

SUPPLEMENT NO. 1
TO APPENDIX C

INSERVICE INSPECTION SUMMARY REPORT
FOR
REFUELING OUTAGE RF93A
JULY 19, 1992 TO JUNE 21, 1993

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

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

COMMERCIAL SERVICE DATE: December 13, 1984

CAPACITY: 1145 MWe

REACTOR PRESSURE VESSEL: Manufacturer: CBIN
State No.: 29936-84W

Serial Number: T-45
Nat'l Bd No.: 8

Prepared By: DPF amey
ISI Engineer

2-16-94
Date

Rudip Supb
Repair/Replacement Engineer

2/15/94
Date

Reviewed & Concurred By: [Signature]
Supervisor, NDE/ISI Services

2-17-94
Date

RTMcan
Manager, Materials and Inspection

2-16-94
Date

HPaul for CRNoyce
Manager, Engineering Programs

2-17-94
Date

RLWicks
Manager, Technical Services

2/17/94
Date

Jeff A Benjamin
Manager, Plant Quality Assessment

3/4/94
Date

Approved By: [Signature]
Plant Manager

3/11/94
Date

Concurrence: [Signature]
Authorized Nuclear Inservice Inspector

3/15/94
Date

9403290168 940316
PDR ADDCK 05000397
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SUPPLEMENT No 1
ISI SUMMARY REPORT RF93A

APPENDIX C

ASME SECTION XI REPAIR AND REPLACEMENT LISTING
NIS-2 OWNER'S REPORTS

This appendix summarizes ASME Section XI repair or replacement work performed between July 19, 1992 and June 21, 1993 and the work plans closed out between July 19, 1992 and February 14, 1994. The status of the NIS-2 Owner's Report is stated for each repair and replacement work performed. Additions to Supplement No 1 are noted with an asterisk (*).

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ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR WNP-2

PLAN NO	MWR NO	COMPONENT NUMBER / WORK DESCRIPTION	DESC OF COMP	R&R REPORTED IN
2-0728	AR 6375	Replaced mechanical seal for pump FPC-P-1A	Pump	RF93A Summary Report
2-0729	AR 6375	Installed pump case vent for pump FPC-P-1A	Piping	See Note 1
2-0737	AR 7283	Modified test connection with valves HPCS-V-37 and HPCS-V-38	Piping	RF93A Summary Report
2-0739	AR 7285	Modified test connection with valves LPCS-V-37 and LPCS-V-38	Piping	RF93A Summary Report
2-0740	AR 7299	Modified test connection with valves RHR-V-157C and RHR-V-158C	Piping	RF93A Summary Report
2-0742 *	AR 6196	Installed fill and vent lines for tank DO-TK-1A	Piping	RF93A Summary Report *
2-0742 *	AR 6453	Installed fill and vent lines for tank DO-TK-1A	Piping	RF93A Summary Report *
2-0743 *	AR 6196	Installed fill and vent lines for tank DO-TK-1B	Piping	RF93A Summary Report *
2-0743 *	AR 6455	Installed fill and vent lines for tank DO-TK-1B	Piping	RF93A Summary Report *
2-0744 *	AR 6196	Installed fill and vent lines for tank DO-TK-2	Piping	RF93A Summary Report *
2-0744 *	AP 0023	Installed fill and vent lines for tank DO-TK-2	Piping	RF93A Summary Report *
2-0771	AR 9071	Fabricated and installed restriction orifice for SW-FE-69A	Piping	RF93A Summary Report
2-0772	AR 9072	Fabricated and installed restriction orifice for SW-FE-69B	Piping	RF93A Summary Report
2-0777	AR 7431	Replaced body to bonnet bolting for valve RHR-V-50B	Valve	RF93A Summary Report
2-0778	AR 6913	Performed work for JCI support B-220-1077-145	Support	RF93A Summary Report
2-0779	AR 6913	Performed work for PDM reinforcement structural steel	Support	RF93A Summary Report
2-0780	AR 7435	Modified test connection with valves RHR-V-157B and RHR-V-158B	Piping	RF93A Summary Report
2-0782	AR 7425	Modified test connection with valves HPCS-V-713 and HPCS-V-714	Piping	RF93A Summary Report
2-0789 *	AR 6376	Replaced mechanical seal for pump FPC-P-1B	Pump	RF93A Summary Report *
2-0790 *	AR 6376	Installed pump case vent for pump FPC-P-1B	Piping	See Note 1 *
2-0806	AR 4935	Replaced stem/disc assembly for valve MS-V-1	Valve	RF93A Summary Report
2-0817	AR 7595	Replaced disc insert for relief valve CCH-RV-2A	Relief valve	RF93A Summary Report
2-0819	AR 8426	Installed test port for relief valve HPCS-RV-35	Relief Valve	RF93A Summary Report
2-0820	AR 6609	Removed scratches on the disc seating surface for valve MS-V-41	Valve	RF93A Summary Report
2-0823 *	AR 5436	Replaced bolting material for OG-HX-1B	Heat Exchanger	RF93A Summary Report *
2-0826	AR 5436	Plugged tube for heat exchanger OG-HX-1B	Heat Exchanger	RF93A Summary Report
2-0832 *	AR 6353	Replaced rear disc assembly for valve CVB-V-1GH	Valve	RF93A Summary Report *
2-0851	AR 8906	Machined defects on plug seating surface for valve RHR-FCV-64B	Valve	RF93A Summary Report
2-0852	AR 8990	Replaced wedge for valve RHR-V-27B	Valve	RF93A Summary Report
2-0853	AR 9103	Replaced relief valve HPCS-RV-35 inlet piping material	Piping	RF93A Summary Report
2-0855	AR 8988	Replaced disc for relief valve RHR-RV-25A	Relief valve	RF93A Summary Report
2-0859	AR 9075	Installed cathodic protection for spray pond siphon pipe - Spray Pond 1B	Piping	RF93A Summary Report
2-0860	AR 9080	Removed vent valves SW-V-168B and SW-V-169B	Piping	RF93A Summary Report
2-0869	AP 0086	Modified connection with failed weld for valve FPC-V-730	Piping	RF93A Summary Report
2-0871	AR 9426	Fabricated and installed restriction orifice for SW-RO-12A	Piping	RF93A Summary Report
2-0872 *	AR 9427	Fabricated and installed restriction orifice for SW-RO-12B	Piping	RF93A Summary Report *
2-0873	AR 9977	Installed thermowells and annubars in SW piping (DG-1)	Piping	RF93A Summary Report
2-0874	AR 9976	Installed thermowells and annubars in SW piping (DG-2)	Piping	RF93A Summary Report
2-0875	AP 0081	Installed thermowells in SW piping (DG-3)	Piping	RF93A Summary Report
2-0877	AR 9070	Body to bonnet seal weld for valve SW-V-931B	Valve	RF93A Summary Report
2-0878	AP 0686	Installed flushing taps for Scram Discharge Volume (SDV - CRD)	Piping	RF93A Summary Report
2-0882 *	AP 0428	Modified connection for RRC-V-96 and RRC-V-97	Piping	RF93A Summary Report *
2-0883 *	AP 0103	Replaced service water piping for LPCS-M-P1	Piping	RF93A Summary Report *
2-0886	AP 0421	Modified connection with valve PI-V-901	Piping	RF93A Summary Report
2-0887 *	AP 0438	Body to bonnet seal weld for valve DO-V-1A	Valve	RF93A Summary Report *
2-0889	AP 0244	Replaced disc insert and nozzle for relief valve S/N 63790-00-0120	Relief Valve	RF93A Summary Report
2-0890	AP 0245	Replaced disc insert and nozzle for relief valve S/N 63790-00-0057	Relief Valve	RF93A Summary Report
2-0891	AP 0246	Replaced disc insert and nozzle for relief valve S/N 63790-00-0122	Relief Valve	RF93A Summary Report
2-0893	AP 0644	Refurbished and reinstalled MS-RV-3D, S/N N63790-00-0126	Relief Valve	RF93A Summary Report
2-0894 *	AP 0643	Refurbished and reinstalled MS-RV-2A, S/N N63790-00-0054	Relief Valve	RF93A Summary Report *
2-0895 *	AP 0642	Replaced existing relief valve MS-RV-1B with spare S/N N63790-00-0120	Relief Valve	RF93A Summary Report *
2-0896 *	AP 0641	Replaced existing relief valve MS-RV-2C with spare S/N N63790-00-0122	Relief Valve	RF93A Summary Report *
2-0897	AP 0640	Replaced existing relief valve MS-RV-3C with spare S/N N63790-00-0052	Relief Valve	RF93A Summary Report
2-0898	AP 0639	Replaced existing relief valve MS-RV-3A with spare S/N N63790-00-0057	Relief Valve	RF93A Summary Report
2-0900	AP 0427	Installed lap joint flange for relief valve RHR-RV-88B	Piping	See Note 1
2-0903 *	AP 1216	Prefabricated piping subassembly for cross tie between FPC and EDR systems	Piping	RF93A Summary Report *
2-0905	AR 8762	Body to bonnet seal weld for valve DO-V-41A	Valve	See Plan No 2-0959
2-0910	AP 2671	Replaced relief valve RHR-RV-36 with blind flanges - Pre outage	Piping	RF93A Summary Report
2-0910	AP 1457	Replaced relief valve RHR-RV-36 with blind flanges - Outage	Piping	RF93A Summary Report

