274P001
   SA182 - F304
   3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
   SA312 - TP316
   3/4" sch 40 - seamless pipe
   0.113" wall thickness
   1.065" max. dia.

3. Plug 159A1176P001
   SA182 - F304
   1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
   SA182 - F304
   3.37" thick x 9 5/8" OD

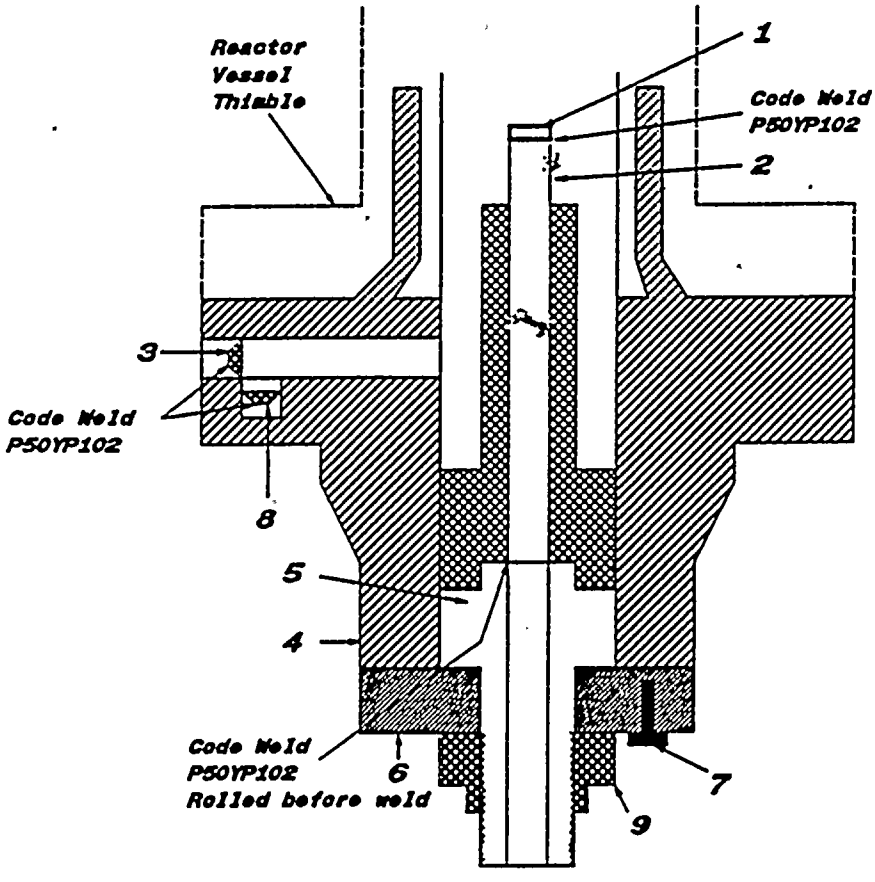
5. Base 137C5311P001
   SA182 - F304
   7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
   137C8151P001, P002
   SA182 - F304
   1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
   SA193 - B6
   6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
   SA182 - F304
   0.38" thick x 1.307" dia.

9. Nut 137C5934P001
   XM - 19 SA479
   1.30" thick x 2.62" dia.



WO No XY 8314

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	7165	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	General Electric	A9280	N/A	N/A	1995	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 7165. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 7165 was rejected based on an unacceptable indication observed during visual examination. Liquid penetrant (PT) examination was not performed
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9280
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9280
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 7165, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9280, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9280

WO No XY 8314

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9280

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/12/96

Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2/19/96 to 8/26/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7456, 7456 W NSIB-25 — National Board, State, and Endorsements

Date 8/26/96

WO No. XY 8314

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

Rulaip Gupb
8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9280 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

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

Date: 06/27/95 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (GC QA Representive)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

OC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

OC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/16, 1995, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

6/27, 1995 Inspector's Signature NC 1231, Ohio, WC 3686 PA
Date National Board, State, Province And No.

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

(07/90)

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

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

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

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

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

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

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

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

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

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with concident temperature when applicable.

