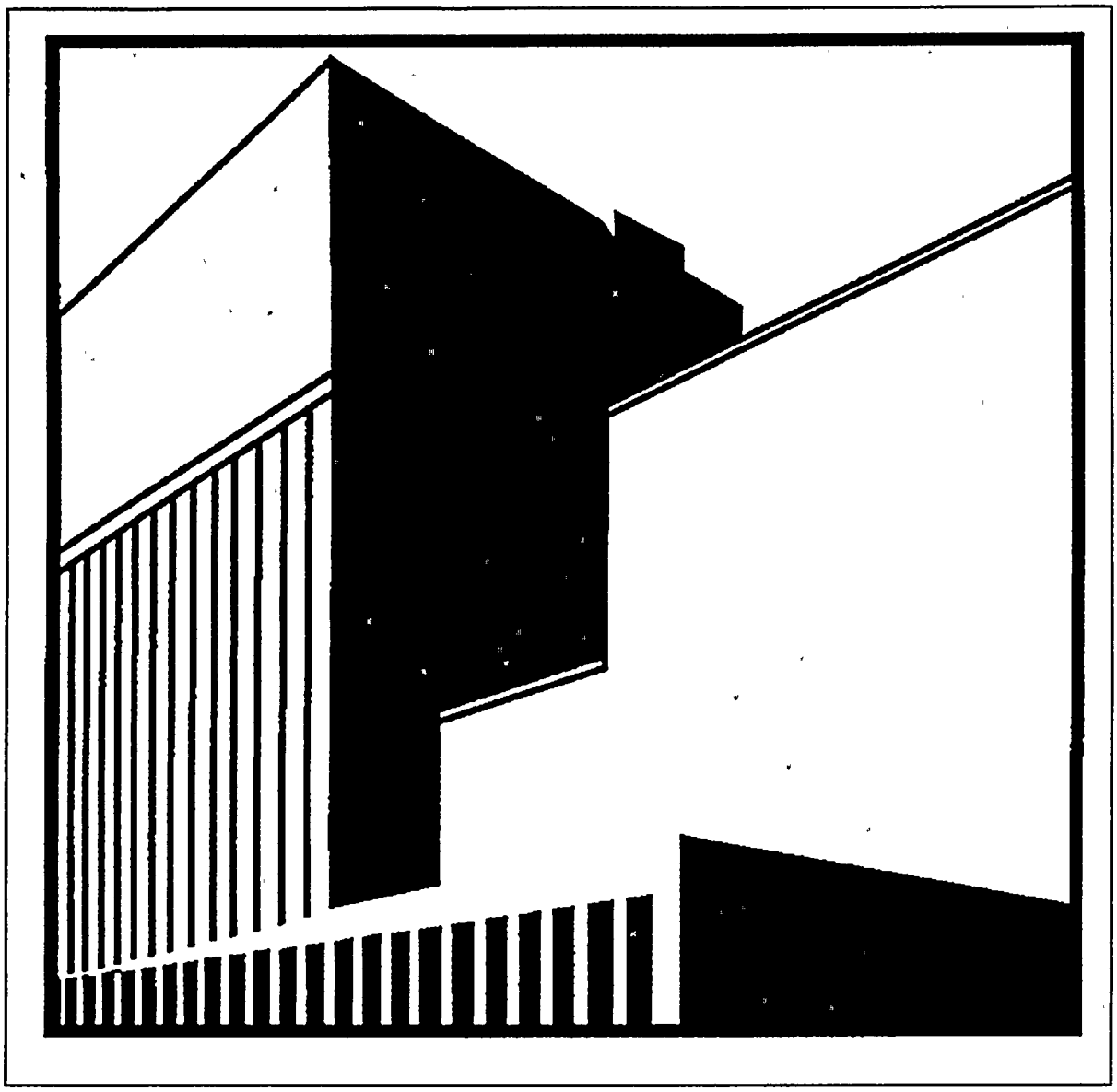

WNP-2
INSERVICE INSPECTION
SUMMARY REPORT
FOR REFUELING OUTAGE
RF13

Spring, 1998

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

INSERVICE INSPECTION SUMMARY REPORT
FOR
REFUELING OUTAGE RF13

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

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

COMMERCIAL SERVICE DATE: December 13, 1984

CAPACITY: 3486 Megawatts Thermal

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

Prepared By: August 12, 1998
ISI Engineer Date

8/12/98
Repair/Replacement Engineer Date

Reviewed & Concurred By: 8/12/98
Supervisor, Materials and Welding Date

8/13/98
NDE Level III Date

8/27/98
Supervisor, Quality Services Date

Concurrence 8/27/98
Authorized Nuclear Inservice Inspector Date

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SUMMARY

WNP-2 has completed American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME) Section XI examinations for the fourth refueling outage of the second inspection interval (thirteenth refuel cycle, RF13, Spring, 1998). Feedwater nozzle inner radius, core spray sparger and supply piping, and Generic Letter 88-01 augmented examinations were also completed during this outage.

EXAMINATION RESULTS

This report summarizes the results of inservice inspection (ISI) of ASME Section III, Code Class 1, 2, 3, and MC components and their supports performed at Washington Public Power Supply System (Supply System) Nuclear Plant No. 2 (WNP-2) between July 10, 1997 and June 13, 1998. Both General Electric (GE) and Supply System personnel performed the examinations. During this period, WNP-2 completed its thirteenth scheduled refueling outage, RF13. This outage is the fourth refueling outage of the second inspection interval. This report includes a copy of the NIS-1 Owner's Report of Inservice Inspection for this refueling outage in Appendix A and copies of the NIS-2 Owner's Report of Repair or Replacement in Appendix B.

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

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

- IGSCC (intergranular stress corrosion cracking) detection in stainless steel welds, based on Generic Letter 88-01.
- Feedwater nozzle inner radius and bore region for NUREG 0619.
- Core spray sparger and supply piping.

ASME SECTION XI EXAMINATIONS

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

A summary and the items examined for ASME Section XI requirements are included on the NIS-1 Owner's Data Report for Inservice Inspection. A copy is included as Appendix A.

AUGMENTED EXAMINATIONS

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

During refuel outage RF9 (Spring, 1994) WNP-2 performed the mechanical stress improvement process on 25 category C welds. Eight of the welds were reinspected in accordance with Generic Letter 88-01 during refuel outage RF10 (Spring, 1995). The remaining seventeen Generic Letter 88-01 category C welds were examined this refueling outage in accordance with Supply System letter GO2-97-029, P.R. Bemis to NRC, "WNP-2, Operating License NPF-21, Request for Extension of Generic Letter 88-01 Category C Examination Interval", dated February 19, 1997 and Nuclear Regulatory Commission (NRC) letter, "Request for an Extension of the Examination Interval for IGSCC Category C Welds for Washington Nuclear Project No. 2 (WNP-2) (TAC No. M98036)", dated May 23, 1997. No IGSCC (intergranular stress corrosion cracking) was detected in the welds examined. The following welds were examined:

Identification No.	Description	Diagram No.	Pg.	Method	Section XI Examination
12LPCI(1)A-6	SE TO NOZZLE	RHR-101		VOL	yes
12LPCI(1)B-6	SE TO NOZZLE	RHR-102		VOL	yes
12LPCI(1)C-6	SE TO NOZZLE	RHR-103		VOL	
12RRC(1)-N2A-6	SE TO NOZ	RRC-101	08	VOL	yes
12RRC(1)-N2B-6	SE TO NOZ	RRC-101	07	VOL	yes
12RRC(1)-N2C-6	SE TO NOZ	RRC-101	06	VOL	
12RRC(1)-N2D-6	SE TO NOZ	RRC-101	05	VOL	
12RRC(1)-N2E-6	SE TO NOZ	RRC-101	04	VOL	
12RRC(1)-N2F-6	SE TO NOZ	RRC-102	08	VOL	
12RRC(1)-N2G-6	SE TO NOZ	RRC-102	07	VOL	
12RRC(1)-N2H-6	SE TO NOZ	RRC-102	06	VOL	
12RRC(1)-N2J-6	SE TO NOZ	RRC-102	05	VOL	
12RRC(1)-N2K-6	SE TO NOZ	RRC-102	04	VOL	
24RRC(2)A-1	NOZ TO SE	RRC-101	01	VOL	yes
24RRC(2)B-1	NOZ TO SE	RRC-102	01	VOL	
4JP(NZ)A-1	N-9 NZ-SE @ 105	RPV-101		VOL	
4JP(NZ)B-1	N9 NZ-SE @ 285	RPV-101		VOL	

Feedwater Nozzle Inner Radius (ISI Program Plan Section 6.2.3)

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

The feedwater spargers were visually examined. Small crack-like indications were found on several of the flow holes. Engineering evaluation concluded that the flow hole cracking will not have an adverse impact on the functional performance of the feedwater spargers, and continued operation for at least 24 months was justified.

Core Spray Sparger and Supply Piping (ISI Program Plan Section 6.6.2)

A visual examination of the core spray sparger and supply piping was performed per the requirements of IE Bulletin 80-13, "Cracking in Core Spray Sparger". No unacceptable indications were observed.

Snubber Testing (ISI Program Plan section 6.2.2)

An initial sample of thirty-seven (37) snubbers was selected from the WNP-2 general population of 393 safety-related snubbers. These snubbers were randomly selected by computer subroutine which is part of the ISI System data base. The selected snubbers were then reviewed to determine if the sample was representative, as required by Licensee Controlled Specification Basis SR 1.7.3.1.e.

Testing of snubbers was performed using portable test devices called "Validators", supplied by the snubber manufacturer. There were no unacceptable results. MD-1285-14C and MS-91(W) had drag greater than 2%, but less than 5 % and were replaced due to service life monitoring considerations. MSRV-4B-3 and RWCU-1C-3(E) had drag less than 2%, but were replaced as a preventive maintenance activity. The snubbers tested are listed on the NIS-1 Owner's Report of Inservice Inspection form in Appendix A.

NON-REGULATORY AUGMENTED EXAMINATIONS

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

During refueling outage RF9 (Spring, 1994), a crack was found in jet pump 18 sensing line. The crack was reexamined during RF13. There was no noticeable change from RF9 data. No indications were found in the other nineteen lines.

A reinspection of the jet pump adjusting screws was performed to document any gaps between the set screw and inlet mixer. Jet pump 9 had a gap on vessel side adjusting screw. Engineering evaluation determined that it was acceptable to operate with the gap for two 12 month operating cycles.

During the inspection for jet pump adjusting screw gaps, two handles from auxiliary wedges were found on the annulus floor plate. Engineering evaluation determined that it was acceptable to operate with the wedges missing their handles. The handles were removed from the RPV.

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

REPAIRS AND REPLACEMENTS

Six (6) significant ASME Section XI repair or replacement activities were performed during RF13 as listed below. A listing and NIS-2 Owner's Reports for these and other ASME Section XI repair or replacement work accomplished and closed out between July 10, 1997 and June 13, 1998 are provided in Appendix B.

1) Main Steam Relief Valves (MSRVs)

Refurbished ten (10) main steam relief valves. nine (9) of these MSRVs were refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartenburg, SC 29301. The refurbished work was performed in accordance with NWS Technologies, LLC VR and NR programs. The tenth valve was refurbished by Supply System. Replaced ten (10) MSRVs.

2) Local Power Range Monitoring (LPRM)

Replaced nine (9) Local Power Range Monitoring (LPRM) incore assemblies.

3) Relief Valves

Replaced relief valves including SLC-RV-29A, SLC-RV-29B, RHR-RV-1A, and RHR-RV-5.