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ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR WNP-2

PLAN NO	MWR NO	COMPONENT NUMBER / WORK DESCRIPTION	DESC OF COMP	R&R REPORTED IN
2-0911	AP 2245	Removed drain connection with valves MS-V-238B and MS-V-239	Piping	RF93A Summary Report
2-0913	AP 0081	Installed Instrument tubing for SW-FT-9	Tubing	See Note 1
2-0914	AR 8980	Body to bonnet seal weld for valve SW-V-36	Valve	RF93A Summary Report
2-0915	AR 8981	Body to bonnet seal weld for valve SW-V-37	Valve	RF93A Summary Report
2-0917	AR 9069	Body to bonnet seal weld for valve SW-V-109A	Valve	RF93A Summary Report
2-0918	AP 0388	Replaced disc for relief valve RRC-RV-34A	Relief Valve	See Note 1
2-0919 *	AR 1933	Machined surface defects on disc seating surface for valve FPC-V-178	Valve	See Note 1 *
2-0923	AP 1954	Refurbished and reinstalled MS-RV-2B, S/N N63790-00-0049	Relief Valve	RF93A Summary Report
2-0924 *	AP 1953	Refurbished and reinstalled MS-RV-5B, S/N N63790-00-0061	Relief Valve	RF93A Summary Report *
2-0925 *	AP 1950	Refurbished and reinstalled MS-RV-2D, S/N N63790-00-0124	Relief Valve	RF93A Summary Report *
2-0926	AP 1952	Refurbished and reinstalled MS-RV-3B, S/N N63790-00-0053	Relief Valve	RF93A Summary Report
2-0927	AP 1951	Refurbished and reinstalled MS-RV-1C, S/N N63790-00-0046	Relief Valve	RF93A Summary Report
2-0928 *	AP 1955	Refurbished and reinstalled MS-RV-1A, S/N N63790-00-0048	Relief Valve	RF93A Summary Report *
2-0930 *	AP 3068	Installed new valve RCIC-V-50	Piping	RF93A Summary Report *
2-0931 *	AP 3068	Modified tubing associated with RCIC-PS-1	Tubing	See Note 1 *
2-0942 *	AP 0348	Replaced Local Power Range Monitoring (LPRM) in core assemblies	RPV	RF93A Summary Report *
2-0945	AP 3471	Installed and seal welded leak off connection for valve MS-V-146	Valve	See Plan No 2-0958
2-0947 *	AP 1992	Replaced bolting material for flange joints on Dwg RCIC-659-27.28	Piping	RF93A Summary Report *
2-0950 *	AP 3425	Refurbished and reinstalled MS-RV-5C, S/N N63790-00-0062	Relief Valve	RF93A Summary Report *
2-0951 *	AP 1992	Replaced bolting material for RPV Nozzle N8	Vessel	RF93A Summary Report *
2-0952 *	AP 1953	Replaced bolting material for CIA-FLX-1U flanged joints	Piping	RF93A Summary Report *
2-0953	AP 3765	Modified Instrument lines PI(1)-4S-X37e and PI(1)-4S-X37f	Piping	See Note 1
2-0954 *	AP 3777	Installed low point drains for hydrogen recombiner CAC-HR-1A	Piping/Tubing	See Note 1 *
2-0955 *	AP 3777	Installed low point drains for hydrogen recombiner CAC-HR-1A	Piping/Tubing	See Note 1 *
2-0956 *	AP 3778	Installed low point drains for hydrogen recombiner CAC-HR-1B	Piping/Tubing	See Note 1 *
2-0957 *	AP 3778	Installed low point drains for hydrogen recombiner CAC-HR-1B	Piping/Tubing	See Note 1 *
2-0958	AP 3471	Installed and seal welded leak off connection for valve MS-V-146	Valve	See Note 1
2-0959	AR 8762	Replaced valve DO-V-41A	Valve	See Note 1
2-0960 *	AP 3851	Installed low point drains for hydrogen recombiner CAC-HR-1A	Piping/Tubing	See Note 1 *
2-0961 *	AP 3852	Installed low point drains for hydrogen recombiner CAC-HR-1B	Piping/Tubing	See Note 1 *
2-0962 *	AP 2589	Replace valve SW-V-937	Piping	See Note 1 *
2-0967 *	AP 1604	Replaced parts for valve SLC-V-4A	Valve	RF93A Summary Report *
2-0968 *	AP 2286	Installed cover plate in place hinge pin plug for valve RFW-V-10B	Valve	RF93A Summary Report *
2-0970	AP 4031	Installed U bolt for support B-220-1073-35 on Dwg D-220-9.0-X39d	Tubing	See Note 1
N/A	AP 0797	Replaced snubbers for support MD-1285-14A and MD-1287-11	Supports	RF93A Summary Report

* Added per Supplement No 1

Note 1 NIS-2 form not required. Replacement work for one (1) inch nominal pipe size (NPS) and smaller



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
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:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 8/27/93

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
MS-RV-5B	Crosby	N63790-00-0061	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced disc insert and nozzle for main steam relief valve MS-RV-5B, Serial No N63790-00-0061. The replacement work was performed as follows

- 1) Removed existing disc insert and nozzle from the valve
- 2) Installed new disc insert and nozzle in the valve
- 3) Reinstalled the valve
- 4) Installed one (1) new nut and two (2) new studs for the valve inlet nozzle
- 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0924

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 1005/6.7 Psig Test Temperature: 538/89.7° F
Component Design Pressure: 1250/500 Psig Temperature: 575/470° F

9. Remarks: 1) Nominal operating pressure test on relief valve inlet flanged joint - test pressure of 1005 Psig and test temperature of 538° F, 2) Pneumatic test on relief valve outlet joint, body to bonnet joint, nozzle ring and adjusting ring set screw joints - test pressure of 6.7 Psig and test temperature of 89.7° F, 3) Component design pressure and temperature - 1250 Psig at 575° F for relief valve inlet piping and 500 Psig at 470° F for relief valve outlet piping, 4) Relief valve set pressure and rated temperature - 1205 Psig at 575° 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 Quaid Supb Signed By R. A. Moen
Materials And Inspection Manager, Materials And Inspection

Date 8/27/93 Date 8-30-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 4-30-93 to 8-31-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

DM Xbggath Commissions 9556W NBI
Inspector's Signature National Board, State, and Endorsements
Date 8-31-93



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
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:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 8/27/93

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
MS-RV-1A	Crosby	N63790-00-0048	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced disc insert and nozzle for main steam relief valve MS-RV-1A, Serial No N63790-00-0048. The replacement work was performed as follows
- 1) Removed existing disc insert and nozzle from the valve
 - 2) Installed new disc insert and nozzle in the valve
 - 3) Reinstalled the valve
 - 4) Installed one (1) new bolt for the valve outlet nozzle
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test





WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0928

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

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

Test Pressure: 1005/6.8 Psig

Test Temperature: 538/88.8° F

Component Design Pressure: 1250/500 Psig

Temperature: 575/470° F

9. Remarks: 1) Nominal operating pressure test on relief valve inlet flanged joint - test pressure of 1005 Psig and test temperature of 538° F, 2) Pneumatic test on relief valve outlet joint, body to bonnet joint, nozzle ring and adjusting ring set screw joints - test pressure of 6.8 Psig and test temperature of 88.8° F, 3) Component design pressure and temperature - 1250 Psig at 575° F for relief valve inlet piping and 500 Psig at 470° F for relief valve outlet piping, 4) Relief valve set pressure and rated temperature - 1175 Psig at 575° 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 Philip Supb.
Materials And Inspection