WO No. XY 8314

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PARTS AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Rudolph Swab 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9280 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

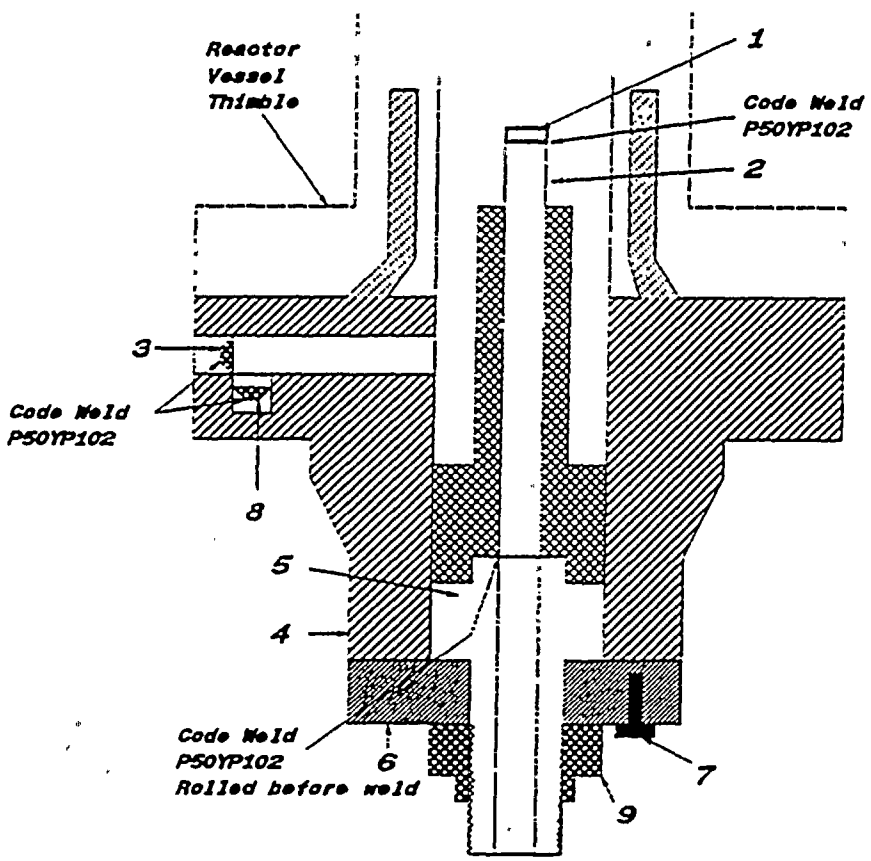
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No XY 8317

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6534	N/A	N/A	1974	Replaced	Yes, Code Class 1
CT&F	General Electric	A9159	N/A	N/A	1992	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 6534. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6534. Liquid penetrant (PT) examination results unacceptable
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9159
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9159
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6534, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9159, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9159

WO No XY 8317

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9159

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Signed By _____

Kuldip Singh - Program Lead Engineer (PLE) — Supervisor, Materials And Welding

Date 8/12/96 — Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/26/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

_____ Commissions 7486, 7486-W NB-IS

Inspector's Signature — National Board, State, and Endorsements

Date 8/26/96

WO No. X4 8317

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

Kuldip Gupta 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9159 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 12/22/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/16, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12/22, 1992 Jerome P Greene NC 1231, Ohio, WC 3686 PA
Date/ Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)
Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)
Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where &

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8317

FORM N-2 NPT CERTIFIC E HOLDERS' DATA REPORT FOR NUCL R PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Rudolph Lurch 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9159 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