4) Valves

Replaced valves including RRC-V-20, PSR-V-X77A/1, CAC-V-58A, SW-V-49.

5) Snubbers

Replaced fifteen (15) snubbers.

6) Emergency Core Cooling System (ECCS) Suction Strainers

Replaced Emergency Core Cooling System (ECCS) Suction Strainers for RHR-P-2A, RHR-P-2B, RHR-P-2C, LPCS-P-1, and HPCS-P-1 pump suction piping.

APPENDIX A

NIS-1 Owner's Report for Inservice Inspection

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

As required by the Provisions of the ASME Code Rules

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

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
RPV	CBIN Nuclear Company	T-45	29936-84W	CBIN-8
Large Bore Pipe	Bechtel - the piping examined is listed on pages 3-12 of this data report	NA	NA	NA

FORM NIS-1 (back)

8. Examination Dates 7/10/97 to 6/13/98

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

11. Applicable Edition of Section XI 1989 Addenda none

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

13. **Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan:**
Approximately 31% of the examinations required for this interval have been completed. See pages 3-12 of this data report for a listing of examinations and tests completed during this refueling outage. Continued on page 3.

14. **Abstract of Results of Examinations and Tests.** All examinations and tests were acceptable except the following:
1) Two CRD flanges one LPRM flange, and PSR-V-77A/1 flange were found leaking during the post outage Class 1 leakage test; 2) Safe-end to nozzle weld 24RRC(2)A-1 had indication requiring evaluation under IWB-3600. All snubber functional tests were acceptable.

15. **Abstract of Corrective Measures:**
1) Relief Request 2ISI-06 and 2ISI-07 were implemented for the leaking flanges. The CRD flange leaks were evaluated for corrective action. They were accepted based on the leakage decreasing over time. The LPRM and PSR-V-77A/1 flanges were tightened to stop the leaks. 2) IWB-3600 evaluation of weld 24RRC(2)A-1 concluded it was acceptable for continued service without repair.

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

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

Date 8/10 1998 Signed Washington Public Power Supply System By Tom Lurin
Owner

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Data Report during the period 7/10/97 to 6/13/98, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

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

H. M. Foster
Inspector's Signature

Commissions 7486W/7486 NISB IS
National Board, State, Province, and Endorsements

Date 8/11 1998

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

13. Abstract of Examinations and Tests (continued):

Snubber Functional Testing - IWF-5000

Snubber Mark Number	Position	Description	Serial No.	Test Date
FPC-908N	W	PSA-1 SNUBBER	22348	4/20/98
HPCS-924N	W	PSA-3 SNUBBER	3883	4/20/98
MD-1285-14C	UA	PSA-1/4 SNUBBER	19886	4/23/98
MD-74	UA	PSA-1 SNUBBER	360	4/23/98
MS-114	S	PSA-10 SNUBBER	9921	4/23/98
MS-1368-12	UA	PSA-1/2 SNUBBER	4013	4/27/98
MS-2619-45	UA	PSA-1/4 SNUBBER	28450	4/28/98
MS-91	W	PSA-3 SNUBBER	2793	4/22/98
MSRV-1A-3	UA	PSA-10 SNUBBER	11857	4/24/98
MSRV-1B-2	UA	PSA-10 SNUBBER	13035	4/24/98
MSRV-1C-2	UA	PSA-35 SNUBBER	10566	4/28/98
MSRV-3B-3	UA	PSA-10 SNUBBER	13050	4/29/98
MSRV-4B-3	UA	PSA-10 SNUBBER	11863	4/24/98
RCIC-1C-9	UA	PSA-10 SNUBBER	7786	4/27/98
RCIC-948N	W	PSA-3 SNUBBER	215	4/21/98
RFW-146	SW	PSA-10 SNUBBER	131	4/28/98
RHR-1000N	UA	PSA-3 SNUBBER	3931	4/21/98
RHR-1021N	W	PSA-3 SNUBBER	3847	4/21/98
RHR-200	UA	PSA-1/2 SNUBBER	2131	4/22/98
RHR-235	UA	PSA-10 SNUBBER	1462	4/21/98
RHR-256	UA	PSA-35 SNUBBER	10730	4/22/98
RHR-274	UA	PSA-3 SNUBBER	2590	4/22/98
RHR-276	N	PSA-3 SNUBBER	2575	4/22/98
RHR-287	UA	PSA-35 SNUBBER	8690	4/28/98
RHR-326	E	PSA-1/4 SNUBBER	392	4/21/98
RHR-414	S	PSA-3 SNUBBER	2586	4/20/98
RHR-563	N	PSA-1 SNUBBER	361	4/22/98
RHR-60	UA	PSA-3 SNUBBER	2369	4/20/98
RHR-903N	UA	PSA-3 SNUBBER	3926	4/20/98
RHR-906N	SE	PSA-10 SNUBBER	293	4/20/98
RHR-922N	UA	PSA-1 SNUBBER	631	4/21/98
RHR-959N	SW	PSA-3 SNUBBER	2360	4/20/98
RRC-SA-3	UA	PSA-100 SNUBBER	614	4/27/98
RRC-SB-7	UA	PSA-35 SNUBBER	4191	4/30/98
RWCU-1C-3	E	PSA-3 SNUBBER	3946	4/28/98
SGT-11	BM	PSA-10 SNUBBER	7787	4/21/98
VR-901N	UA	PSA-1/2 SNUBBER	4024	4/27/98

KEY

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

Notes to snubber functional testing

All snubber functional tests were acceptable. None of the tested snubbers require testing at the next refueling outage. Testing results are documented in plant procedure TSP-SNUBBER-R702 dated 5/18/98

Notes are on page 12

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

13. Abstract of Examinations and Tests (continued):

Identification No.	Description	Diagram No.	Pg.	Method	Report No.	Date	Results(1)
Examination Category: B-A							
Item Number: B1.21							
AH	TOP HD DOL PLT	RPV-102		VOL	R-R13-G19	5/15/98	A
Item Number: B1.40							
AG	TOP HD-FLG WELD	RPV-102		SUR	2RPM-001	5/04/98	A
				VOL	R-R13-G18	5/15/98	A
Examination Category: B-D							
Item Number: B3.100							
N1-0-IR	RRC NZ-IR @ 0	RPV-101		VOL	R-R13-G02	5/15/98	A
N2-30-IR	RRC NZ-IR @ 30	RPV-101		VOL	R-R13-G04	5/15/98	A
N2-60-IR	RRC NZ-IR @ 60	RPV-101		VOL	R-R13-G06	5/15/98	A
N3-72-IR	MS NZ-IR @ 72	RPV-101		VOL	R-R13-G08	5/15/98	A
N4-90-IR	FW NZ-IR @ 90	RPV-101		VOL	2RPU-006	4/24/98	A
N5-120-IR	LPCS NZ-IR @120	RPV-101		VOL	R-R13-G23	5/15/98	A
N6-135-IR	LPCI NZ-IR @135	RPV-101		VOL	R-R13-G14	5/13/98	A
N6-45-IR	LPCI NZ-IR @ 45	RPV-101		VOL	R-R13-G12	5/15/98	A
N7-IR	HD SP NZ-HD IR	RPV-102		VOL	R-R13-G20	5/15/98	A
Item Number: B3.90							
N1-0	RRC NZ-V @ 0	RPV-101		VOL	R-R13-G01	5/15/98	A
N2-30	RRC NZ-V @ 30	RPV-101		VOL	R-R13-G03	5/15/98	A
N2-60	RRC NZ-V @ 60	RPV-101		VOL	R-R13-G05	5/15/98	A
N3-72	MS NZ-V @ 72	RPV-101		VOL	R-R13-G07	5/15/98	A
N4-30	FW NZ-V @ 30	RPV-101		VOL	R-R13-G10	5/15/98	A
N4-90	FW NZ-V @ 90	RPV-101		VOL	R-R13-G09	5/15/98	A
N5-120	LPCS NZ-V @ 120	RPV-101		VOL	R-R13-G22	5/15/98	A
N6-135	LPCI NZ-V @ 135	RPV-101		VOL	R-R13-G13	5/15/98	A
N6-45	LPCI NZ-V @ 45	RPV-101		VOL	R-R13-G11	5/15/98	A
N7	HD SP NZ-HD TOP	RPV-102		VOL	R-R13-G17	5/15/97	A
Examination Category: B-F							
Item Number: B5.10							
10LPCS(1)-4	SE TO NOZZLE	LPCS-101	02	SUR	2LPP-002	4/23/98	A
12LPCI(1)A-6	SE TO NOZZLE	RHR-101		SUR	2RHP-006	4/29/98	A
				VOL	R-R13-017	5/01/98	A
12LPCI(1)B-6	SE TO NOZZLE	RHR-102		SUR	2RHP-004	4/24/98	A
				VOL	R-R13-006	4/30/98	A
12RRC(1)-N2A-6	SE TO NOZ	RRC-101	08	SUR	2RRP-009	4/25/98	A
				VOL	R-R13-024	5/04/98	A
12RRC(1)-N2B-6	SE TO NOZ	RRC-101	07	SUR	2RRP-010	4/25/98	A
				VOL	R-R13-025	5/06/98	A
24RRC(2)A-1	NOZ TO SE	RRC-101	01	SUR	2RRP-012	4/29/98	A
				VOL	R-R13-031	5/14/98	R(6)
24RRC(2)B-1	NOZ TO SE	RRC-102	01	VOL	R-R13-030	5/09/98	A
Item Number: B5.130							
12LPCI(1)A-5	SE EXT TO SE	RHR-101		SUR	2RHP-005	4/29/98	A
				VOL	R-R13-018	5/03/98	A

Notes are on page 12

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

13. Abstract of Examinations and Tests (continued):

Identification No.	Description	Diagram No.	Pg.	Method	Report No.	Date	Results(1)
12LPCI(1)B-5	SE EXT TO SE	RHR-102		SUR	2RHP-003	4/24/98	A
				VOL	R-R13-011	4/30/98	A
Examination Category: B-G-1							
Item Number: B6.10							
RPV NUT 36-1-15A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-16A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-1A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-22A	RPV NUT	RPV-101		SUR	2RPU-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-23A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-29A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-2A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-30A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-36A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-37A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-43A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-44A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-50A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-51A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-57A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A

Notes are on page 12

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

13. Abstract of Examinations and Tests (continued):

Identification No.	Description	Diagram No.	Pg.	Method	Report No.	Date	Results(1)
RPV NUT 36-1-58A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-64A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-65A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-71A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-72A	RPV NUT	RPV-101		SUR	2RPM-003	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-8A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
RPV NUT 36-1-9A	RPV NUT	RPV-101		SUR	2RPM-002	5/06/98	A
				VOL	2RPU-007	5/06/98	A
Item Number: B6.20							
RPV STUD 35-1-15A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-16A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-1A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-22A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-23A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-29A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-2A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-30A	RPV STUD	RPV-101		VOL	2ROU-004	4/20/98	A
RPV STUD 35-1-36A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-37A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-43A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-44A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-50A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-51A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-64A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-65A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-71A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-72A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-8A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-9A	RPV STUD	RPV-101		VOL	2RPU-004	4/20/98	A
Item Number: B6.30							
RPV STUD 35-1-57A	RPV STUD	RPV-101		SUR	2RPM-004	5/06/98	A
				VOL	2RPU-004	4/20/98	A
RPV STUD 35-1-58A	RPV STUD	RPV-101		SUR	2RPM-004	5/06/98	A
				VOL	2RPU-004	4/20/98	A
Item Number: B6.40							
RPV THREADS	THREADS-RPV FLG	RPV-101		VOL	2RPU-005	4/20/98	A
Item Number: B6.50							
RPV WASHER 35-1-15A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-16A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-1A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-22A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A