Signed By RT Moore
Manager, Materials And Inspection

Date 8/27/93

Date 8-30-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 4-30-93 to 8-31-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

DM Hoggarth
Inspector's Signature

Commissions 9556W NBI
National Board, State, and Endorsements

Date 8-31-93



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
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:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 8/27/93

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
MS-RV-2D	Crosby	N63790-00-0124	N/A	N/A	1981	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced disc insert and nozzle for main steam relief valve MS-RV-2D, Serial No N63790-00-0124. The replacement work was performed as follows
- 1) Removed existing disc insert and nozzle from the valve
 - 2) Installed new disc insert and nozzle in the valve
 - 3) Reinstalled the valve
 - 4) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

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: 1005/6.8 Psig Test Temperature: 538/82.4° F
 Component Design Pressure: 1250/500 Psig Temperature: 575/470° F

9. Remarks: 1) Nominal operating pressure test on relief valve inlet flanged joint - test pressure of 1005 Psig and test temperature of 538° F, 2) Pneumatic test on relief valve outlet joint, body to bonnet joint, nozzle ring and adjusting ring set screw joints - test pressure of 6.8 Psig and test temperature of 82.4° F, 3) Component design pressure and temperature - 1250 Psig at 575° F for relief valve inlet piping and 500 Psig at 470° F for relief valve outlet piping, 4) Relief valve set pressure and rated temperature - 1185 Psig at 575° 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 Rudip Supit Signed By R. Moore
 Materials And Inspection Manager, Materials And Inspection
 Date 8/21/93 Date 8-30-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 4-30-93 to 8-31-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Vlogar Commissions 9556 W NBI
 Inspector's Signature National Board, State, and Endorsements
 Date 8-31-93



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

Date: 10/7/93

Sheet: 1 of 1

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)

Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

3. (a) Work Performed By: Bechtel Construction, Inc, PO Box 600, Richland, WA

(b) Repair Organization P.O. No, Job No, etc.: C20069

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 Winter 1980 Addenda, Code Case: N-308

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(1)-4CL2 RCIC(50)-1	WPPSS WPPSS	RCIC(1)-4CL2-P1 RCIC(50)-1-P1	N/A N/A	N/A N/A	1984 1983	Replacement Replacement	Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Installed new valve RCIC-V-50. The work was performed as follows

- 1) Installed new piping material
- 2) Installed new valve
- 3) Made required socket welds
- 4) Performed PT examination on the final socket welds. PT examination results acceptable
- 5) Installed new bolting material for the flanged joint
- 6) Installed new support material
- 7) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0930

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

8 Tests Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 1650/113 Psig Test Temperature: 74.7° F
Component Design Pressure: 1500/100 Psig Temperature: 170° F

9. Remarks: 1) See attached NPV-1 Code Data Report for the new valve RCIC-V-50, Serial No 921S0404, 2) Hydrostatic test on the welded joints in the high pressure portion of the system - test pressure of 1650 Psig and test temperature of 74.7° F, 3) Hydrostatic test on the welded joints in the low pressure portion of the system - test pressure of 113 Psig and test temperature of 74.7° F, 4) Nominal operating pressure test on the flanged joint - test pressure of 946 Psig and test temperature of 534° 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 - Materials And Inspection

Signed By R. A. Man
Manager, Materials And Inspection

Date 10/7/93

Date 10-7-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-18-93 to 10-12-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Dan Hoggarth
Inspector's Signature

Commissions 9556W NBI
National Board, State, and Endorsements

Date 10-12-93

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

Pg. 1 of 2

10/7/93

Buland Supp

1. Manufactured and certified by BW/IP INTERNATIONAL, INC. PUMP DIVISION LOS ANGELES OPERATIONS
2300 EAST VERNON AVENUE VERNON, CA 90058
(name and address of N Certificate Holder)
2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM NORTH POWER PLANT LOOP RICHLAND, WA 99352
(name and address of Purchaser)
3. Location of installation WASHINGTON PUBLIC POWER SUPPLY SYSTEM NORTH POWER PLANT LOOP RICHLAND, WA 99352
(name and address)
4. Model No., Series No., or Type GLOBE Drawing 76850001 Rev. D CRN N/A
5. ASME Code, Section III, Division 1: 1971 WINTER *73 I N/A
(edition) (addenda date) (class) (Code Case no.)
6. Pump or valve VALVE Nominal inlet size 2 Outlet size 2
(in.) (in.)
7. Material: Body SSA-105 Bonnet SA-105 Disk STELLITE #6 Bolting N/A

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
921S0402	N/A	RS 222210	RS 222221	RS 222225-1
921S0403	N/A	RS 222211	RS 222222	RS 222225-2
921S0404	N/A	RS 222212	RS 222223	RS 222225-3
<u>RCIC-V-50, S/N 921S0404</u>				

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

921S0402
921S0403
921S0404

Certificate Holder's Serial No.

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

CERTIFICATION OF DESIGN

Design Specification certified by RICHARD LESLIE SCHLOSSER P.E. State WA Reg. no. 21701
Design Report certified by RAJ CHAUDHARY P.E. State CA Reg. no. 20608

CERTIFICATE OF COMPLIANCE

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

N Certificate of Authorization No. N-1130 Expires JUNE 10, 1993

Date 5-15-92 Name BN/TP INTERNATIONAL, INC. Signed [Signature]
(N Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by *ARKWRIGHT MUTUAL INS. CO. of NORWOOD, MASS. have inspected the pump, or valve, described in this Data Report on MAY 15, 1992, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

*FACTORY MUTUAL SYSTEM

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

Date 5/15/92 Signed [Signature] Commissions 1275 CB
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.



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:** 9/29/93
Address: 3000 George Washington Way, Richland, Washington **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
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
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	8	N/A	1974	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
- 2) Installed new Local Power Range Monitoring (LPRM) Incore assemblies



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 following new Local Power Range Monitoring (LPRM) incore assemblies

Core Location	LPRM Serial No
48-41	J8991
32-25	J8989
40-17	J8987
16-49	J8986
40-09	J8988
16-09	J8990

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 RAMAN
 Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 9/29/93 Date 9-29-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 4/27/93 to 9/30/93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

DM Hoggarth Commissions 9556 W NBI
 Inspector's Signature National Board, State, and Endorsements
 Date 9/30/93

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES 9/29/83

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by GE/REUTER-STOKES, INC. 8499 DARROW ROAD, TWINSBURG, OH 44087
(Name and address of Manufacturer of part)
- (b) Manufactured for WNP-2 (HANFORD) WPPSS - RICHLAND, WA 99352
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part J8986 THRU J8991 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/A 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 10-12 1990 Signed GE/REUTER-STOKES By James V. Helms
(Manufacturer) QUALITY ASSURANCE

Certificate of Authorization Expires SEPTEMBER 16, 1991 Certificate of Authorization No. N-2703

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE/REUTER-STOKES, INC. TWINSBURG, OH DC24A1257AK

Stress analysis report on file at GE/REUTER-STOKES, INC. TWINSBURG, OH CDR-C-5320-43

Design specifications certified by WEI-CHI KUNG Prof. Eng. State CA Reg. No. M21125

Stress analysis report certified by SURINDER L. KAMPANI Prof. Eng. State OH Reg. No. E034113

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 1990, 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 1990

James C. Schell Commissions NB 7920-OH10 - PAWC 2454-N
Inspector's Signature National Board, State, Province and No.