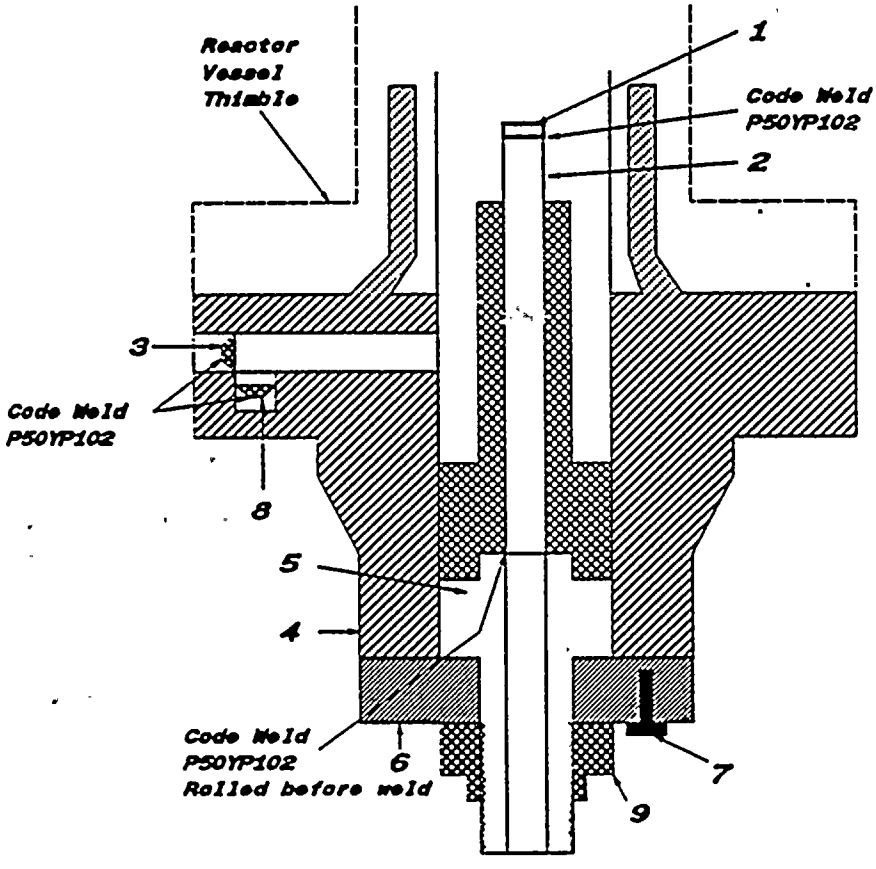
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No XY 8319

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	7324	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	General Electric	A9447	N/A	N/A	1995	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 7324. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 7324 was rejected based on an unacceptable indication observed during visual examination. Liquid penetrant (PT) examination was not performed
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9447
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9447
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 7324, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9447, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9447

WO No XY 8319

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None
Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9447

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI
Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Date 8/12/96

Signed By — Supervisor, Materials And Welding
Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/12/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7415, 7458 WA NIS-2

National Board, State, and Endorsements

Date 8/12/96

WO No. XY 8319

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

Rudolph Bump 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9447 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 06/27/95 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

OC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

OC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/16, 1995, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

6/27, 1995		NC 1231, Ohio, WC 3686 PA
Date	Inspector's Signature	National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/96)

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8319

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PARTS AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Dulaip Singh 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9447 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

(Brief description of service for which component was designed)

1. Cap 166B9274P001
   SA182 - F316
   3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
   SA312 - TP316
   3/4" sch 40 - seamless pipe
   0.113" wall thickness
   1.065" max. dia.

3. Plug 159A1176P001
   SA182 - F304
   1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
   SA182 - F304
   3.37" thick x 9 5/8" OD

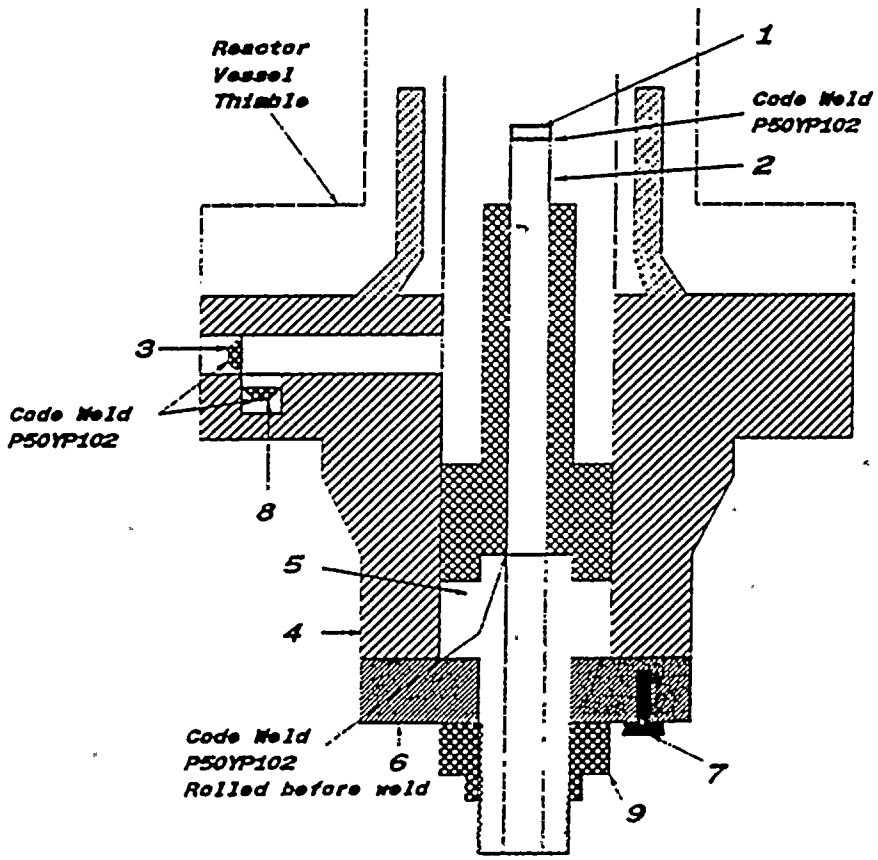
5. Head 129B3539P005
   SA182 - F304
   7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
   SA182 - F304
   1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
   SA193 - B6
   6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
   SA182 - F304
   0.38" thick x 1.307" dia.