Notes are on page 12

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

13. Abstract of Examinations and Tests (continued):

Identification No.	Description	Diagram No.	Pg.	Method	Report No.	Date	Results(1)
RPV WASHER 35-1-23A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-29A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-2A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-30A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-36A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-37A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-43A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-44A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-50A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-51A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-57A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-58A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-64A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-65A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-71A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-72A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-8A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
RPV WASHER 35-1-9A	RPV WASHER	RPV-101		VT-1	2RPV-008	5/06/98	A
Examination Category: B-G-2							
Item Number: B7.50							
6RCIC(1)-44BD	FLANGE BOLTING	RCIC-102	03	VT-1	2RIV-006	5/14/98	A
Item Number: B7.70							
MS-RV-1B-BLT	VALVE BOLTING	MS-102	01	VT-1	2MSV-095	4/24/98	A(2)
MS-RV-1D-BLT	VALVE BOLTING	MS-104	01	VT-1	2MSV-096	4/24/98	A(2)
MS-RV-2A-BLT	VALVE BOLTING	MS-101	01	VT-1	2MSV-097	4/24/98	A(2)
MS-RV-2C-BLT	VALVE BOLTING	MS-103	01	VT-1	2MSV-093	4/23/98	A(2)
MS-RV-2D-BLT	VALVE BOLTING	MS-104	01	VT-1	2MSV-121	5/08/98	A(2)
MS-RV-3A-BLT	VALVE BOLTING	MS-101	01	VT-1	2MSV-118	5/06/98	A(2)
MS-RV-3B-BLT	VALVE BOLTING	MS-102	01	VT-1	2MSV-111	5/01/98	A(2)
MS-RV-3D-BLT	VALVE BOLTING	MS-104	01	VT-1	2MSV-091	4/24/98	A(2)
MS-RV-4B-BLT	VALVE BOLTING	MS-102	01	VT-1	2MSV094	4/24/98	A(2)
MS-RV-5B-BLT	VALVE BOLTING	MS-102	01	VT-1	2MSV-107	4/29/98	A(2)
Examination Category: B-J							
Item Number: B9.11							
10LPCS(1)-1	ELL TO PIPE	LPCS-101	02	SUR	2LPM-004	4/23/98	A
				VOL	R-R13-004	4/27/98	A
10LPCS(1)-2	PIPE TO SE EXT	LPCS-101	02	SUR	2LPM-004	4/23/98	A
				VOL	R-R13-005	4/27/98	A
12RRC(1)-N2A-4	PIPE TO SE	RRC-101	08	SUR	2RRP-009	4/25/98	A
				VOL	R-R13-023	5/05/98	A
12RRC(1)-N2B-4	PIPE TO SE	RRC-101	07	SUR	2RRP-010	4/25/98	A
				VOL	R-R13-026	5/07/98	A
20RRC(6)-8	PIPE TO VALVE	RRC-105		SUR	2RRP-008	4/25/98	A
				VOL	R-R13-013	5/01/98	R
6RCIC(1)-45	FLG TO NOZZLE	RCIC-102	03	SUR	2RIM-008	4/27/98	A
				VOL	R-R13-012	5/01/98	A

Notes are on page 12

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

13. Abstract of Examinations and Tests (continued):

Identification No.	Description	Diagram No.	Pg.	Method	Report No.	Date	Results(1)
Examination Category: B-K-1							
Item Number: B10.10							
RRC-HB-1(W)	4 WELDED LUGS	RRC-102	01	SUR	2RRP-011	4/27/98	A
Examination Category: B-N-1							
Item Number: B13.10							
JP RISER BRACE	JP RISER BRACE	RPV-101		VT-1	2RPV-010	5/09/98	A
RPV INTERIOR	RPV INTERIOR	RPV-101		VT-3	2RPV-009	5/09/98	A
				VT-3	2RPV-010	5/09/98	A
Examination Category: B-P							
Item Number: B15.10							
RPV-PB-101(L)	LK PRES BNDRY	RPV-101		VT-2	2VT2-98	5/31/98	A
RPV-PB-102(L)	LK PRES BNDRY	RPV-102		VT-2	2VT2-98	5/31/98	R(4,5)
Item Number: B15.50							
HPCS-PB-101(L)	LK PRES BNDRY	HPCS-101		VT-2	2VT2-98	5/31/98	A
LPCS-PB-101(L)	LK PRES BNDRY	LPCS-101		VT-2	2VT2-98	5/31/98	A
MS-PB-101(L)	LK PRES BNDRY	MS-101		VT-2	2VT2-98	5/31/98	A
MS-PB-102(L)	LK PRES BNDRY	MS-102		VT-2	2VT2-98	5/31/98	A
MS-PB-103(L)	LK PRES BNDRY	MS-103		VT-2	2VT2-98	5/31/98	A
MS-PB-104(L)	LK PRES BNDRY	MS-104		VT-2	2VT2-98	5/31/98	A
MS-PB-105(L)	LK PRES BNDRY	MS-105		VT-2	2VT2-98	5/31/98	A
MS-PB-106(L)	LK PRES BNDRY	MS-106		VT-2	2VT2-98	5/31/98	A
RCIC-PB-101(L)	LK PRES BNDRY	RCIC-101		VT-2	2VT2-98	5/31/98	A
RCIC-PB-102(L)	LK PRES BNDRY	RCIC-102		VT-2	2VT2-98	5/31/98	A
RFW-PB-101(L)	LK PRES BNDRY	RFW-101		VT-2	2VT2-98	5/31/98	A
RFW-PB-102(L)	LK PRES BNDRY	RFW-102		VT-2	2VT2-98	5/31/98	A
RHR-PB-101(L)	LK PRES BNDRY	RHR-101		VT-2	2VT2-98	5/31/98	A
RHR-PB-102(L)	LK PRES BNDRY	RHR-102		VT-2	2VT2-98	5/31/98	A
RHR-PB-103(L)	LK PRES BNDRY	RHR-103		VT-2	2VT2-98	5/31/98	A
RHR-PB-104(L)	LK PRES BNDRY	RHR-104		VT-2	2VT2-98	5/31/98	A
RHR-PB-105(L)	LK PRES BNDRY	RHR-105		VT-2	2VT2-98	5/31/98	A
RHR-PB-106(L)	LK PRES BNDRY	RHR-106		VT-2	2VT2-98	5/31/98	A
RRC-PB-101(L)	LK PRES BNDRY	RRC-101		VT-2	2VT2-98	5/31/98	A
RRC-PB-102(L)	LK PRES BNDRY	RRC-102		VT-2	2VT2-98	5/31/98	A
RRC-PB-104(L)	LK PRES BNDRY	RRC-104		VT-2	2VT2-98	5/31/98	A
RRC-PB-105(L)	LK PRES BNDRY	RRC-105		VT-2	2VT2-98	5/31/98	A
RRC-PB-106(L)	LK PRES BNDRY	RRC-106		VT-2	2VT2-98	5/31/98	A
RRC-PB-107(L)	LK PRES BNDRY	RRC-107		VT-2	2VT2-98	5/31/98	A
RRC-PB-108(L)	LK PRES BNDRY	RRC-108		VT-2	2VT2-98	5/31/98	A
RRC-PB-109(L)	LK PRES BNDRY	RRC-109		VT-2	2VT2-98	5/31/98	A
RRC-PB-110(L)	LK PRES BNDRY	RRC-110		VT-2	2VT2-98	5/31/98	A
RRC-PB-111(L)	LK PRES BNDRY	RRC-111		VT-2	2VT2-98	5/31/98	A
RWCU-PB-101(L)	LK PRES BNDRY	RWCU-101		VT-2	2VT2-98	5/31/98	A
SLC-PB-101(L)	LK PRES BNDRY	SLC-101		VT-2	2VT2-98	5/31/98	A
Item Number: B15.60							
RRC-P-1A-BDY(L)	LK PRES BNDRY	RRC-103		VT-2	2VT2-98	5/31/98	A
RRC-P-1B-BDY(L)	LK PRES BNDRY	RRC-103		VT-2	2VT2-98	5/31/98	A
RRC-PB-103(L)	LK PRES BNDRY	RRC-103		VT-2	2VT2-98	5/31/98	A

Notes are on page 12

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

13. Abstract of Examinations and Tests (continued):

Identification No.	Description	Diagram No.	Pg.	Method	Report No.	Date	Results(1)
Item Number: B15.70							
HPCS-V-4-BDY(L)	LK PRES TEST	HPCS-101	01	VT-2	2VT2-98	5/31/98	A
HPCS-V-5-BDY(L)	LK PRES TEST	HPCS-101	02	VT-2	2VT2-98	5/31/98	A
HPCS-V-51-BDY(L)	LK PRES TEST	HPCS-101	02	VT-2	2VT2-98	5/31/98	A
LPCS-V-5-BDY(L)	LK PRES TEST	LPCS-101	01	VT-2	2VT2-98	5/31/98	A
LPCS-V-51-BDY(L)	LK PRES TEST	LPCS-101	02	VT-2	2VT2-98	5/31/98	A
LPCS-V-6-BDY(L)	LK PRES TEST	LPCS-101	02	VT-2	2VT2-98	5/31/98	A
MS-RV-1A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	2VT2-98	5/31/98	A
MS-RV-1B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-98	5/31/98	A
MS-RV-1C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-98	5/31/98	A
MS-RV-1D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	2VT2-98	5/31/98	A
MS-RV-2A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	2VT2-98	5/31/98	A
MS-RV-2B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-98	5/31/98	A
MS-RV-2C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-98	5/31/98	A
MS-RV-2D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	2VT2-98	5/31/98	A
MS-RV-3A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	2VT2-98	5/31/98	A
MS-RV-3B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-98	5/31/98	A
MS-RV-3C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-98	5/31/98	A
MS-RV-3D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	2VT2-98	5/31/98	A
MS-RV-4A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	2VT2-98	5/31/98	A
MS-RV-4B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-98	5/31/98	A
MS-RV-4C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-98	5/31/98	A
MS-RV-4D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	2VT2-98	5/31/98	A
MS-RV-5B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	2VT2-98	5/31/98	A
MS-RV-5C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	2VT2-98	5/31/98	A
MS-V-22A-BDY(L)	LK PRES TEST	MS-101	02	VT-2	2VT2-98	5/31/98	A
MS-V-22B-BDY(L)	LK PRES TEST	MS-102	02	VT-2	2VT2-98	5/31/98	A
MS-V-22C-BDY(L)	LK PRES TEST	MS-103	02	VT-2	2VT2-98	5/31/98	A
MS-V-22D-BDY(L)	LK PRES TEST	MS-104	02	VT-2	2VT2-98	5/31/98	A
MS-V-28A-BDY(L)	LK PRES TEST	MS-101	02	VT-2	2VT2-98	5/31/98	A
MS-V-28B-BDY(L)	LK PRES TEST	MS-102	02	VT-2	2VT2-98	5/31/98	A
MS-V-28C-BDY(L)	LK PRES TEST	MS-103	02	VT-2	2VT2-98	5/31/98	A
MS-V-28D-BDY(L)	LK PRES TEST	MS-104	02	VT-2	2VT2-98	5/31/98	A
PSR-V-77A/1	LK PRES TEST	NA		VT-2	2VT2-98	5/31/98	R(7)
RCIC-V-13-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	2VT2-98	5/31/98	A
RCIC-V-63-BDY(L)	LK PRES TEST	RCIC-101	01	VT-2	2VT2-98	5/31/98	A
RCIC-V-64-BDY(L)	LK PRES TEST	RCIC-101	01	VT-2	2VT2-98	5/31/98	A
RCIC-V-65-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	2VT2-98	5/31/98	A
RCIC-V-66-BDY(L)	LK PRES TEST	RCIC-102	03	VT-2	2VT2-98	5/31/98	A
RFW-V-10A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	2VT2-98	5/31/98	A
RFW-V-10B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	2VT2-98	5/31/98	A
RFW-V-11A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	2VT2-98	5/31/98	A
RFW-V-11B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	2VT2-98	5/31/98	A
RFW-V-32A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	2VT2-98	5/31/98	A
RFW-V-32B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	2VT2-98	5/31/98	A
RFW-V-65A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	2VT2-98	5/31/98	A
RFW-V-65B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	2VT2-98	5/31/98	A
RHR-V-111A-BDY(L)	LK PRES TEST	RHR-101		VT-2	2VT2-98	5/31/98	A
RHR-V-111B-BDY(L)	LK PRES TEST	RHR-102		VT-2	2VT2-98	5/31/98	A
RHR-V-111C-BDY(L)	LK PRES TEST	RHR-103		VT-2	2VT2-98	5/31/98	A
RHR-V-112A-BDY(L)	LK PRES TEST	RHR-105		VT-2	2VT2-98	5/31/98	A
RHR-V-112B-BDY(L)	LK PRES TEST	RHR-106		VT-2	2VT2-98	5/31/98	A
RHR-V-113-BDY(L)	LK PRES TEST	RHR-104		VT-2	2VT2-98	5/31/98	A
RHR-V-19-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	2VT2-98	5/31/98	A