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:** 9/3/93
Address: 3000 George Washington Way, Richland, Washington **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
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
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(1)-4A	WPPSS	MS(1)-4A-P3	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced bolting material for the RPV head nozzle N-8 flanged joint. The replacement work was performed as follows

- 1) Install new studs and nuts for the flanged joint
- 2) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0951

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 1005 Psig Test Temperature: 530° F
Component Design Pressure: 1250 Psig 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 Signed By R. A. Moore
Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 9/3/93 Date 9-3-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-21-93 to 9-8-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Dan Hoggarth Commissions 9556W NBI
Inspector's Signature National Board, State, and Endorsements

Date 9/8/93



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

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Bechtel Construction, Inc, PO Box 600, Richland, WA

(b) Repair Organization P.O. No, Job No, etc.: C20069

4. Identification Of System: Diesel Oil (DO) 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 Winter 1980 Addenda, Code Case: N-308

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
DO(1)-1A DO(9)-1A	WPPSS WPPSS	DO(1)-1A-P2 DO(9)-1A	N/A N/A	N/A N/A	1983 1982	Replacement Replacement	Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work Performed: Installed/modified vent, fill, etc lines associated with storage tank DO-TK-1A. The work was performed as follows

- 1) Installed new pipe and plate material for the drop pipe
- 2) Made required welds for the drop pipe
- 3) Installed new pipe and fitting material for the fill, vent and pump out lines
- 4) Made required welds for the fill, vent and pump out lines
- 5) Installed new bolting material for the flanged joints
- 6) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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: 40 to 41.6 Psig Test Temperature: 67.6 to 71.9° F
 Component Design Pressure: Atm/12 Psig Temperature: 120° F

9. Remarks: 1) The minimum pneumatic test pressure of 40 Psig is based on engineering evaluation and not the component design pressure, 2) Performed VT-2 visual examination on the flanged joints while the storage tank DO-TK-1A was being filled with diesel oil. Pressure and temperature was not required to be recorded

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 R. A. Moore
 Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
 Date 9/20/93 Date 9-20-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 11-17-92 to 9-22-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Abgar Commissions 956W NBI
 Inspector's Signature National Board, State, and Endorsements
 Date 9/22/93



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Bechtel Construction, Inc, PO Box 600, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** C20069
4. **Identification Of System:** Diesel Oil (DO) 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 Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 9/20/93

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
DO(1)-1-HPCS DO(9)-1-HPCS	WPPSS WPPSS	DO(1)-1-HPCS-P1 DO(9)-1-HPCS	N/A N/A	N/A N/A	1982 1982	Replacement Replacement	Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work Performed: Installed/modified vent, fill, etc lines associated with storage tank DO-TK-2. The work was performed as follows

- 1) Installed new pipe and plate material for the drop pipe
- 2) Made required welds for the drop pipe
- 3) Installed new pipe and fitting material for the fill, vent and pump out lines
- 4) Made required welds for the fill, vent and pump out lines
- 5) Installed new bolting material for the flanged joints
- 6) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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: 40 to 41.6 Psig Test Temperature: 65.7 to 93.4° F
 Component Design Pressure: Atm/12 Psig Temperature: 120° F

9. Remarks: 1) The minimum pneumatic test pressure of 40 Psig is based on engineering evaluation and not the component design pressure, 2) Performed VT-2 visual examination on the flanged joints while the storage tank DO-TK-2 was being filled with diesel oil. Pressure and temperature was not required to be recorded

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 R. Amou
 Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 9/20/93 Date 9-20-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 11-17-92 to 9-22-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Dr. Hyggan Commissions 9556W NBI
 Inspector's Signature National Board, State, and Endorsements

Date 9-22-93



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Bechtel Construction, Inc, PO Box 600, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** C20069
4. **Identification Of System:** Diesel Oil (DO) 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 Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 9/20/93

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
DO(1)-1B DO(9)-1B	WPPSS WPPSS	DO(1)-1B-P2 DO(9)-1B	N/A N/A	N/A N/A	1983 1982	Replacement Replacement	Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work Performed: Installed/modified vent, fill, etc lines associated with storage tank DO-TK-1B. The work was performed as follows

- 1) Installed new pipe and plate material for the drop pipe
- 2) Made required welds for the drop pipe
- 3) Installed new pipe and fitting material for the fill, vent and pump out lines
- 4) Made required welds for the fill, vent and pump out lines
- 5) Installed new bolting material for the flanged joints
- 6) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0743

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Other ☐ None
Test Pressure: 40 to 41.6 Psig Test Temperature: 67.6 to 97° F
Component Design Pressure: Atm/12 Psig Temperature: 120° F

9. Remarks: 1) The minimum pneumatic test pressure of 40 Psig is based on engineering evaluation and not the component design pressure, 2) Performed VT-2 visual examination on the flanged joints while the storage tank DO-TK-1B was being filled with diesel oil. Pressure and temperature was not required to be recorded

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 Rudip Singh
Rudip Singh - Materials And Inspection

Signed By R. Amou
Manager, Materials And Inspection

Date 9/20/93

Date 9-20-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 11-17-92 to 9-22-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

John Haggart
Inspector's Signature

Commissions 9556W NBI
National Board, State, and Endorsements

Date 9/22/93



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:** 12/7/93
Address: 3000 George Washington Way, Richland, Washington **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
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
4. **Identification Of System:** Fuel Pool Cooling (FPC) System
5. **(a) Applicable Construction Code:** ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
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
FPC-P-1B	Worthington	44 000019A (3 LR 9)	24	N/A	1977	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced mechanical seal (gland plate) for pump FPC-P-1B. The replacement work was performed as follows

- 1) Removed existing mechanical seal (gland plate) from the pump
- 2) Installed new mechanical seal (gland plate) in the pump
- 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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: 84 Psig Test Temperature: 88° F
 Component Design Pressure: 150 Psig Temperature: 212° 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 Ruldip Singh Signed By R. A. Man
 Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 12/10/93 Date 12-13-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 2-19-93 to 12-8-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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. Hoggath Commissions 9556 W NBI
 Inspector's Signature National Board, State, and Endorsements
 Date 12/14/93



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

Date: 1/27/94

Sheet: 1 of 1

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)

Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

3. (a) Work Performed By: Bechtel Construction, Inc, PO Box 600, Richland, WA

(b) Repair Organization P.O. No, Job No, etc.: C20069

4. Identification Of System: Off Gas (OG) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with no Addenda, Code Case: None

(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308

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
OG-HX-1B	GE	223717	57776	N/A	1974	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced bolting material for head cover to channel bolted joint for OG-HX-1B. The replacement work was performed as follows

- 1) Installed new studs for head cover to channel bolted joint
- 2) Installed new nuts for head cover to channel bolted joint



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0823

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 Materials And Inspection

Signed By R. A. Moore 1-27-94
Manager, Materials And Inspection

Date 1/27/94 Date 1-27-94

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts, have inspected the components described in this Owner's Report during the period 5/2/92 to 1/27/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Vlogarath
Inspector's Signature

Commissions 9556 W N.B.I
National Board, State, and Endorsements

Date 1/28/94



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:** 12/29/93
Address: 3000 George Washington Way, Richland, Washington **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
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
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	1978	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced rear disc assembly for valve CVB-V-1GH. The replacement work was performed as follows

- 1) Removed existing rear disc assembly from the valve
- 2) Installed new rear disc assembly in the valve
- 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

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 ☒

Test Pressure:*

Test Temperature: 82.7° F

Component Design Pressure:**

Temperature: 275° F

9. Remarks: See attached N-2 Code Data Report for the new rear disc assembly, Serial No A773-1

* Test Pressure - 128.7 inches of water

** Component Design Pressure - 0.150 to 0.350 Psid

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

Kuldeep Singh - Materials And Inspection

Signed By

Manager, Materials And Inspection

Date

12/29/93

Date

12-29-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5/15/92 to 12/30/93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Inspector's Signature

Commissions

9556 W

NBI

National Board, State, and Endorsements

Date

12/30/93

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

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

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

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

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

(a) _____

(b) _____

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

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

8. Design pressure² _____ psi at _____ °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 _____ in. or gage. Number _____ Type _____
(Str. or U)

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

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

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

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

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

(a) Top, bottom, ends _____

(b) Channel _____

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

14. Design pressure² _____ psi at _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

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

17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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

¹ If Postweld Heat-Treated.

² List other 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 S/O 02.1066.02.. P.O. 073064-02..

1. (a) Manufactured by Anderson, Greenwood & Co., 5425 S. Rice Ave., Houston, TX 77081
(Name and address of Manufacturer of part)
- (b) Manufactured for Washington Public Power Supply System WNP-2 OPS WHS Complex, WHS #1 N Power Plant Loop, Richland,
(Name and address of Manufacturer of completed nuclear component) WA 99352
2. Identification-Manufacturer's Serial No. of Part A773-1 Nat'l Id. No. N/A
- (a) Constructed According to Drawing No. N04-3861-002 Drawing Prepared by Anderson, Greenwood & Co.
- (b) Description of Part Inspected Disc Assy Magnetic (Rear)
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date S-75, Case No. N/A Class 2
3. Remarks: Replacement part
(Brief description of service for which component was designed)

Plan No. 2-0832

Rudip Supri

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 6-27 19 88 Signed Anderson, Greenwood & Co., Joseph A. Parks
(Manufacturer)

Certificate of Authorization Expires 8-4-90 Certificate of Authorization No. N2204

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at Anderson, Greenwood & Co.