9. Nut 114B5460P001
   XM - 19 SA479
   1.30" thick x 2.62" dia.



WO No XY 8321

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6672	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	General Electric	A9138	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 6672. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6534. Liquid penetrant (PT) examination results unacceptable
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9138
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9138
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6672, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9138, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9138

WO No XY 8321

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9138

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE) Signed By [signature] — Supervisor, Materials And Welding

Date 8/12/96 Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/26/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

[signature]
Inspector's Signature

Commissions [illegible] 7486, 7486.W NB 15-17
National Board, State, and Endorsements

Date 8/26/96

(WO No. X4 8321

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

Rudolf Gruby 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9138 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 01/28/93 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (SC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018648

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 1/25, 1993, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

1/28, 1993		NC 1231, Ohio, WC 3686 PA
Date	Inspector's Signature	National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8321

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

Kuldip Gupta 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9138 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.

(Brief description of service for which component was designed)

1. Cap 166B9274P001
   SA182 - F304
   3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
   SA312 - TP316
   3/4" sch 40 - seamless pipe
   0.113" wall thickness
   1.065" max. dia.

3. Plug 159A1176P001
   SA182 - F304
   1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
   SA182 - F304
   3.37" thick x 9 5/8" OD

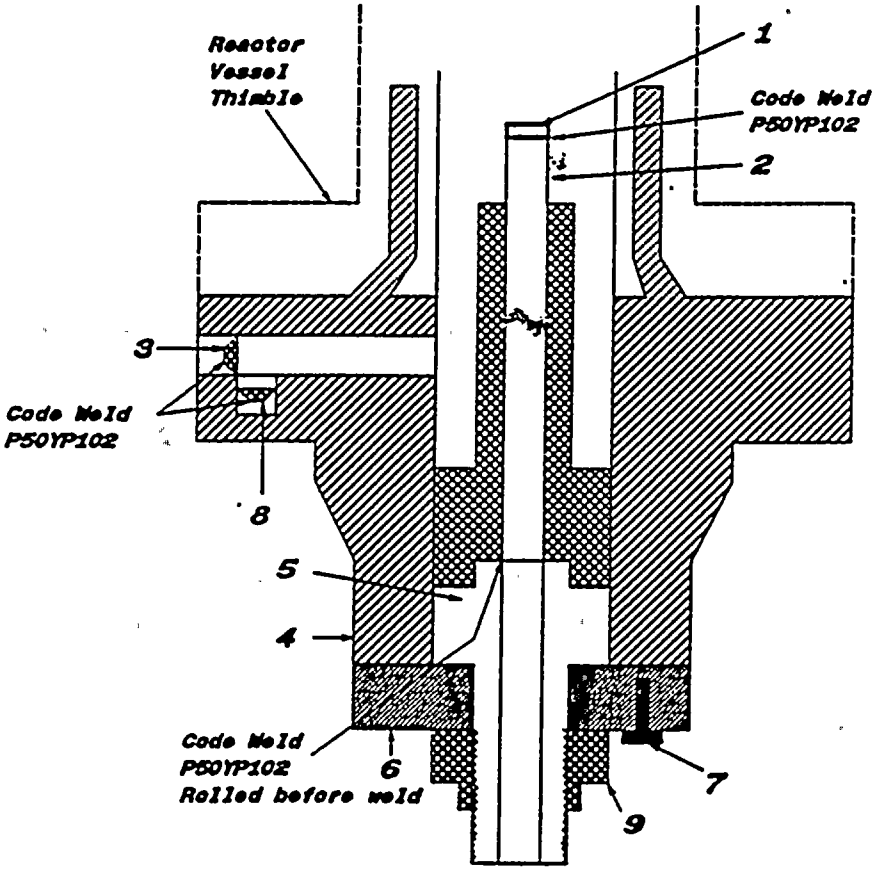
5. Base 137C5311P001
   SA182 - F304
   7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
   137C8151P001, P002
   SA182 - F304
   1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
   SA193 - B6
   6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
   SA182 - F304
   0.38" thick x 1.307" dia.