Notes are on page 12

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

13. Abstract of Examinations and Tests (continued):

Identification No.	Description	Diagram No.	Pg.	Method	Report No.	Date	Results(1)
RHR-V-23-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	2VT2-98	5/31/98	A
RHR-V-41A-BDY(L)	LK PRES TEST	RHR-101		VT-2	2VT2-98	5/31/98	A
RHR-V-41B-BDY(L)	LK PRES TEST	RHR-102		VT-2	2VT2-98	5/31/98	A
RHR-V-41C-BDY(L)	LK PRES TEST	RHR-103		VT-2	2VT2-98	5/31/98	A
RHR-V-42A-BDY(L)	LK PRES TEST	RHR-101		VT-2	2VT2-98	5/31/98	A
RHR-V-42B-BDY(L)	LK PRES TEST	RHR-102		VT-2	2VT2-98	5/31/98	A
RHR-V-42C-BDY(L)	LK PRES TEST	RHR-103		VT-2	2VT2-98	5/31/98	A
RHR-V-50A-BDY(L)	LK PRES TEST	RHR-105		VT-2	2VT2-98	5/31/98	A
RHR-V-50B-BDY(L)	LK PRES TEST	RHR-106		VT-2	2VT2-98	5/31/98	A
RHR-V-53A-BDY(L)	LK PRES TEST	RHR-105		VT-2	2VT2-98	5/31/98	A
RHR-V-53B-BDY(L)	LK PRES TEST	RHR-106		VT-2	2VT2-98	5/31/98	A
RHR-V-8-BDY(L)	LK PRES TEST	RHR-104		VT-2	2VT2-98	5/31/98	A
RHR-V-9-BDY(L)	LK PRES TEST	RHR-104		VT-2	2VT2-98	5/31/98	A
RRC-V-23A-BDY(L)	LK PRES TEST	RRC-101	01	VT-2	2VT2-98	5/31/98	A
RRC-V-23B-BDY(L)	LK PRES TEST	RRC-102	01	VT-2	2VT2-98	5/31/98	A
RRC-V-60A-BDY(L)	LK PRES TEST	RRC-101	02	VT-2	2VT2-98	5/31/98	A
RRC-V-60B-BDY(L)	LK PRES TEST	RRC-102	02	VT-2	2VT2-98	5/31/98	A
RRC-V-67A-BDY(L)	LK PRES TEST	RRC-101	02	VT-2	2VT2-98	5/31/98	A
RRC-V-67B-BDY(L)	LK PRES TEST	RRC-102	02	VT-2	2VT2-98	5/31/98	A
RWCU-V-1-BDY(L)	LK PRES TEST	RWCU-101	04	VT-2	2VT2-98	5/31/98	A
RWCU-V-102-BDY(L)	LK PRES TEST	RWCU-101	02	VT-2	2VT2-98	5/31/98	A
RWCU-V-4-BDY(L)	LK PRES TEST	RWCU-101	05	VT-2	2VT2-98	5/31/98	A
RWCU-V-40-BDY(L)	LK PRES TEST	RFW-103		VT-2	2VT2-98	5/31/98	A
Examination Category: C-F-2							
Item Number: C5.51							
6MS(1)A-2	PIPE TO CAP	MS-201	04	SUR	2MSM-026	4/22/98	A
				VOL	R-R13-001	4/22/98	A
Examination Category: C-H							
Item Number: C7.30							
CRD-PB-201(L)	LK PRES BNDRY	CRD-201		VT-2	2CRV-004	4/18/98	A
CRD-PB-202(L)	LK PRES BNDRY	CRD-202		VT-2	2CRV-004	4/18/98	A
HPCS-PB-201(L)	LK PRES BNDRY	HPCS-201		VT-2	2HPV-001	12/10/97	A
HPCS-PB-202(L)	LK PRES BNDRY	HPCS-202		VT-2	2HPV-001	12/10/97	A
LPCS-PB-201(L)	LK PRES BNDRY	LPCS-201		VT-2	2LPV-002	9/17/97	A
LPCS-PB-202(L)	LK PRES BNDRY	LPCS-202		VT-2	2LPV-002	9/17/97	A
RCC-PB-201(L)	LK PRES BNDRY	RCC-201		VT-2	2RCV-01	5/31/98	A
RCC-PB-202(L)	LK PRES BNDRY	RCC-202		VT-2	2RCV-01	5/31/98	A
RCIC-PB-201(L)	LK PRES BNDRY	RCIC-201		VT-2	2RIV-004	12/31/97	A
RCIC-PB-203(L)	LK PRES BNDRY	RCIC-203		VT-2	2RIV-004	12/31/97	A
RCIC-PB-204(L)	LK PRES BNDRY	RCIC-204		VT-2	2RIV-005	12/31/97	A
RCIC-PB-205(L)	LK PRES BNDRY	RCIC-205		VT-2	2RIV-005	12/31/97	A
RHR-PB-201(L)	LK PRES BNDRY	RHR-201		VT-2	2RHV-011	11/10/97	A
RHR-PB-202(L)	LK PRES BNDRY	RHR-202		VT-2	2RHV-011	11/10/97	A
RHR-PB-203(L)	LK PRES BNDRY	RHR-203		VT-2	2RHV-011	11/10/97	A
RHR-PB-204(L)	LK PRES BNDRY	RHR-204		VT-2	2RHV-011	11/10/97	A
RHR-PB-205(L)	LK PRES BNDRY	RHR-205		VT-2	2RHV-011	11/10/97	A
RHR-PB-206(L)	LK PRES BNDRY	RHR-206		VT-2	2RHV-011	11/10/97	A
RHR-PB-207(L)	LK PRES BNDRY	RHR-207		VT-2	2RHV-012	12/02/97	A
RHR-PB-208(L)	LK PRES BNDRY	RHR-208		VT-2	2RHV-012	12/02/97	A
RHR-PB-209(L)	LK PRES BNDRY	RHR-209		VT-2	2RHV-012	12/02/97	A
RHR-PB-210(L)	LK PRES BNDRY	RHR-210		VT-2	2RHV-013	12/09/97	A
RHR-PB-211(L)	LK PRES BNDRY	RHR-211		VT-2	2RHV-013	12/09/97	A

Notes are on page 12

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

13. Abstract of Examinations and Tests (continued):

Identification No.	Description	Diagram No.	Pg.	Method	Report No.	Date	Results(1)
Examination Category: D-C							
Item Number: D3.10							
FPC-PB-301(L)	LK PRES BNDRY	FPC-301		VT-2	2FPV-001	12/12/97	A
FPC-PB-302(L)	LK PRES BNDRY	FPC-302		VT-2	2FPV-001	12/17/97	A
FPC-PB-303(L)	LK PRES BNDRY	FPC-303		VT-2	2FPV-001	12/12/97	A
FPC-PB-304(L)	LK PRES BNDRY	FPC-304		VT-2	2FPV-001	12/17/97	A
FPC-PB-305(L)	LK PRES BNDRY	FPC-305		VT-2	2FPV-001	12/17/97	A
Examination Category: F-A							
Item Number: F1.10D							
RWCU-1C-3	PSA-3 SNUBBER	RWCU-101	04	VT-3	2HV-138	5/04/98	A(2)
Item Number: F1.20A							
FPC-903N	ANCHOR	FPC-201		VT-3	2HV-120	5/02/98	A
Item Number: F1.20D							
MS-114	PSA-10 SNUBBER	MS-201	02	VT-3	2HV-136	4/23/98	A(2)
MS-91	PSA-3 SNUBBER	MS-201	03	VT-3	2HV-134	5/19/98	A(2)
MS-999N	PSA-10 SNUBBER	MS-203	03	VT-3	2HV-140	5/04/98	A(2)
Item Number: F1.30C							
FPC-86	BOX	FPC-301	05	VT-3	2HV-127	5/15/98	A
Item Number: F1.30D							
MSRV-4B-3	PSA-10 SNUBBER	MS-308	01	VT-3	2HV-137	5/04/98	A(2)
Item Number: F1.40A							
DCW-HX-1A1(CS)	HX BASE	SW-302		VT-3	2HV-122	5/04/98	A
DCW-HX-1A2(CS)	HX BASE	SW-302		VT-3	2HV-123	5/04/98	A
DCW-HX-1B1(CS)	HX BASE	SW-306		VT-3	2HV-124	5/04/98	A
DCW-HX-1B2(CS)	HX BASE	SW-306		VT-3	2HV-125	5/04/98	A
DCW-HX-1C(CS)	HX BASE	SW-310		VT-3	2HV-126	5/04/98	A
FPC-DM-1A(CS)	DEMIN BASE	FPC-304	04	VT-3	2HV-117	3/11/98	A
FPC-DM-1B(CS)	DEMIN BASE	FPC-304	05	VT-3	2HV-118	3/11/98	A
FPC-HX-1A(CS)	HX BASE	FPC-302	02	VT-3	2HV-130	5/15/98	A
FPC-HX-1B(CS)	HX BASE	FPC-303	03	VT-3	2HV-131	5/15/98	A
FPC-P-1A(CS)	PUMP BASE	FPC-301	05	VT-3	2HV-128	5/15/98	A
FPC-P-1B(CS)	PUMP BASE	FPC-301	06	VT-3	2HV-129	5/15/98	A
FPC-P-3(CS)	PUMP BASE	FPC-306		VT-3	2HV-121	5/02/98	A
HPCS-P-2(CS)	PUMP BASE	SW-309		VT-3	2HV-119	5/02/98	A

Notes are on page 12

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

13. **Abstract of Examinations and Tests (continued):**

Identification No.	Description	Diagram No.	Pg.	Method	Report No.	Date	Results(1)

Notes to section 13 "Abstract of Examinations and Tests"

(1) A = Acceptable R = Rejectable
(2) Preservice Inspection
(3) Includes item B15.70 valves, NPS 4 inch and smaller, within examination boundary.
(4) 2 CRD flanges found leaking at various rates. Evaluation concluded acceptable for continued service.
(5) One LPRM flange found leaking. Flange tightened, leak stopped.
(6) Indication required evaluation under IWB-3600. Evaluation concluded indication was acceptable for continued service without repair.
(7) Flange found leaking. flange tightened, leak stopped.