Stress analysis report on file at N/A

Design specifications certified by David M. Bosi Prof. Eng. State WA Reg. No. 20941

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

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 TX and employed by C.U.I.C. of Boston, MA have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 6-29 19 88 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 6-29 19 88
Inspector's Signature [Signature] Commissions [Signature] National Board, State, Province and No. 1027

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


**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:** 9/9/93
Address: 3000 George Washington Way, Richland, Washington **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
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
4. **Identification Of System:** Service Water System (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 Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

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

7. Description Of Work Performed: Installed restricting orifice plate for SW-RO-12B. The replacement work was performed as follows

- 1) Fabricated new restricting orifice plate
- 2) Removed existing spacer ring from the piping system
- 3) Installed new restricting orifice plate in the piping system
- 4) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0872

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 214 Psig Test Temperature: 64° F
Component Design Pressure: 309 Psig 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 Signed By R. Amos
Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 9/17/93 Date 9-20-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 1-14-93 to 9-9-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Dan Hoggan Commissions 9556 W NBI
Inspector's Signature National Board, State, and Endorsements
Date 9/22/93



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:** 8/30/93
Address: 3000 George Washington Way, Richland, Washington **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:** Bechtel Construction, Inc, PO Box 600, Richland, WA
 (b) **Repair Organization P.O. No, Job No, etc.:** C20069
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:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
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	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Fabricated and installed modified connection with valves RRC-V-96 and RRC-V-97. The fabrication and installation work was performed as follows

- 1) Fabricated pipe nipple
- 2) Performed PT examination on the final machined surfaces of the pipe nipple. PT examination results acceptable
- 3) Beveled the socket ends of the new valves for butt welding
- 4) Performed PT examination on the beveled ends of both the valves. PT examination results acceptable
- 5) Cut and removed the existing connection
- 6) Installed pipe nipple and valves and made required welds
- 7) Performed PT examination on the final welds. PT examination results acceptable
- 8) Performed RT examination on the final circumferential butt welds. RT examination results acceptable



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0882

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 following new valves

EPN No	Serial No
RRC-V-96	PB 1150
RRC-V-97	PB 1153

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 - Materials And Inspection

Signed By Atman
Manager, Materials And Inspection

Date 8/30/93

Date 8-31-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 1-12-93 to 9-2-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Xlogarth
Inspector's Signature

Commissions 9556 W NBI
National Board, State, and Endorsements

Date 9-2-93

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

PLAN No. 2-0882

- (a) Model No., (b) N Certificate Holder's (c) Canadian

(g) Year
Built

(10) Kuldip Singh

INFORMATION ONLY

Puldip Singh

8/30/93.

- (Brief description of service for which equipment was designed)

6. Design Conditions 3600 psi 100 °F or Valve Pressure Class _____ (1)
(Pressure) (Temperature)
7. Cold Working Pressure 3600 psi at 100°F.
8. Pressure Retaining Places _____

[illegible]

(1) For manually operated valves only.

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

(10/77)

This form (F00037) may be obtained from the Order Dept. ASME 745 E 47th St. New York 17, N.Y. 10017



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Bechtel Construction, Inc, PO Box 600, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** C20069
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 Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 9/16/93

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
SW(1)-2 SW(21)-2	WPPSS WPPSS	SW(1)-2-P1 SW(21)-2-P1	N/A N/A	N/A N/A	1983 1983	Replacement Replacement	Yes, Code Class 3 Yes, Code Class 3

7. **Description Of Work Performed:** Replaced Service Water (SW) supply and return piping to and from the motor oil cooler for LPCS-M-P1. The replacement work was performed as follows
- 1) Cut and removed existing piping and fitting material
 - 2) Installed new piping and fitting material
 - 3) Made required welds



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0883

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 R. A. Moen
Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 9/17/93 Date 9-20-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 10-23-92 to 9/20/93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Abegguth Commissions 9556W NB-I
Inspector's Signature National Board, State, and Endorsements

Date 9/22/93



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:** 8/26/93
Address: 3000 George Washington Way, Richland, Washington **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
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
4. **Identification Of System:** Diesel Oil (DO) System
5. **(a) Applicable Construction Code:** ASME Section III Code Class 3, 1974 Edition with Summer 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
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
DO-V-1A	Borg Warner	64069	N/A	N/A	1981	Repair	Yes, Code Class 3

7. **Description Of Work Performed:** Made body to bonnet seal weld for valve DO-V-1A. The work was performed as follows
- 1) Cut valve body to bonnet seal weld
 - 2) Reinstalled valve internals and the bonnet
 - 3) Made valve body to bonnet seal weld
 - 4) Performed PT examination on the final seal weld. PT examination results acceptable
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0887

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 12 Psig Test Temperature: Ambient
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 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 Dulip Singh
Materials And Inspection

Signed By R. Moen
Manager, Materials And Inspection

Date 8/26/93

Date 8-26-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 11-3-92 to 8-31-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Dan Hoggarth
Inspector's Signature

Commissions 9556 W NBI
National Board, State, and Endorsements

Date 8-31-93



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:** 9/3/83
Address: 3000 George Washington Way, Richland, Washington **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
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
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-RV-2A	Crosby	N63790-00-0054	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced disc insert and nozzle for main steam relief valve MS-RV-2A, Serial No N63790-00-0054. The replacement work was performed as follows
1) Removed existing disc insert and nozzle from the valve
2) Installed new disc insert and nozzle in the valve
3) Reinstalled the valve
4) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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: 1005/6.79 Psig Test Temperature: 538/88.2° F
 Component Design Pressure: 1250/500 Psig Temperature: 575/470° F

9. Remarks: 1) Nominal operating pressure test on relief valve inlet flanged joint - test pressure of 1005 Psig and test temperature of 538° F, 2) Pneumatic test on relief valve outlet joint, body to bonnet joint, nozzle ring and adjusting ring set screw joints - test pressure of 6.79 Psig and test temperature of 88.2° F, 3) Component design pressure and temperature - 1250 Psig at 575° F for relief valve inlet piping and 500 Psig at 470° F for relief valve outlet piping, 4) Relief valve set pressure and rated temperature - 1185 Psig at 575° 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 R. Amma
 Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
 Date 9/3/93 Date 9-3-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 4/30/93 to 9/8/93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Hoggarth Commissions 9580W NBI
 Inspector's Signature National Board, State, and Endorsements
 Date 9/8/93



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
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:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 9/9/83

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
B22-G001B	WPPSS	B22-G001B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-1B. The replacement work was performed as follows
- 1) Removed existing relief valve MS-RV-1B, Serial No N63790-00-0045 with set pressure of 1150 Psig at rated temperature of 575° F
 - 2) Installed replacement relief valve with Serial No N63790-00-0120 with set pressure of 1150 Psig at rated temperature of 575° F
 - 3) Installed one (1) new nut for the valve inlet nozzle and one (1) new bolt for the valve outlet nozzle
 - 4) Performed pressure test to confirm pressure boundary integrity. 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
- 2) ASME Section III Code Class 1, 1971 Edition with no Addenda for the relief valve



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: 1005/6.79 Psig Test Temperature: 538/88.1° F
 Component Design Pressure: 1250/500 Psig Temperature: 575/470° F

9. Remarks: 1) See attached NV-1 Code Data Report for replacement relief valve Serial No N63790-00-0120, 2) Nominal operating pressure test on relief valve inlet flanged joint - test pressure of 1005 Psig and test temperature of 538° F, 3) Pneumatic test on relief valve outlet joint, body to bonnet joint, nozzle ring and adjusting ring set screw joints - test pressure of 6.79 Psig and test temperature of 88.1° F, 4) Component design pressure and temperature - 1250 Psig at 575° F for relief valve inlet piping and 500 Psig at 470° F for relief valve outlet piping, 5) Relief valve set pressure and rated temperature - 1150 Psig at 575° 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 Rudip Singh Signed By RAMon
 Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
 Date 9/17/93 Date 9-20-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 4/30/93 to 9/9/93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Dan Vagganath Commissions 9536W NBI
 Inspector's Signature National Board, State, and Endorsements
 Date 9/22/93

PLAN No. 2-0895

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Outlet Size
1/2" S3.