9. Nut 137C5934P001
   XM - 19 SA479
   1.30" thick x 2.62" dia.



WO No XY 8323

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	2996	N/A	N/A	1974	Replaced	Yes, Code Class 1
CT&F	General Electric	A9420	N/A	N/A	1995	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 2996. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 2996. Liquid penetrant (PT) examination results unacceptable
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9420
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9420
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 2996, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9420, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9420

WO No XY 8323

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None
Test Pressure: Psig Test Temperature: ° F
Component Design Pressure: Psig Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9420

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI
Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 8/12/96 Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/26/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Commissions 7486, 7486-W WCIB-IS
Inspector's Signature National Board, State, and Endorsements

Date 8/26/96

WO No. XY 8323

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

Rudolph Rupb
8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9420 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 06/27/95 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/26, 1995, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

6/27, 1995 Jerome P Ewen NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3. "REMARKS".

(07/90)

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)								
(b)								

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

WO NO. X4 8323

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

Reactor Sump 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9420 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

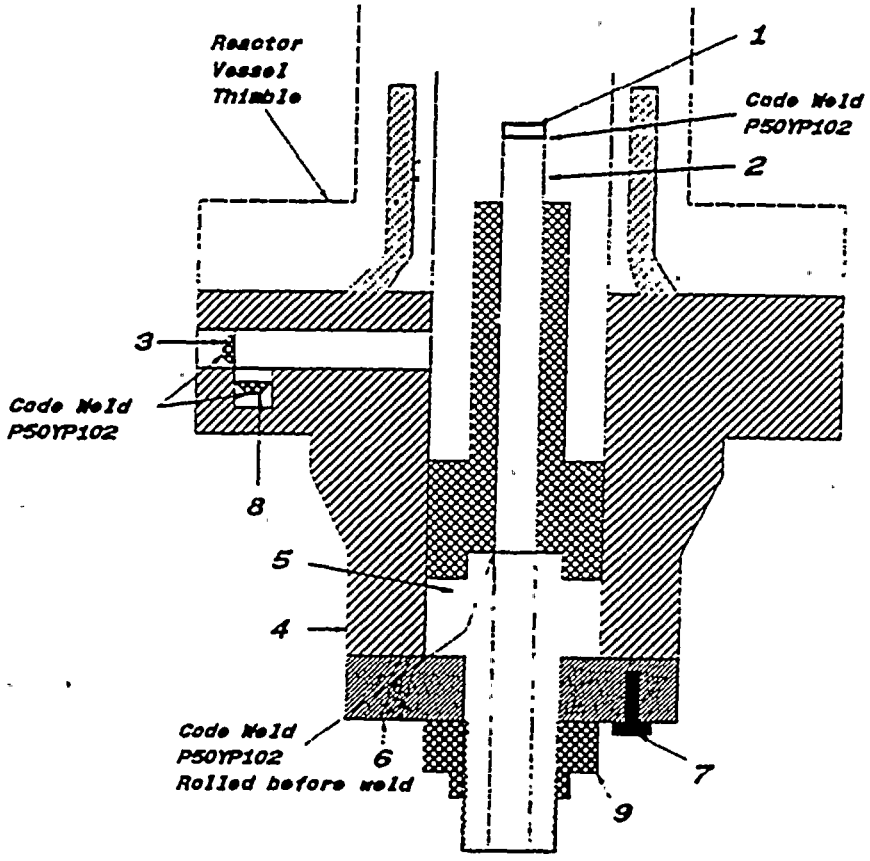
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No XY 8326

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	6137	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	General Electric	A9348	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 6137. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6137. Liquid penetrant (PT) examination results unacceptable
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9348
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9348
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6137, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9348, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9348