- END OF REPORT-

Notes are on page 12

APPENDIX B

NIS-2 OWNER'S REPORTS

This appendix summarizes ASME Section XI repair or replacement work performed between July 10, 1997 and June 13, 1998. The status of the NIS-2 Owner's Report is stated for each repair and replacement work performed.

ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR WNP-2 REFUELING OUTAGE RF98

PLAN NO	WOT NO	COMPONENT NUMBER AND WORK DESCRIPTION	CODE COMP	R&R REPORTED IN
2-1301 *	DN 8501	Replaced valve CAC-V-58A	Piping	RF98 Summary Report
2-1381	BPR 901	Made body to bonnet seal weld for spare valve S/N 14	Valve	RF98 Summary Report
2-1444	DVH 203	Replaced pipe plug for cooling coil WMA-CC-53A/1	Cooling Coil	RF98 Summary Report
2-1445	DVG 803	Replaced pipe plug for cooling coil PRA-CC-1A	Cooling Coil	RF98 Summary Report
2-1450	DVG 901	Replaced pipe plug for cooling coil RRA-CC-2	Cooling Coil	RF98 Summary Report
2-1451	DVH 001	Replaced pipe plug for cooling coil RRA-CC-5	Cooling Coil	RF98 Summary Report
2-1452	DVH 101	Replaced pipe plugs for cooling coil RRA-CC-11	Cooling Coil	RF98 Summary Report
2-1462 *	DDT 101	Installed tubing associated with air controller for valve RCIC-PCV-15	Tubing	RF98 Summary Report
2-1475	GLV 701	Made body to bonnet seal weld for spare valve S/N 13	Valve	RF98 Summary Report
2-1481 *	HFW 301	Replaced valve SW-V-49	Piping	RF98 Summary Report
2-1482 *	HGB 504	Prefabricated external bypass for pressure locking for valve RCC-V-40	Valve	RF98 Summary Report
2-1482 *	HGB 501	Installed external bypass for pressure locking for valve RCC-V-40	Valve	RF98 Summary Report
2-1483 *	JGP 401	Prefabricated external bypass for pressure locking for valve RHR-V-42A	Valve	RF98 Summary Report
2-1483 *	JBD 501	Installed external bypass for pressure locking for valve RHR-V-42A	Valve	RF98 Summary Report
2-1484 *	HCN 101	Prefabricated external bypass for pressure locking for valve HPCS-V-15	Valve	RF98 Summary Report
2-1484 *	JBM 901	Installed external bypass for pressure locking for valve HPCS-V-15	Valve	RF98 Summary Report
2-1490	HCS 408	Refurbished relief valve S/N N63790-00-0053	Relief Valve	RF98 Summary Report
2-1491	HCS 402	Replaced relief valve MS-RV-2A	Piping	RF98 Summary Report
2-1492	HCS 802	Replaced relief valve MS-RV-1B	Piping	RF98 Summary Report
2-1493	HCS 902	Replaced relief valve MS-RV-3B	Piping	RF98 Summary Report
2-1494	HCT 002	Replaced relief valve MS-RV-4B	Piping	RF98 Summary Report
2-1495	HCT 103	Replaced relief valve MS-RV-5B	Piping	RF98 Summary Report
2-1496	HCS 502	Replaced relief valve MS-RV-3C	Piping	RF98 Summary Report
2-1497	HCS 602	Replaced relief valve MS-RV-5C	Piping	RF98 Summary Report
2-1498	HCT 302	Replaced relief valve MS-RV-1D	Piping	RF98 Summary Report
2-1499	HCS 702	Replaced relief valve MS-RV-3D	Piping	RF98 Summary Report
2-1505 *	HBZ 201	Replaced level switch RCIC-LS-N010	Piping	RF98 Summary Report
2-1506 *	HCM 401	Replaced plugs for valve CRD-V-101A/1411	Valve	RF98 Summary Report
2-1507 *	HCM 402	Replaced plugs for valve CRD-V-102A/1411	Valve	RF98 Summary Report
2-1508 *	GMG 101	Replaced plugs for valve CRD-V-102A/1443	Valve	RF98 Summary Report
2-1509	HMV 101	Replaced Local Power Range Monitoring (LPRM) Incore assemblies	RPV	RF98 Summary Report
2-1511 *	KCM 801	Prefabricated to replace valve RRC-V-20	Piping	RF98 Summary Report
2-1511 *	HTV 901	Replaced valve RRC-V-20	Piping	RF98 Summary Report
2-1512 *	KCM 701	Prefabricated to replace valve PSR-V-X77A/1	Piping	RF98 Summary Report
2-1512 *	HTV 801	Replaced valve PSR-V-X77A/1	Piping	RF98 Summary Report
2-1513	HNJ 801	Replaced relief valve SLC-RV-29A	Piping	RF98 Summary Report
2-1514	HNJ 901	Replaced relief valve SLC-RV-29B	Piping	RF98 Summary Report
2-1515	GYD 101	Replaced suction strainers RHR-ST-5A and 5B for pump RHR-P-2A	Piping	RF98 Summary Report
2-1516	GYC 901	Replaced suction strainers RHR-ST-3A and 3B for pump RHR-P-2B	Piping	RF98 Summary Report
2-1517	GYD 001	Replaced suction strainers RHR-ST-4A and 4B for pump RHR-P-2C	Piping	RF98 Summary Report
2-1518	GYD 201	Replaced suction strainers LPCS-ST-2 and 3 for pump LPCS-P-1	Piping	RF98 Summary Report
2-1519	GYD 301	Replaced suction strainers HPCS-ST-2 and 3 for pump HPCS-P-1	Piping	RF98 Summary Report
2-1520	KKB 901	Replaced rupture disc for RCIC-RD-1 and RCIC-RD-2	Piping	RF98 Summary Report
2-1521	JKT 801	Replaced rupture disc for CAC-RD-1A	Piping	RF98 Summary Report
2-1522	JKT 901	Replaced rupture disc for CAC-RD-1B	Piping	RF98 Summary Report
2-1523	JWF 501	Replaced rupture disc for CCH-RD-1B	Piping	RF98 Summary Report
2-1524	GTM 702	Refurbished spare relief valve Serial No N60597-00-0003	Relief Valve	RF98 Summary Report
2-1525	HNL 301	Replaced relief valve RHR-RV-1A	Piping	RF98 Summary Report
2-1526	JWZ 801	Replaced parts for valve SLC-V-4B	Valve	RF98 Summary Report
2-1527	HHH 601	Replaced studs and nuts for hinge pin cover plate for valve LPCS-V-3	Valve	RF98 Summary Report
2-1528	KVT 901	Replaced bonnet for valve MD-V-71	Valve	RF98 Summary Report
2-1532	C 31331	Refurbished relief valve S/N N63790-00-0050	Relief Valve	RF98 Summary Report
2-1533	C 31331	Refurbished relief valve S/N N63790-00-0054	Relief Valve	RF98 Summary Report
2-1534	C 31331	Refurbished relief valve S/N N63790-00-0057	Relief Valve	RF98 Summary Report
2-1535	C 31331	Refurbished relief valve S/N N63790-00-0058	Relief Valve	RF98 Summary Report
2-1536	C 31331	Refurbished relief valve S/N N63790-00-0062	Relief Valve	RF98 Summary Report

PLAN NO	WOT NO	COMPONENT NUMBER AND WORK DESCRIPTION	CODE COMP	R&R REPORTED IN
2-1537	C 31331	Refurbished relief valve S/N N63790-00-0134	Relief Valve	RF98 Summary Report
2-1538	C 31331	Refurbished relief valve S/N N63790-00-0135	Relief Valve	RF98 Summary Report
2-1539	C 31331	Refurbished relief valve S/N N63790-00-0138	Relief Valve	RF98 Summary Report
2-1540	C 31331	Refurbished relief valve S/N N63790-01-0140	Relief Valve	RF98 Summary Report
2-1541	LRF 801	Replaced valve PI-EFC-X41E	Piping	RF98 Summary Report
2-1542 *	KCM 801	Prefabricated support for valve RRC-V-20	Support	RF98 Summary Report
2-1542 *	HTV 901	Installed support for valve RRC-V-20	Support	RF98 Summary Report
2-1544	BGH 501	Refurbished spare relief valve Serial No N67441-00-0002	Relief Valve	RF98 Summary Report
2-1545	FD 6601	Refurbished spare relief valve Serial No N67441-00-0001	Relief Valve	RF98 Summary Report
2-1546 *	KRW 002	Replaced fittings for tubing for CIA supply to valve MS-V-22D	Tubing	RF98 Summary Report
2-1547 *	KDG 302	Replaced ball for valve TIP-V-3	Valve	RF98 Summary Report
2-1549	KTL 706	Replaced mechanical seal (gland plate) for pump FPC-P-1A	Pump	RF98 Summary Report
2-1550	JDG 009	Replaced front snubber for valve CVB-V-1ST	Valve	RF98 Summary Report
2-1551	KWC 502	Replaced relief valve MS-RV-2C	Piping	RF98 Summary Report
2-1552	KNT 901	Cut and rewelded welds associated with SW-FE-8B	Piping	RF98 Summary Report
2-1553	LBF 001	Modified outlet flange for spare relief valve RHR-RV-5	Relief Valve	RF98 Summary Report
2-1554	HNL 101	Replaced relief valve RHR-RV-5	Piping	RF98 Summary Report
2-1556 *	HLW 412	Prefabricated connection with valves RHR-V-606 and RHR-V-631	Piping	RF98 Summary Report
2-1556 *	HLW 404	Installed connection with valves RHR-V-606 and RHR-V-631	Piping	RF98 Summary Report
2-1557	LDY 902	Replaced bolting material for relief valve MS-RV-2D	Relief Valve	RF98 Summary Report
2-1558	LFD 701	Replaced bolting material for relief valve MS-RV-3A	Relief Valve	RF98 Summary Report
2-1559	JGD 008	Replaced front snubber for valve CVB-V-1QR	Valve	RF98 Summary Report
2-1560 *	LDM 801	Replaced tubing for CIA supply to valve MS-V-22A	Tubing	RF98 Summary Report
2-1561 *	LDM 801	Replaced tubing for CIA supply to valve MS-V-22B	Tubing	RF98 Summary Report
2-1562 *	LDM 801	Replaced tubing for CIA supply to valve MS-V-22C	Tubing	RF98 Summary Report
2-1563 *	LDM 801	Replaced tubing for CIA supply to valve MS-V-22D	Tubing	RF98 Summary Report
2-1564 *	LDB 901	Replaced tubing for CAS supply to valve MS-V-28A	Tubing	RF98 Summary Report
2-1565 *	LDB 901	Replaced tubing for CAS supply to valve MS-V-28B	Tubing	RF98 Summary Report
2-1566 *	LDB 901	Replaced tubing for CAS supply to valve MS-V-28C	Tubing	RF98 Summary Report
2-1567 *	LDB 901	Replaced tubing for CAS supply to valve MS-V-28D	Tubing	RF98 Summary Report
2-1569	LPW 301	Removed temporary attachment (nut) welded to penetration X-58	Containment	RF98 Summary Report
N/A	HMH 101	Replaced snubber for support RHR-400	Support	RF98 Summary Report
N/A	HMH 101	Replaced snubber for support RHR-442	Support	RF98 Summary Report
N/A	HMH 101	Replaced snubbers for support MS-91 (East) and MS-91 (West)	Support	RF98 Summary Report
N/A	HMH 101	Replaced snubber for support MS-114 (North)	Support	RF98 Summary Report
N/A	HMH 101	Replaced pin for support MSRV-1A-3	Support	RF98 Summary Report
N/A	HMH 101	Replaced snubber for support MSRV-4B-3	Support	RF98 Summary Report
N/A	HMH 101	Replaced snubber for support RWCU-1C-3 (East)	Support	RF98 Summary Report
N/A	HMH 101	Replaced snubber and forward bracket for support MS-4448-413	Support	RF98 Summary Report
N/A	HMH 101	Replaced snubber for support MS-999N	Support	RF98 Summary Report
N/A	HMH 101	Replaced snubber and forward bracket for support MD-1285-14C	Support	RF98 Summary Report
N/A	HMH 101	Replaced snubber for support MD-1290-11B	Support	RF98 Summary Report
N/A	MCJ 601	Replaced snubber for support RHR-42	Support	RF98 Summary Report
N/A	MCJ 601	Replaced snubbers for support RHR-39 (North) and RHR-39 (South)	Support	RF98 Summary Report