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
General Electric Company, 175 Curtner Ave.,
2. Manufactured For San Jose, CA 95125 Order No. 205-AJ986
Name and Address
3. Owner Washington Public Power Supply System, Richland, Washington 99352
Name and Address
4. Location of Plant Hanford Reservation, Richland, Washington 99352
5. Valve Identification MPL 0B22-F013 Serial No. 883790-00-0120 Drawing No. DS-A-63790 Rev. C
Type Safety Relief Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Inch Inch Inch Inch
Power Actuated
6. Set Pressure (psig) 1150 575° F
Rated Temperature
- Stamped Capacity 865,725 @ 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. XXXXXXXXXX Bar Stock & Forgings		
Body	<u>N93183-36-0083</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
Bonnet	<u>N93407-36-0102</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
b. XXXXXXXXXX Disc Insert	<u>N93185-37-0152</u>	<u>ASME SA637 Gr. 718</u>
Nozzle	<u>N93184-33-0068</u>	<u>ASME SA182 Gr. F316</u>
Disc Holder *K55484-41-0168	<u>N89714-35-0156</u>	<u>AMS 5662B</u>
Spring Washers K62858-36-0082	<u>K62856-36-0108</u> <u>K62857-36-0134</u>	<u>ASME SA105 Gr. II</u>
Adjusting Bolt	<u>N93410-33-0070</u>	<u>ASME SA193 Gr. B6</u>
Spindle Point K62873-37-0138	<u>N89720-43-0155</u>	<u>ASME SA564 Type 630</u>
c. Spring K62858-36-0082	<u>*N89722-0080</u>	<u>ASTM A304-66 Gr. 4161H</u>
d. Bolting		
e. XXXXXXXXXX Spindle Ball	<u>K62873-37-0138</u>	<u>N93213-0205</u> <u>Stoody #6</u>
Thrust Bearing Adapter	<u>N93409-32-0066</u>	<u>ASME SA193 Gr. B6</u>
Bonnet Stud (BW19)	<u>N93207-1474 thru 1485</u>	<u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u>
Bonnet Stud Nut (J87)	<u>N93210-0985 thru 0996</u>	<u>ASME SA194 Gr. 2H</u>
Inlet Stud (BW21)	<u>N93216-1407 thru 1418</u>	<u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u> <u>ASTM A194-71 Gr. 2H</u>
Inlet Stud Nut (BW22)	<u>N93218-1329 thru 1340</u>	<u>ASME SA194 Gr. 2H</u>
Adjusting Bolt Button	<u>N93411-33-0073</u>	<u>ASME SA193 Gr. B6</u>

... originally built against Crosby Order No. N51727, Assembly No. N56000. Valve
modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts,
Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers,
Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New
Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

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 P. G. Casanova
(N Certificate Holder)

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

symbol expires September 30, 1983.
(Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

43 Kendrick Street, Wrentham, Massachusetts 02093

Design specifications certified by ¹ Boyd P. Brooks

PE State California Reg. No. 13655

Stress report certified by ¹ W.D. Greenlaw

PE State Massachusetts Reg. No. 14784

¹Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and
Pressure Vessel Inspectors and the State or Province of Massachusetts
and employed by Factory Mutual Systems* of Norwood, Massachusetts
have inspected the pump, or valve, described in this Data Report on 1/9, 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. Further-
more, neither the Inspector nor his employer shall be 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 John E. Morris Commissions MASS 1266
(Inspector) (Nat'l. Bd., State, Prov. and No.)

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



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:** 9/16/93
Address: 3000 George Washington Way, Richland, Washington **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
(b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
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:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
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 relief valve MS-RV-2C. The replacement work was performed as follows
1) Removed existing relief valve MS-RV-2C, Serial No N63790-00-0047 with set pressure of 1175 Psig at rated temperature of 575° F
2) Installed replacement relief valve with Serial No N63790-00-0122 with set pressure of 1175 Psig at rated temperature of 575° F
3) Installed one (1) new nut for the valve inlet nozzle
4) Performed pressure test to confirm pressure boundary integrity. 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
2) ASME Section III Code Class 1, 1971 Edition with no Addenda for the relief valve



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0896

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 1000/6.7 Psig Test Temperature: 538/89.4° F
Component Design Pressure: 1250/500 Psig Temperature: 575/470° F

9. Remarks: 1) See attached NV-1 Code Data Report for replacement relief valve Serial No N63790-00-0122, 2) Nominal operating pressure test on relief valve inlet flanged joint - test pressure of 1000 Psig and test temperature of 538° F, 3) Pneumatic test on relief valve outlet joint, body to bonnet joint, nozzle ring and adjusting ring set screw joints - test pressure of 6.7 Psig and test temperature of 89.4° F, 4) Component design pressure and temperature - 1250 Psig at 575° F for relief valve inlet piping and 500 Psig at 470° F for relief valve outlet piping, 5) Relief valve set pressure and rated temperature - 1175 Psig at 575° 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 Ruldip Singh
Kuldip Singh - Materials And Inspection

Signed By RXTman
Manager, Materials And Inspection

Date 9/17/93

Date 9-20-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 4-30-93 to 9-17-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Jim Hoggarth
Inspector's Signature

Commissions 9556W NBI
National Board, State, and Endorsements

Date 9/22/93

CROSBY**CROSBY VALVE & GAGE COMPANY**
WRENTHAM, MASSRule 9p Sup 5
9/16/93FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules

Q.C.-440

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St., Wrentham, MA 02091
Name and Address
- Model No. HB-65-BP-FN Order No. N94281 Contract Date 4/24/79 National Board No. N/A
General Electric Company, 175 Curtner Ave.,
2. Manufactured For San Jose, CA 95125 Order No. 205-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-F01 Serial No. N63790-00-0122 Drawing No. DS-A-63790 Rev. C
Type Safety Relief Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Inch Inch Inch Inch
Power Actuated
6. Set Pressure (psig) 1175 575° F
Rated Temperature
- Stamped Capacity 884,314 @ 3 Overpressure -- Blowdown (psig) 2% to 11%
- 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	<u>N93183-36-0085</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
Bonnet	<u>N93407-36-0097</u>	<u>ASTM A105-71 Gr. II</u> <u>ASME SA105 Gr. II</u>
b. XXXXXX Disc Insert	<u>N93185-37-0153</u>	<u>ASME SA637 Gr. 718</u>
Nozzle	<u>N93184-33-0070</u>	<u>ASME SA182 Gr. F316</u>
Disc Holder K55484-31-0016	<u>N89714-31-0014</u>	<u>AMS 5662B</u>
Spring Washers K62858-36-0080	<u>K62856-36-0107</u> <u>K62857-36-0121</u>	<u>ASME SA105 Gr. II</u>
Adjusting Bolt	<u>N93410-33-0071</u>	<u>ASME SA193 Gr. B6</u>
Spindle Point K62873-37-0135	<u>N89720-43-0145</u>	<u>ASME SA564 Type 630</u>
c. Spring K62858-36-0080	<u>*N89722-0085</u>	<u>ASTM A304-66 Gr. 4161H</u>
d. Bolting		
Spindle Ball	<u>N93213-0202</u>	<u>Stoody #6</u>
e. XXXXXX Thrust Bearing Adapter	<u>N93409-32-0068</u>	<u>ASME SA193 Gr. B6</u>
Bonnet Stud (BW19)	<u>N93207-1498 thru 1509</u>	<u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u>
Bonnet Stud Nut (J87)	<u>N93210-1009 thru 1020</u>	<u>ASME SA194 Gr. 2H</u>
Inlet Stud (BW21)	<u>N93216-1431 thru 1442</u>	<u>ASTM A193-71 Gr. B7</u> <u>ASME SA193 Gr. B7</u>
Inlet Stud Nut (BW22)	<u>N93218-1365 thru 1376</u>	<u>ASTM A194-71 Gr. 2H</u> <u>ASME SA194 Gr. 2H</u>
Adjusting Bolt Button	<u>N93411-33-0075</u>	<u>ASME SA193 Gr. 36</u>
K63618-33-0075		

Valve originally built against Crosby Order No. N51727, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.