WO No XY 8326

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9348

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Signed By [signature]

Kuldip Singh - Program Lead Engineer (PLE) — Supervisor, Materials And Welding

Date 8/12/96 — Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/19/96 to 8/26/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature] — Commissions 7486, 7486-W NB-IS

Inspector's Signature — National Board, State, and Endorsements

Date 8/26/96

WO No. XY 8326

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

8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9348 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 01/28/93 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (SC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev I
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018648

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 1/25, 1993, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

1/28, 1993	Jerome P Evans	NC 1231, Ohio, WC 3686 PA
Date	Inspector's Signature	National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ (Kind & Spec. No.) T.S. _____ (Min. of Range Specified) Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ Inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ (Kind & Spec. No.) T.S. _____ (Min. of Range Specified) Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8326

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

Vulcan Sump 5
8/12/9

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9348 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

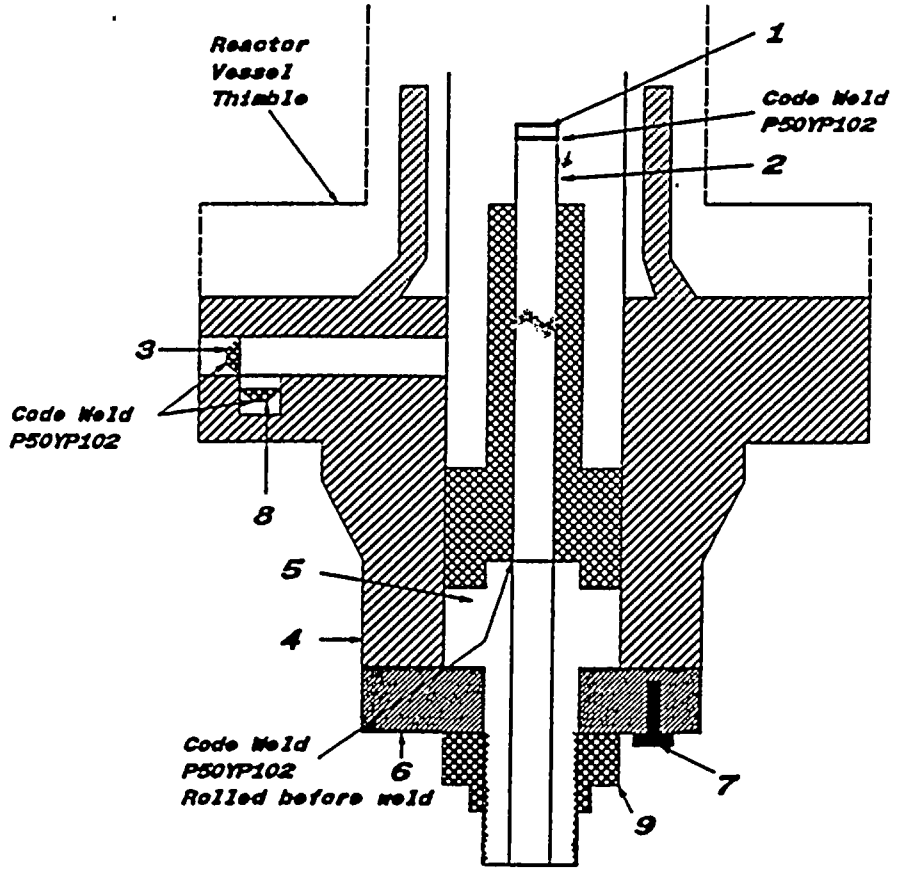
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No XY 8328

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	7367	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	General Electric	A9155	N/A	N/A	1992	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 6367. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6367. Liquid penetrant (PT) examination results unacceptable
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9155
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9155
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 7367, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9155, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9155

WO No XY 8328

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None
Test Pressure: Psig Test Temperature: ° F
Component Design Pressure: Psig Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9155

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI
Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 8/12/96
Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/26/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature] — Inspector's Signature
Commissions 7486, 7486 NSIB-II — National Board, State, and Endorsements

Date 8/26/96

WO No. XY 8328

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Richard Rupp 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9155 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 12/22/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

OC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

OC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/16, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12/22, 1992 Jerome P Evans NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)
Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ Inches or gage, Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft ___ in
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)
Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where &