NOTES -

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

PLAN No 2-1301

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 03/02/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Atmosphere Control (CAC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CAC-HR-1A	Air Products	76-129-3	5209	N/A	1977	Replacement	Yes, Code Class 2
CAC-V-58A	ITT Grinnell	75-5716-1-1	N/A	N/A	1976	Replaced	Yes, Code Class 2
CAC-V-58A	ITT Engineered	562877-3-1	N/A	N/A	1996	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing valve CAC-V-58A. The replacement work was performed as follows:
   1) Removed existing valve CAC-V-58A, Serial No 75-5716-1-1.
   2) Installed new replacement valve CAC-V-58A, Serial No 562877-3-1.
   3) Made required socket weld.
   4) Performed visual examination on the final socket weld. Visual examination results acceptable.
   5) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable.

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Summer 1973 Addenda for the Containment Atmosphere Control (CA) System.
2) ASME Section III, Code Class 2, 1974 Edition with Summer 1974 Addenda for the new replacement valve CAC-V-58A, Serial No 562877-3-1.

PLAN No 2-1301

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve CAC-V-58A, Serial No 562877-3-1.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By** Kuldip Singh

Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 3/3/98 **Date** 3/3/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Inspector's Signature National Board, State, and Endorsements

Date _____

FORM NPV-1 MANUFACTURERS DATA REPORT FOR NUCLEAR PUMPS OR VALVES

PLAN No. 2-1301
Rudolf Sugb
2/28/98

As Required by the Provisions of the ASME Code Rules

1. Manufactured by ITT Engineered Valves, 33 Centerville Road, Lancaster, PA 17603 Order No. 562877
(Name and Address of Manufacturer)

2. Manufactured for Washington Public Power Supply System, Richland, WA Order No. 238568-01

3. Owner Washington Public Power Supply System

4. Location of Plant WNP-2 OPS Warehouse Complex, WHS #1, North Power Plant Loop, Richland, WA

5. Pump or Valve Identification 1/2" Handwheel Operated Diaphragm Valve w/Travel Stop
- Nuclear Power Plant -
(Brief description of service for which equipment was designed)

(a) Drawing No. SD-C-116477 Rev 0 Prepared by ITT Engineered Valves

(b) National Board No. NA

CAC-V-58A, S/N 562877-3-1

6. Design Conditions 300 (Pressure) psi 150 (Temperature) °F

7. The material, design, construction, and workmanship complies with ASME Code Section III. Class 2

Edition 1974, Addenda Date Summer 1974, Case No. 1540-1
Bolting: 1986 No Addenda

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
562877-3-1			
Bodies	ASME SA-216 Grade WCB	Post Precision	
		Castings Inc.	
562877-3-1			
Bonnets	ASME SA351 Grade CF8	Stainless Foundry &	
		Engineering, Inc.	
(b) Forgings			

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM P.O. 238568-01
ITT ENGINEERED VALVES
SERIAL NO. 562877-3-1
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FORM NPV-1 (back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
562877-3-1			
Studs	ASME SA193 Grade B7	Allied Nut & Bolt	1986 Code
			No Addenda
562877-3-1			1986 Code
Nuts	ASME SA194 Grade 2H	Nova Machine Products	No Addenda
(d) Other Parts			
Vent Plug			
562877-3-1	ASME SA479 Type 410	Nova Machine Products	

8. Hydrostatic test 500 psi

CERTIFICATION OF DESIGN

Design information on file at ITT Engineered Valves, Lancaster, PA 17603

Stress Analysis Report on file at NA

Design Specifications certified by M.J. Meiss 1) Prof.Eng.State Delaware Reg.No. 2519

Stress Analysis Report Certified by _____ (1) Prof.Eng.State _____ Reg.No. _____

(1) Signature not required. List name only.

We certify that the statements made in this report are correct.

Date FEB 19 1996 Signed ITT Engineered Valves By [signature]
(Manufacturer)

Certificate of Authorization No. N 2649 expires 07/06/96

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by H.S.B.I. & I. Company of Hartford, Connecticut have inspected the equipment described in this Data Report on 2-15-19 96; and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

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

Date 2-15-96 19_____

[signature] Commissions NB4829A PA1860
(Inspector) (National Board, State

WASHINGTON PUBLIC POWER SUPPLY SYSTEM P.O. 233368-01
ITT ENGINEERED VALVES
SERIAL NO. 562877-3-1

PLAN No 2-1381

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 10/28/97
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Target Rock	14	N/A	N/A	1980	Repaired	Yes, Code Class 2
Spare Disc	Target Rock	762	N/A	N/A	1989	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Spare Target Rock valve Serial No 14 (PI-V-X269), Model No 79TT-001 was removed from the plant in accordance with ASME Section XI Plan No 2-1398. This spare valve was refurbished for future use in the plant. The refurbishment (repair and replacement) work was performed as follows:
   1) Cut valve body to bonnet seal weld.
   2) Removed existing disc from the valve.
   3) Installed new replacement disc Serial No 762 in the valve.
   4) Made valve body to bonnet seal weld.
   5) Performed visual examination on the final seal weld. Visual examination results acceptable.
   6) Performed liquid penetrant (PT) examination on the final seal weld. Liquid penetrant (PT) examination results acceptable.

PLAN No 2-1381

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: See attached N-2 Code Data Report for the new replacement disc, Serial No 762.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 10/28/97 — Date 10/28/97

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 9/23/96 to 11/3/97 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature — Commissions 7486 W/7486 N IS8 IS (National Board, State, and Endorsements)

Date 11/3/97

PLANT NO. 2-1381

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

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

Not To Exceed One Day's Production

Pg. 1 of 1

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735
(name and address of NPT Certificate Holder)

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

3. Location of installation Washington Nuclear Plant 2, Richland, WA
(name and address)

4. Type 202337-1 Rev. E (drawing no.) SA-479 316 (mat'l. spec. no.) 75 KSI (tensile strength) N/A (CRN) 1989 (year built)

5. ASME Code, Section III: 1974 (edition) W 75 (addenda date) 2 (class) N/A (Code Case no.)

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

7. Remarks: Spare Parts for a completed valve, Models 79TT-001, 83TT-001

SPARE DISC, S/N 762 FOR Rudolf Sue 10/6/91

SPARE VALVE, S/N 14

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

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

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	779	N/A
(2)	816	N/A
(3)	788	N/A
(4)	824	N/A
(5)	782	N/A
(6)	760	N/A
(7)	762	N/A
(8)	N/A	N/A
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10. Design pressure N/A psi. Temp. N/A °F. Hydro. test pressure 165 (when applicable) at temp. °F AMB

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

(12/86)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Mfr. Serial No. See Front

Not To Exceed One Day's Production

CERTIFICATION OF DESIGN

Design specifications certified by _____ P.E. State _____ Reg. no. _____

Design report* certified by _____ P.E. State _____ Reg. no. _____

CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization No. 1948 Expires 12-9-89

Date 4/4/89 Name Target Rock Corporation (NPT Certificate Holder) Signed E. Bajada (Authorized representative) E. Bajada, Q.A. Manager

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by Commercial Union Insurance Company of Boston, Mass. have inspected these items described in this Data Report on 4/4/89, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 4/4/89 Signed William A. Rolland (Authorized Inspector) Commissions NEW YORK STATE COMMISSION NO. 2288 ALSO COMMISSIONED IN Conn., Ohio & Canada (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

PLAN No 2-1444

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 05/19/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Cooling Coils
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Summer 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
WMA-CC-53A/1	CVI Corporation	See Note 1	See Note 1	N/A	1975	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced threaded hex head pipe plugs for the cooling coils. The replacement work was performed as follows:

Upper Cooling Coil Outlet Nozzle For WMA-CC-53A/1
1) Modified threaded hex head pipe plug.
2) Installed modified threaded hex head pipe plug.
3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the threaded joint. No evidence of leakage during the pressure test.

Lower Cooling Coil Inlet Nozzle For WMA-CC-53A/1
1) Modified threaded hex head pipe plug.
2) Installed modified threaded hex head pipe plug.
3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the threaded joint. No evidence of leakage during the pressure test.

Lower Cooling Coil Outlet Nozzle For WMA-CC-53A/1
1) Modified threaded hex head pipe plug.
2) Installed modified threaded hex head pipe plug.
3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the threaded joint. No evidence of leakage during the pressure test.

NOTES -

1) The information pertaining to the National Board No. and the Serial No. on the ASME Code name plates was inaccessible. The air handling unit WMA-AH-53A/1 consists of two (2) banks with two (2) cooling coils (upper and lower cooling coil) in each bank. Each cooling coil has its own N-1 Code Data Report with the National Board No. and the Serial No. as follows:

National Board No. 234, Serial No. 03-A090
National Board No. 240, Serial No. 03-A091
National Board No. 236, Serial No. 03-A092
National Board No. 244, Serial No. 03-A082

The ASME Code name plates for the above listed cooling coils in WMA-CC-53A/1 were inaccessible in order to confirm which National Board No. and the Serial No. cooling coil (upper and lower) is applicable to which N-1 Code Data Report.

2) The N-1 Code Data Reports for the units are coded as WMA-AH-53A/1, 53A/2.,53A/3 and 53A/4. The Code Data Reports are for cooling coils WMA-CC-53A/1, 53A/2.,53A/3 and 53A/4.

PLAN No 2-1444

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 230 Psig **Test Temperature:** 55° F

Component Design Pressure: 300 Psig **Temperature:** 200° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 5/20/98 **Date** 5/20/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 11/19/97 *to* 5/18/98 *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** 7486W/7486 WI SB IS

National Board, State, and Endorsements

Date 5/23/98

PLAN No 2-1445

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 05/19/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Cooling Coil
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Summer 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PRA-CC-1A*	CVI Corporation	03-A098	219	N/A	1975	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced threaded hex head pipe plug for cooling coil PRA-CC-1A*. The replacement work was performed as follows:
   1) Modified threaded hex head pipe plug.
   2) Installed modified threaded hex head pipe plug.
   3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the threaded joint. No evidence of leakage during the pressure test.

NOTES -

1) * The N-1 Code Data Report for this unit is coded as PRA-FC-1A. The Code Data Report is for cooling coil PRA-CC-1A.