N63790-00-0122

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 JJ Keene
(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

¹Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 1/9, 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 John D. Morris Commissions 119/81
(Inspector) (Nat'l. Bd., State, Prov. and No.)

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



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Bechtel Construction, Inc, PO Box 600, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** C20069
4. **Identification Of System:** Fuel Pool Cooling (FPC) System
5. (a) **Applicable Construction Code:** ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 10/25/93

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
FPC(7)-1	WPPSS	FPC(7)-1-P2	N/A	N/A	1984	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Fabricated piping subassembly for cross tie between Fuel Pool Cooling (FPC) and Equipment Drain Radioactive (EDR) systems. The work was performed as follows

- 1) Installed new piping material
- 2) Installed new valves
- 3) Made required socket welds and circumferential butt welds

-> NOTE - The fabricated piping subassembly will be installed in accordance with ASME Section XI Plan No 2-0904



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0903

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 new valves

EPN No	Serial No
FPC-V-54	1273
FPC-V-55	1275
FPC-V-188	79952

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 Rudip Singh Signed By R. A. Moore
Kuldip Singh Materials And Inspection Manager, Materials And Inspection

Date 10/25/93 Date 10-25-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 2-9-93 to 10-25-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Dan Hoggarth Commissions 9556 W NBI
Inspector's Signature National Board, State, and Endorsements
Date 10-26-93

PLAN NO, 2-0903

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 Rupp
192593

1. Manufactured by Nuclear Valve Div., Borg Warner, 7500 Tyrona Ave., Van Nuys, Calif.
(Name and Address of N Certificate Holder) 3000 George Washington Way
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 Outlet Size 3/4
(Inch) (Inch)

	(a) Model No. Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Std. No.	(g) Year Built
(1)	1500#	79951 thru	N/A	76590-2	1	N/A	1983
(2)		75570					
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

- The valves are designed to handle a fluid media which includes steam, water condensate, hotated water, etc., associated with a FWR and FWR. The temperature pressure rating of the media is stated below.

6. Design Conditions 3600 psi 100 °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 LX20'	Stellite 46	Rex Precision	
1T01, 1W10, 5F32			
(b) Forgings			
Body-Code 1V46	SA 105	Kawaguchi	

(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 3 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

(10/77)

This form (800037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

BECHTEL

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[illegible]

8. 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 '78. Code Case No. N/A. Date 7/21/83

Signed Nuclear Valve Div., Borg Warner by James R. Hume

Our ASME Certificate of Authorization No. H-1254 to use the H symbol expires 10/27/84

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. 12842

Stress analysis certified by (1) Byron H. 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 7/29 1943, 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 7/29 1983 (Inspector) Commissions 1275 CA. NB 7669 BECAUSE
(Not) Ed. State, Prov. and No.

(Mark) Bel., State, Prov. and No.)

653

105D

PLAN No. 2-0903

001275

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

1. Manufactured by 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 Hanford Plant
(Name and Address)

4. Pump or Valve 4"-150#BB GATE VALVE Nominal Inlet Size 4" Outlet Size 4"
(Inch)

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

(1) B12-0054B-02WN #1275 N/A P2-3311-N-A54 2 N/A 1977

(3) Rev. B

(4)

(5)

(6) EPC-V-SS, S/N 1275

(7)

(8)

(9)

(10)

5. (Brief description of service for which equipment was designed)

6. Design Conditions 200 psi 250 °F or Valve Pressure Class (1)
(Pressure) (Temperature)

7. Cold Working Pressure 275 psi at 100°F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
WEDGE S/N: 8653	SA-216 WC-8	Vestshell, Inc.	
H/C: V-1244			
(b) Forgings			
BODY S/N: 1275	SA-105	The Steel Improvement	
H/C: Code-S1		& Forge Company	
BONNET S/N: 703	SA-105	Galt-British Forge Ltd.	
H/C: 214744			

(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			
Bonnet Studs	SA-193/B7	(C of C Attached)	
Bonnet Nuts	SA-194/2H	(C of C Attached)	
(d) Other Parts			
WELDS H/C: 412A253	SFA-5.18E/0S3	Chemetron Corporation	
H/C: 493S3182	SFA-5.1 E7018	-ditto-	

9. Hydrostatic test Shell: 425 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. I, Edition 1971

Addenda Summer, 1973 Code Case No. N/A Date

Signed VELAN ENGINEERING COMPANIES by J. T. Kmetyko Manager QC Doc.

Our ASME Certificate of Authorization No. N-1738 to use the (N) symbol expires 3 May 1980

(N) (NPV)

(Date)

CERTIFICATION OF DESIGN

Design information on file at VELAN ENGINEERING COMANIES Montreal; Quebec

Stress analysis report (Class 1 only) on file at Not Required

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

(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 Sept 28 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 Sept 28 19 77

Inspector (Inspector)

Commissions 2946 (203-225-056)

(N) (NPV) (State, Prov. and No.) 1977

105C

PLAN 80.2-0903

Ducip Sup¹

001273

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

1. Manufactured by 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 Hanford - Plant
(Name and Address)
4. Pump or Valve 4"-150#BB GATE VALVE Nominal Inlet Size 4" Outlet Size 4"
(inch)

	(a) Model No., Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Std. No.	(g) Year Built
(1)	B12-0054B-02WN	#1273	N/A	P2-3311-N-A54	2	N/A	1977
(3)				Rev. B			
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

FPC-V-54, S/N 1273

5. _____
(Brief description of service for which equipment was designed)

6. Design Conditions 200 psi 250 °F or Valve Pressure Class _____ (1)
(Pressure) (Temperature)
7. Cold Working Pressure 275 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
WEDGE S/N: 8654	SA-216 WC-B	Vestshell, Inc.	
H/C: V-1244			
(b) Forgings			
BODY S/N: 1273	SA-105	The Steel Improvement	
H/C: Code-S1		& Forge Company	
BONNET S/N: 704	SA-105	Galt-British Forge Ltd.	
H/C: 214744			

FOR INFORMATION ONLY
FOR INFORMATION ONLY

(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			
Bonnet Studs	SA-193/B7	(C OF C Attached)	
Bonnet Nuts	SA-194/2H	(C of C Attached)	
(d) Other Parts			
WELDS H/C: 412A253	SFA-5.18E70S3	Chemetron Corporation	
H/C: 493S3182	SFA-5.1 E7018	-ditto-	

9. Hydrostatic test Shell: 425 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. I., Edition 1971.

Addenda Summer, 1973 (Date), Code Case No. N/A, Date .

Signed VELAN ENGINEERING COMPANIES (Manufacturer) by J. T. Kmetyko (Manager) QC Doc. [Signature]

Our ASME Certificate of Authorization No. N-1738 to use the (N) symbol expires 3 May 1980 (Date).

CERTIFICATION OF DESIGN

Design information on file at VELAN ENGINEERING COMANIES Montreal; Quebec

Stress analysis report (Class 1 only) on file at Not Required

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 Travis of Travis have inspected the pump, or valve, described in this Data Report on Sept. 26 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 Sept. 26 19 77

[Signature] (Inspector)

Commissions

774 616 2031-72E-05C ONLY
(Nat'l Bd., State, Prov. and No.)