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8328

FORM N-2 NPT CERTIFIC .E HOLDERS' DATA REPORT FOR NUCL .R PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. 1

Rudolph Sung 5
8/12/75

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9155 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

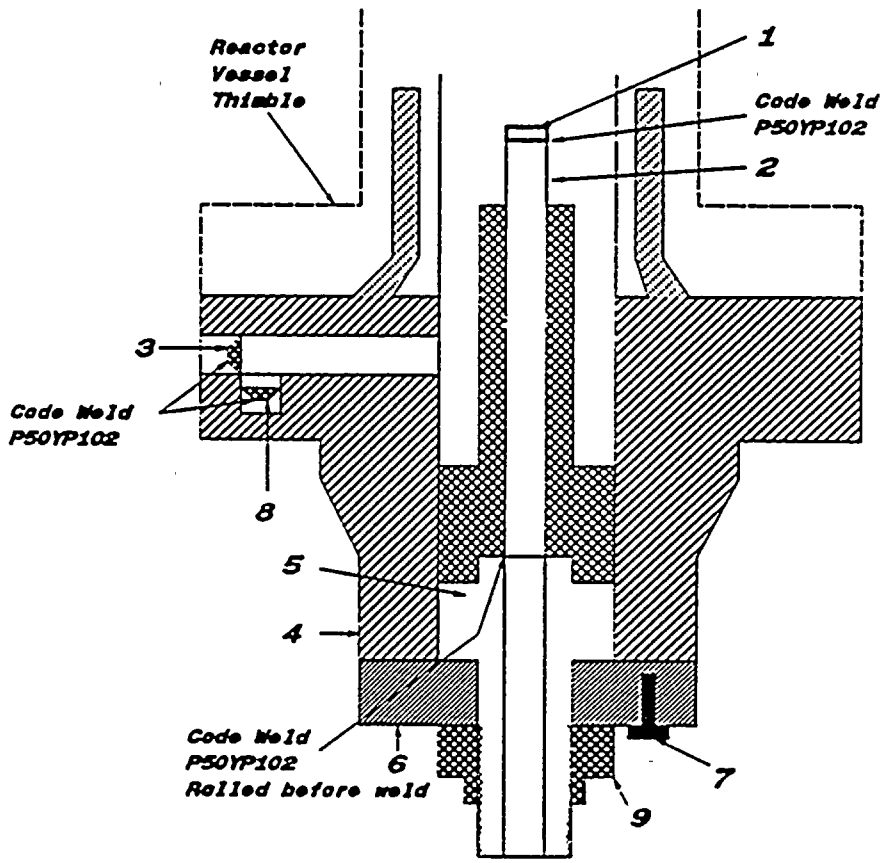
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



WO No XY 8329

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	7157	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	General Electric	A9350	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 7157. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 7157. Liquid penetrant (PT) examination results unacceptable
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9350
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9350
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 7157, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9350, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9350

WO No XY 8329

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9350

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By

Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding

Date 8/12/96 Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/26/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Commissions 7456, 7456-W, NB-IS-IT

Inspector's Signature National Board, State, and Endorsements

Date 8/26/96

((WO NO. XY 8329

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

Weldup Swgb
8/12/96

1. Manufactured & Certifiec by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9350 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 01/28/93 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

OC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

OC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 1/25, 1993, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

1/22, 1993 Jerome P Evers NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Whe

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8329

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

Rudolph Bunch 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9350 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

(Brief description of service for which component was designed)

1. Cap 166B9274P001
   SA182 - F304
   3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
   SA312 - TP316
   3/4" sch 40 - seamless pipe
   0.113" wall thickness
   1.065" max. dia.

3. Plug 159A1176P001
   SA182 - F304
   1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
   SA182 - F304
   3.37" thick x 9 5/8" OD