PLAN No 2-1445

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 230 Psig — Test Temperature: 55° F

Component Design Pressure: 300 Psig — Temperature: 200° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/20/98 — Date 5/20/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/12/98 to 5/23/98 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 7486W/7486 NIS8 ES — National Board, State, and Endorsements

Date 5/23/98

PLAN No 2-1450

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:** 05/19/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Cooling Coil
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Summer 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRA-CC-2*	CVI Corporation	03-A075	222	N/A	1975	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced threaded hex head pipe plug for cooling coil RRA-CC-2*. The replacement work was performed as follows:

1) Modified threaded hex head pipe plug.
2) Installed modified threaded hex head pipe plug.
3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the threaded joint. No evidence of leakage during the pressure test.

NOTES -

1) * The N-1 Code Data Report for this unit is coded as RRA-FC-2. The Code Data Report is for cooling coil RRA-CC-2.

PLAN No 2-1450

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 230 Psig
Component Design Pressure: 300 Psig
Test Temperature: 55° F
Temperature: 200° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

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

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Date 5/20/98

Date 5/20/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/3/97 to 5/23/98 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 7486W/7486 NEIB IS.
National Board, State, and Endorsements

Date 5/23/98

PLAN No 2-1451

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:** 05/19/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Cooling Coil
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Summer 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRA-CC-5*	CVI Corporation	03-A079	226	N/A	1975	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced threaded hex head pipe plug for cooling coil RRA-CC-5*. The replacement work was performed as follows:

1) Modified threaded hex head pipe plug.
2) Installed modified threaded hex head pipe plug.
3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the threaded joint. No evidence of leakage during the pressure test.

NOTES -

1) * The N-1 Code Data Report for this unit is coded as RRA-FC-5. The Code Data Report is for cooling coil RRA-CC-5.

PLAN No 2-1451

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 230 Psig — Test Temperature: 55° F

Component Design Pressure: 300 Psig — Temperature: 200° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/20/98 — Date 5/20/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/18/97 to 5/23/98 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.

[illegible] — Inspector's Signature

Commissions 7486 W/7486 NISB II — National Board, State, and Endorsements

Date 5/23/98

PLAN No 2-1452

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:** 05/19/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Cooling Coil
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Summer 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRA-CC-11	CVI Corporation	03-A072	225	N/A	1975	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced threaded hex head pipe plug for cooling coil RRA-CC-11. The replacement work was performed as follows:

1) Modified threaded hex head pipe plug.
2) Installed modified threaded hex head pipe plug.
3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the threaded joint. No evidence of leakage during the pressure test.

PLAN No 2-1452

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 230 Psig — Test Temperature: 55° F

Component Design Pressure: 300 Psig — Temperature: 200° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/20/98 — Date 5/20/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/18/97 to 5/22/98 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 7486W/7486 NIS8 II — National Board, State, and Endorsements

Date 5/22/98

PLAN No 2-1462

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 11/20/97
Sheet: 1 of 1
Unit: WNP-2

1. Owner: Washington Public Power Supply System (WPPSS)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1974 Edition with Winter 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-RCIC-PCV-15	JCI	PI(1)-ST-RCIC-PCV-15	N/A	N/A	1982	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Installed new tubing material associated with the second air regulator for the air operator for valve RCIC-PCV-15. The work was performed as follows:

1) Installed new tubing.
2) Installed new fittings associated with the tubing installation.

PLAN No 2-1462

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 11/20/97 — Date 11/20/97

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1475

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 01/28/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Target Rock	13	N/A	N/A	1980	Repaired	Yes, Code Class 2
Spare Disc	Target Rock	762	N/A	N/A	1989	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Spare Target Rock valve Serial No 13 (PI-V-X268), Model No 79TT-001 was removed from the plant in accordance with ASME Section XI Plan No 2-1352. This spare valve was refurbished for future use in the plant. The refurbishment (repair and replacement) work was performed as follows:
   1) Cut valve body to bonnet seal weld.
   2) Removed existing disc from the valve.
   3) Installed new replacement disc Serial No 782 in the valve.
   4) Made valve body to bonnet seal weld.
   5) Performed visual examination on the final seal weld. Visual examination results acceptable.
   6) Performed liquid penetrant (PT) examination on the final seal weld. Liquid penetrant (PT) examination results acceptable.

PLAN No 2-1475

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: See attached N-2 Code Data Report for the new replacement disc, Serial No 782.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 1/28/98 — Date 1/28/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10-8-97 to 1-28-98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

J. M. Gaston — Inspector's Signature

Commissions 7486W/7486 NIS8 IS — National Board, State, and Endorsements

Date 1/28/98

PLAN No. 2-1475

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

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

Not To Exceed One Day's Production

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735 (name and address of NPT Certificate Holder)
2. Manufactured for Washington Public Power Supply System, Richland, WA (name and address of purchaser)
3. Location of installation Washington Nuclear Plant 2, Richland, WA (name and address)
4. Type 202337-1 Rev. E (drawing no.) SA-479 316 (mat'l. spec. no.) 75 KSI (tensile strength) N/A (CRN) 1989 (year built)
5. ASME Code, Section III: 1974 (edition) W 75 (addenda date) 2 (class) N/A (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A
7. Remarks: Spare Parts for a completed valve, Models 79TT-001, 83TT-001

DISC S/N 782 Rudolf Zupb 1/25/98

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. in Numerical Order		Part or Appurtenance Serial Number	National Board Number in Numerical Order
(1)	779	N/A	(26)		
(2)	816	N/A	(27)		
(3)	788	N/A	(28)		
(4)	824	N/A	(29)		
(5)	782	N/A	(30)		
(6)	760	N/A	(31)		
(7)	762	N/A	(32)		
(8)	N/A	N/A	(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)		

10. Design pressure N/A psi. Temp. N/A °F. Hydro. test pressure 165 (when applicable) at temp. °F AMB

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

(12/86) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Mfr. Serial No. See Front

Design specifications certified by _____ P.E. State _____ Reg. no. _____

Design report* certified by _____ P.E. State _____ Reg. no. _____

CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization No. 1948 Expires 12-9-89

Date 4/4/89 Name Target Rock Corporation (NPT Certificate Holder) Signed E. Bajada (authorized representative) E. Bajada, Q.A. Manager

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by Commercial Union Insurance Company of Boston, Mass. have inspected these items described in this Data Report on 4/4/89, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 4/4/89 Signed William A. Rolland (Authorized Inspector) Commissions NEW YORK STATE COMMISSION NO. 2288 ALSO COMMISSIONED IN: Penn., Ohio & Con (Nat'l. Bd. (incl. endorsement(s) state or prov. an

PLAN No 2-1481

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 10/23/97
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(21)-2	WPPSS	SW(21)-2-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3
SW-V-49	Borg Warner	16840	N/A	N/A	1977	Replaced	Yes, Code Class 1
SW-V-49	Borg Warner	94WS0019	N/A	N/A	1994	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing valve SW-V-49. The replacement work was performed as follows:
   1) Removed existing valve SW-V-49, Serial No 16840.
   2) Installed new replacement valve SW-V-49, Serial No 94WS0019.
   3) Made required socket welds.
   4) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES

1) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Service Water (SW) piping system.
2) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 3 application.
3) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the new replacement valve SW-V-49, Serial No 94WS0019.

PLAN No 2-1481

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve SW-V-49, Serial No 94WS0019.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 10/28/97 — Date 10/28/97

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No. 2-148

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

1. Manufactured and certified by BR/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 76620 Rev. L CRN N/A

5. ASME Code, Section III, Division 1: 1971 (edition) WINTER 1973 (addenda date) 1 (class) N/A (Code Case no.)

6. Pump or valve VALVE Nominal inlet size 1" (in.) Outlet size 1" (in.)

7. Material: Body SA105 Bonnet N/A 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.
94RS0019	N/A	308657	N/A	308670

SW-V-49, S/N 94WS0019

Philip Sims
10/1/97

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

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Certificate Holder's Serial No. 94RS0019

8. Design conditions 3600 (pressure) psi 100 (temperature) °F or valve pressure class 1500# (1)

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 5400-5450 psi. Disk differential test pressure 3960-4010 psi

11. Remarks: MATERIAL: BACKSEAT SA564 TYPE 630 COND. H-1100
CERT HOLDER'S S/N — BACKSEAT S/N
94RS0019 308681

CERTIFICATION OF DESIGN

Design Specification certified by RICHARD LESLIE SCHLOSSER P.E. State WASH. Reg. no. 21701
Design Report certified by DAVID MURANGIAN P.E. State CA. Reg. no. M19547

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-1131 Expires JUNE 10, 1996

Date 10-31-94 Name BW/IP INTERNATIONAL, INC. (N Certificate Holder) Signed [signature] (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 October 31, 1994, 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 ENGINEERING ASSOCIATION

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 10/31/94 Signed [signature] (Authorized Inspector) Commissions CA 1574 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

SATISFACTORY ✓ UNSATISFACTORY ____
[signature] II 11/8/94
RECEIPT INSPECTOR / LEVEL / DATE

PLAN No 2-1482

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/16/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Closed Cooling (RCC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2 And 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCC-V-219	BW/IP	E337A-1-1	N/A	N/A	1998	Replacement	Yes, Code Class 1
RCC-V-220	Dragon	PB 1303	N/A	N/A	1998	Replacement	Yes, Code Class 1
RCC-V-221	Dragon	PB 1243	N/A	N/A	1996	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Installed external bypass for valve RCC-V-40. The ASME Section III, Code Class 2 and ASME Section III, Code Class 3 replacement work was performed as follows:

A) ASME Section III, Code Class 2 Replacement Work
1) Installed new piping material such as elbows, sockolet and pipe.
2) Installed new valve RCC-V-219, Serial No E337A-1-1.
3) Made required socket welds.
4) Performed visual examination on the final socket welds. Visual examination results acceptable.
5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES -
1) The existing ASME Code Stamped piping system in which the new valve RCC-V-219, Serial No E337A-1-was installed is Reactor Closed Cooling (RCC) piping system RCC(36)-1-P2. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
2) The new valve RCC-V-219, Serial No E337A-1 is certified to comply with ASME Section III, Code Class 1, 1986 Edition with no Addenda requirements.
3) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.

B) ASME Section III, Code Class 3 Replacement Work
1) Installed new piping material such as elbows, sockolet, tee and pipe.
2) Installed new valve RCC-V-220, Serial No PB 1303.
3) Installed new valve RCC-V-221, Serial No PB 1243.
4) Made required socket welds.
5) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES -
1) The existing ASME Code Stamped piping system in which the new valves RCC-V-220, Serial No PB 1303 and RCC-V-221, Serial No PB 1243 were installed is Reactor Closed Cooling (RCC) piping system RCC(36)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
2) The new valves RCC-V-220, Serial No PB 1303 and RCC-V-221, Serial No PB 1243 are certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1976 Addenda requirements.
3) ASME Section III, Code Class 1 valves for ASME Section III, Code Class 3 application.

PLAN No 2-1482

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: See attached NPV-1 Code Data Reports for the following new valves:

EPN No	Serial No
RCC-V-219	E337A-1-1
RCC-V-220	PB 1303
RCC-V-221	PB 1243

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/16/98 — Date 6/16/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No. 2-1482

Kulaup Sing 6/15/98.