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) 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 Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 9/3/93

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
RCIC(1)-4CL1	WPPSS	RCIC(1)-4CL1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced bolting material for the RPV head nozzle N-7 and piping flanged joints. The replacement work was performed as follows

- 1) Install new studs and nuts for both the flanged joints
- 2) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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: 1005 Pslg Test Temperature: 538° F
 Component Design Pressure: 1500 Pslg Temperature: 570° 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 R. A. Man
 Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 7/3/93 Date 9-3-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-21-93 to 9-8-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Hoggarth Commissions 9556W NBI
 Inspector's Signature National Board, State, and Endorsements

Date 9/8/93



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
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:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 9/3/83

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
MS-RV-5C	Crosby	N63790-00-0062	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced disc insert and nozzle for main steam relief valve MS-RV-5C, Serial No N63790-00-0062. The replacement work was performed as follows

- 1) Removed existing disc insert and nozzle from the valve
- 2) Installed new disc insert and nozzle in the valve
- 3) Reinstalled the valve
- 4) Installed three (3) new bolts for the valve outlet nozzle
- 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0950

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 1005/6.78 Psig Test Temperature: 538/81.3° F
Component Design Pressure: 1250/500 Psig Temperature: 575/470° F

9. Remarks: 1) Nominal operating pressure test on relief valve inlet flanged joint - test pressure of 1005 Psig and test temperature of 538° F, 2) Pneumatic test on relief valve outlet joint, body to bonnet joint, nozzle ring and adjusting ring set screw joints - test pressure of 6.78 Psig and test temperature of 81.3° F, 3) Component design pressure and temperature - 1250 Psig at 575° F for relief valve inlet piping and 500 Psig at 470° F for relief valve outlet piping, 4) Relief valve set pressure and rated temperature - 1205 Psig at 575° 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 Dulip Singh
Kuldip Singh - Materials And Inspection

Signed By R. Arora
Manager, Materials And Inspection

Date 9/3/93

Date 9-3-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-17-93 to 9-8-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Dan Hoggart
Inspector's Signature

Commissions 9556 W NBI
National Board, State, and Endorsements

Date 9/6/93



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:** 9/1/93
Address: 3000 George Washington Way, Richland, Washington **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
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
 4. **Identification Of System:** Containment Instrument Air (CIA) 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 Winter 1980 Addenda, Code Case: N-308
 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
CIA(3)-2	WPPSS	CIA(3)-2-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced bolting material for flex hose CIA-FLX-1U flanged joint. The replacement work was performed as follows

- 1) Installed one (1) stud and two (2) nuts for the flex hose flanged joint
- 2) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0952

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

8 Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Other ☐ None
Test Pressure: 184 Psig Test Temperature: 76 to 79° F
Component Design Pressure: 200 Psig Temperature: 340° 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 R. Amou
Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 9/1/93 Date 9-1-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 9-2-93 to 9-2-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Hoggart Commissions 9556W NBE
Inspector's Signature National Board, State, and Endorsements

Date 1-2-93



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:** 9/16/93
Address: 3000 George Washington Way, Richland, Washington **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
 (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
 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:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
 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-4A	Conax	N/A	91	N/A	1975	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced parts for valve SLC-V-4A. The replacement work was performed as follows
 1) Removed existing trigger body assembly and inlet fitting from the valve
 2) Installed new trigger body assembly and inlet fitting in the valve
 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

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: 1150/1220 to 1240 Psig Test Temperature: 80.4/82.9° 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	3691
Inlet fitting	3693

- 2) Nominal operating pressure test on the down stream side of the valve (RPV Side) - test pressure of 1150 Psig and test temperature of 80.4° F
 3) Nominal operating pressure test on the up stream side of the valve (SLC-P-1A Side) - test pressure of 1220 to 1240 Psig and test temperature of 82.9° 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 Ruldip Singh Signed By R. A. Moen
 Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 9/17/93 Date 9-20-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 6-4-93 to 9-17-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Hoggarth Commissions 9556 W NBI
 Inspector's Signature National Board, State, and Endorsements
 Date September 22, 1993

CERTIFICATE OF DESIGN

Design specifications certified by Clyde T. Nieh P.E. State CA Reg no 15757

Design report certified by Francis J. Domino P E State NY Reg no 36432

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-1950 Expires Sept. 2, 1992

Date 8/20/91 Name Conax Buffalo Corporation Signed J.G. Schraven
NOT COM-CON MEMBER Authorized Representative of
J.G. Schraven, N.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 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 8-15-71 and state that:

of Hartford, CT have inspected these items described in this data report on 8-15-77 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 equities described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date 2-21-91 Signed [Signature] Commissions 25778-1
(Authorized Inspection) Check 8d (and) endorsement state or 2-20 8-2-91

FORM N-1000-40 FOR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES* *PLAN NO. 2-0967*
As Required by the Provisions of the ASME Code, Section III, Division 1
Not To Exceed One Day's Production Pg. 1 of 1

1. Manufactured and certified by Conax Buffalo Corporation, 2300 Walden Ave., Cheektowaga, NY
(Name and address of certificate holder)

2. Manufactured for Washington Public Power Supply System, Richland, WA
(Name and address of purchaser)

3. Location of installation WNP-2 *PLAN NO. 2-0967*

4. Type N-20000 Rev. F 304SST SA479 75KSI SA *Quoted by Engrs*
(Part name) (Part spec no.) (Nominal strength) (Grade)

5. ASME Code, Section III 77 S77 1 SA *9/16/93*
(Section) (Subsection) (Division) (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) 3691	3691	(26)	
(2) 3692	3692	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

SATISFACTORY ☒ UNSATISFACTORY ☐
Vincent Bell II 9-22-91
RECEIPT INSPECTOR / LEVEL / DATE

10. Design pressure 1400 psi Temp. 150 °F. Hydro. test pressure *see remarks at temp °F.
(When applicable)

*Supplemental information in form of lists, sketches or drawings may be used provided (1) one is 8 1/2 x 11, (2) information in items 2 and 3 in 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 APH.

This form (E000-40) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

100-1000-40-01-01

FORM N-2 (back)

CERTIFICATE OF DESIGN

Design specifications certified by Clyde T. Nieh P. E. state CA Reg no 155-
 Design report certified by Francis J. Domino P. E. state NY Reg no 3655

CERTIFICATE OF SHOP COMPLIANCE

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

ASME Certificate of Authorization no. N-1850 Expires Sept. 2, 1992
 Date 8/20/91 Name Conax Buffalo Corporation Signed James G. Schraven
ASME CERTIFIED REPORT Authorized Representative
J.G. Schraven, 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 H.S.B.I. & I. Co.
 of Hartford, CT have inspected these items described in this data report on 8-15-91 and state that to
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code
 Section III. Each part listed has been authorized for stamping on the date shown above.
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment
 described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury,
 property damage or loss of any kind arising from or connected with this inspection.

Date 8-15-91 Signed Robert L. [Signature] Commissions 1155784
(Authorized Inspector) (N.B. and N.B. Inspectors State of NY and CT)

**FORM NO. 1 FOR 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 2-0967

Pg. 1 of 1

1. Manufactured and certified by Conax Buffalo Corporation, 2300 Walden Ave., Cheektowaga, NY 14221
(Name and address of certificate holder)
2. Manufactured for Washington Public Power Supply System, Richland, WA
(Name and address of purchaser)
3. Location of installation WNP-2
(Name and address)
4. Type N-38017 Rev. E 304SST SA479 75KSI SA 976831990
(Drawing No.) (Material Spec. No.) (Nominal Strength) (CA No.) (Date)
5. ASME Code, Section III 77 S77 1 SA
(Division) (Subsection) (Section) (Code Case No.)
6. Fabricated in accordance with Const. Spec (Div. 2 only) NA Revision Date
7. Remarks. Inlet Fitting for explosive actuated valve replacement kit for standby 1:1:1:1 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	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(1) 3693	3693	(26)	
(2) 3694	3694	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	SATISFACTORY <input checked="" type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
(23)		(48)	<u>W. J. Beck</u> <u>4-20-91</u>
(24)		(49)	RECEIVED INSPECTOR / LEVEL / DATE
(25)		(50)	

10. Design pressure 1400 psi Temp. 150 °F. Hydro. test pressure *see remarks at temp:
(when applicable)

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

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

2 4 4 0 0 7 1 8



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
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
4. **Identification Of System:** Reactor Feedwater (RFW) System
5. (a) **Applicable Construction Code:** ASME Section III Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
(b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1980 Edition with Winter 1980 Addenda, Code Case: N-308
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Date: 10/11/93

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
RFW-V-10B	Anchor Darling	1N257	N/A	N/A	1977	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Installed cover plate in place of hinge pin plug for valve RFW-V-10B. The replacement work was performed as follows

- 1) Fabricated new cover plate
- 2) Installed new cover plate on the valve hinge pin plug opening
- 3) Made required weld
- 4) Performed MT examination on the final weld. MT examination results acceptable
- 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PLAN NO 2-0968

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

8 Tests Conducted: Hydrostatic ☒ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☐ None
Test Pressure: 1440 Psig Test Temperature: 79.8° 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 Signed By R. A. Moore
Kuldip Singh - Materials And Inspection Manager, Materials And Inspection

Date 10/11/93 Date 10-12-93

CERTIFICATE OF INSERVICE INSPECTION

I, the 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 (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 6-5-93 to 10-12-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Don Haggarth Commissions: 9556 W N.B.I
Inspector's Signature National Board, State, and Endorsements
Date 10-12-93