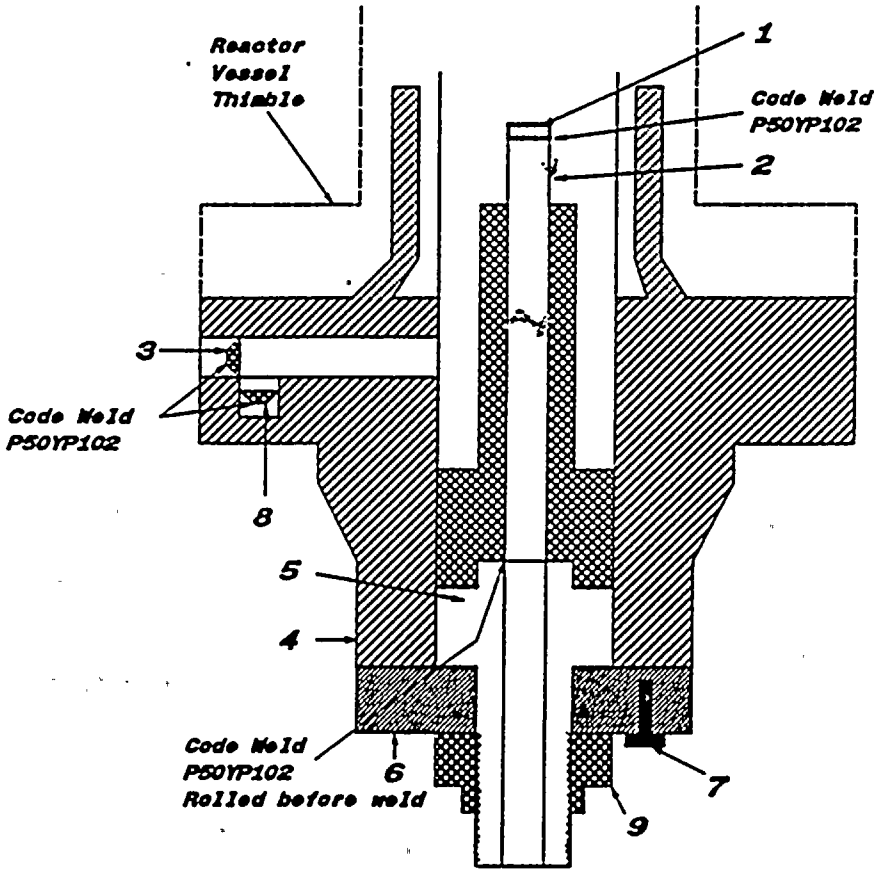
5. Base 137C5311P001
   SA182 - F304
   7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
   137C8151P001, P002
   SA182 - F304
   1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
   SA193 - B6
   6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
   SA182 - F304
   0.38" thick x 1.307" dia.

9. Nut 137C5934P001
   XM - 19 SA479
   1.30" thick x 2.62" dia.



WO No XY 8337

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. **Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/12/96
   Address: 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   Address: Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: See Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	7331	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	General Electric	A9172	N/A	N/A	1992	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Overhauled Control Rod Drive (CRD) assembly Serial No 7331. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:
   1) Disassembled Control Rod Drive (CRD) assembly for overhaul
   2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 7331. Liquid penetrant (PT) examination results unacceptable
   3) Installed new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9172
   4) Reassembled remaining Control Rod Drive (CRD) parts

NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9172
2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 7331, ASME Section III, Code Class 1, 1971 Edition with no Addenda
3) The new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9172, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
4) The entire Control Rod Drive (CRD) assembly is now identified by the new replacement Cylinder Tube And Flange (CT&F) Serial No A9172

WO No XY 8337

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒ None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9172

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By — Supervisor, Materials And Welding

Date 8/12/96

Date 8/13/96

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/19/96 to 8/26/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

Inspector's Signature

Commissions 7486, 7486 W NIS8-IS

National Board, State, and Endorsements

Date 8/26/96

WO No. XY 8337

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

Rudolph Engels 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9172 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 12/22/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/16, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12/22, 1992	Jerome P Evers	NC 1231, Ohio, WC 3686 PA
Date	Inspector's Signature	National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ Inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where)

1 - If Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

WO No. XY 8337

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

Relamp Supt 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

(Name and Address of NPT Certificate Holder)

(b) Manufactured for : WNP 2 Richland, Washington 99352

(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A9172 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.

(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
   SA182 - F304
   3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
   SA312 - TP316
   3/4" sch 40 - seamless pipe
   0.113" wall thickness
   1.065" max. dia.

3. Plug 159A1176P001
   SA182 - F304
   1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
   SA182 - F304
   3.37" thick x 9 5/8" OD

5. Base 137C5311P001
   SA182 - F304
   7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
   137C8151P001, P002
   SA182 - F304
   1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
   SA193 - B6
   6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
   SA182 - F304
   0.38" thick x 1.307" dia.

9. Nut 137C5934P001
   XM - 19 SA479
   1.30" thick x 2.62" dia.