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

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

Pg. ____ of ____

1. Manufactured and certified by BW/IP International, Inc. Valve Division, 701 First Street, Williamsport, PA 17701
   (name and address of N Certificate Holder)
2. Manufactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 99352
   (name and address of Purchaser or Owner)
3. Location of installation WNP-2 OPS WHS Complex, North Power Plant Loop, Richland, WA 99352
   (name and address)
4. Model No., Series No., or Type Piston Check Drawing W98-25029 Rev. A CRN ----
5. ASME Code, Section III, Division 1: 1986 (edition) No (addenda date) 1 (class) N/A (Code Case no.)
6. Pump or valve Valve Nominal inlet size 1/2" (in.) Outlet size 1/2" (in.)
7. Material: Body SA351-CF8M Bonnet SA479-316 Disk SA564-630-1075 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.
E337A-1-1	N/A	25	Heat #714381	Heat #714273

RCC-V-219, S/N E337A-1-1

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

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

FORM NPV-1 (back)

8. Remarks 1/2"-1878#-GB Piston Check, Pressure Seal Design

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

10. Cold working pressure 4507 psi at 100°F

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

CERTIFICATION OF DESIGN

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

Design Report certified by Theron C. Bartlett II P.E. State PA Reg. no. PE-039036-E

CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. N1712 Expires 4/15/98

Date 3-25-98 Name BW/IP International, Inc. Valve Division (N Certificate Holder) Signed Debra Lowdenslager (authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Pennsylvania and employed by Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 1-21 thru 3-26 19 98, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 3-26-98 Signed Charles Young (Authorized Inspector) Commissions Pennsylvania 2392 (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

(1) For manually operated valves only.

PLAN No. 2-1482
Rudip Singh 6/15/98

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

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

1. Manufactured by Dragon Valves, Inc. 13457 Excelsior Dr., Norwalk, CA. 90650
(Name and Address of N Certificate Holder)
2. Manufactured for Wash. Public Power Sup. Sys., P.O. Box 968, Richland, WA., 99352
(Name and Address of Purchaser or Owner)
3. Location of Installation WNP-2 North Power Plant Loop, Richland, WA., 99352
(Name and Address)
4. Pump or Valve Valve. Nominal Inlet Size 1/2 (inch) Outlet Size 1/2 (inch)

	(a) Model No., Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	7N057SWD	PB1303	N/A	16954	1	N/A	1998
(2)		&		Rev. A			
(3)		PB1304					
(4)							
(5)							
(6)		RCC-V-220, S/N PB 1303					
(7)							
(8)							
(9)							
(10)							

5. Globe Valve (2 Pcs.)
(Brief description of service for which equipment was designed)

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class 1500 (1)
7. Cold Working Pressure 3600 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings N/A			
(b) Forgings			
HT. 1G4836	ASME SA182 GR. F316	Ajax Forge Co.	Body
HT. A19167	ASME SA182 GR. F316	Ajax Forge Co.	Bonnet Yoke

(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.

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting N/A			
(d) Other Parts			
HT. 712678	ASME SA564 GR. 630	Carpenter Tech.	Disc

9. Hydrostatic test 5400 psi. Disk Differential test pressure 3600 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. I., Edition 1974. Addenda W'76 (Date). Code Case No. N/A. Date March 24, 1998

Signed Dragon Valves, Inc. (N Certificate Holder) by Mark A. Snyder

Our ASME Certificate of Authorization No. N-1033 to use the N (N) symbol expires 3/6/99 (Date).

CERTIFICATION OF DESIGN

Design information on file at Washington Public Power Supply Systems

Stress analysis report (Class 1 only) on file at Washington Public Power Supply Systems

Design specifications certified by (1) Abbas A. Mostala

PE State WA. Reg. No. 0028777

Stress analysis certified by (1) Harold M. Braund

PE State CA. Reg. No. 20589

(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 H.S.B. INSP. & INS. CO. of HARTFORD, CT. have inspected the pump, or valve, described in this Data Report on 3.24. 19 98, and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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

Date 3.24. 19 98.

Cirilo F. Reyes (Inspector) Commissions CA-1520 (Nat'l Bd., State, Prov. and No.)

PLAN. No. 2-1482

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

6/15/96

1. Manufactured by Dragon Valves, Inc. 13457 Excelsior Dr., Norwalk, CA. 90650
(Name and Address of N Certificate Holder)
2. Manufactured for Wash. Public Power Sup. Sys., P.O. Box 968 Richland, WA. 99352
(Name and Address of Purchaser or Owner)
3. Location of Installation WNP-2 North Power Plant Loop, Richland, WA. 99352
(Name and Address)
4. Pump or Valve Valve Nominal Inlet Size 1/2 (inch) Outlet Size 1/2 (inch)

	(a) Model No., Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	7N057SWD	PB1238	N/A	16954	1	N/A	1995
(2)		Thru		Rev. A			
(3)		PB1243					
(4)							
(5)							
(6)							
(7)		RCC-V-221, S/N PB1243					
(8)							
(9)							
(10)							

5. Globe Valve (6 Pcs.)
(Brief description of service for which equipment was designed)

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class 1500 (1)
7. Cold Working Pressure 3600 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings N/A			
(b) Forgings			
HT. 9369H	ASME SA182 GR. F316	Ajax Forge Co.	Body
HT. A19167	ASME SA182 GR. F316	Ajax Forge Co.	Bonnet Yoke

(1) For manually operated valves only.

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

(10/77) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

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FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting N/A			
(d) Other Parts			
HT. 705679	ASME SA564 GR. 630	Carpenter Tech.	Disc

9. Hydrostatic test 5400 psi. Disk Differential test pressure 3600 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. I., Edition 1974, Addenda W'76 (Date), Code Case No. N/A, Date 2/13/96

Signed Dragon Valves, Inc. (N Certificate Holder) by R. R. Snyder

Our ASME Certificate of Authorization No. N-1033 to use the N (N) symbol expires 5-6-96 (Date).

CERTIFICATION OF DESIGN

Design information on file at Washington Public Power Supply Systems (See Line 2)

Stress analysis report (Class 1 only) on file at Washington Public Power Supply Systems

Design specifications certified by (1) James F. Hagen

PE State WA. Reg. No. 13579

Stress analysis certified by (1). Harold M. Braund

PE State CA. Reg. No. 20589

(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 H.S.B. INSP. & INS. CO. of HARTFORD, CT. have inspected the pump, or valve, described in this Data Report on 2-15 19 96, 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 2-15 19 96.

(Inspector) Commissions CA 1716 (Nat'l Bd., State, Prov. and No.)

SATISFACTORY ✓ UNSATISFACTORY

SIFT INSPECTOR / LEVEL / DATE 9/3/96

0268041133

PLAN No 2-1483

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/04/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-4A	WPPSS	RHR(1)-4A-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
RHR-V-42A	Velan	0377	N/A	N/A	1977	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Installed external bypass for valve RHR-V-42A, Serial No 0377. The replacement work was performed as follows:
   1) Installed new piping material such as pipe, pilot boss.
   2) Made required welds.
   3) Performed visual examination on the final welds. Visual examination results acceptable.
   4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES -

1) The existing ASME Code Stamped piping system applicable to valve RHR-V-42A, Serial No 0377 is Residual Heat Removal (RHR) piping system RHR(1)-4A-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing valve RHR-V-42A, Serial No 0377 on which the external bypass was installed is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda requirements.

PLAN No 2-1483

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Date 6/4/98 Date 6/4/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____
National Board, State, and Endorsements

Date _____

PLAN No 2-1484

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:** 05/22/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: High Pressure Core Spray (HPCS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS(2)-1	WPPSS	HPCS(2)-1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
HPCS-V-15	Anchor Darling	E5310-3-1	N/A	N/A	1975	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Installed external bypass for valve HPCS-V-15. The replacement work was performed as follows:

1) Installed new piping material such as tee, reducing insert, half coupling and pipe.
2) Installed new valve HPCS-V-86, Serial No PB 1239
3) Made required welds.
4) Performed visual examination on the final welds. Visual examination results acceptable.
5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the High Pressure Core Spray (HPCS) piping system HPCS(2)-1-P1.
2) ASME Section III, Code Class 2, 1971 Edition with Summer 1971 Addenda for valve HPCS-V-15, Serial No E5310-3-1.
3) ASME Section III, Code Class 1 valve HPCS-V-86, Serial No PB 1239 for ASME Section III, Code Class 2 application.

PLAN No 2-1484

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve HPCS-V-86, Serial No PB 1239.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/22/98 — Date 5/22/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN NO: 2-1484

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

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

1. Manufactured by Dragon Valves, Inc. 13457 Excelsior Dr., Norwalk, CA. 90650
(Name and Address of N Certificate Holder)
2. Manufactured for Wash. Public Power Sup. Sys., P.O. Box 968 Richland, WA. 99352
(Name and Address of Purchaser or Owner)
3. Location of Installation WNP-2 North Power Plant Loop, Richland, WA. 99352
(Name and Address)
4. Pump or Valve Valve. Nominal Inlet Size 1/2 (inch) Outlet Size 1/2 (inch)

	(a) Model No., Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	7N057SWD	PB1238	N/A	16954	1	N/A	1995
(2)		Thru		Rev. A			
(3)		PB1243					
(4)							
(5)							
(6)		HPCS-V-86, S/N PB 1239					
(7)							
(8)							
(9)				Rudolf Swab			
(10)				5/21/98			

5. Globe Valve (6 Pcs.)
(Brief description of service for which equipment was designed)

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class 1500 (1)
7. Cold Working Pressure 3600 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings N/A			
(b) Forgings			
HT. 9369H	ASME SA182 GR. F316	Ajax Forge Co.	Body
HT. A19167	ASME SA182 GR. F316	Ajax Forge Co.	Bonnet Yoke

(1) For manually operated valves only.

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

(10/77) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting N/A			
(d) Other Parts			
HT. 705679	ASME SA564 GR. 630	Carpenter Tech.	Disc

9. Hydrostatic test 5400 psi. Disk Differential test pressure 3600 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. I., Edition 1974.
Addenda W'76 (Date). Code Case No. N/A. Date 2/13/96
Signed Dragon Valves, Inc. (N Certificate Holder) by R. K. Snyder
Our ASME Certificate of Authorization No. N-1033 to use the N (N) symbol expires 5-6-96 (Date).

CERTIFICATION OF DESIGN

Design information on file at Washington Public Power Supply Systems (See Line 2)
Stress analysis report (Class 1 only) on file at Washington Public Power Supply Systems

Design specifications certified by (1) James F. Hagen
PE State WA. Reg. No. 13579
Stress analysis certified by (1). Harold M. Braund
PE State CA. Reg. No. 20589

(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 H.S.B. INSP. & INS. CO. of HARTFORD, CT. have inspected the pump, or valve, described in this Data Report on 2-15 19 96, 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 2-15 19 96.
Ralph Wilson (Inspector) Commissions CA 1716 (Nat'l Bd., State, Prov. and No.)

SATISFACTORY / UNSATISFACTORY
RECEIPT INSPECTOR / LEVEL / DATE
II 9/3/96

02681411133

PLAN No 2-1490

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 06/23/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0053	N/A	N/A	1980		Yes, Code Class 1
Disc Insert	Crosby	N93185-45-0160	N/A	N/A	N/A	Replaced	No, Code Class 1
Disc Insert	Crosby	N93185-56-0249	N/A	N/A	N/A	Replacement	No, Code Class 1
Nozzle	Crosby	N93184-44-0112	N/A	N/A	N/A	Replaced	No, Code Class 1
Nozzle	Crosby	N93184-56-0174	N/A	N/A	N/A	Replacement	No, Code Class 1

7. Description Of Work Performed: Replaced parts and bolting material for spare relief valve Serial No N63790-00-0053. The replacement work was performed as follows:

1) Removed existing disc insert Serial No N93185-45-0160 from the spare relief valve.
2) Installed new replacement disc insert Serial No N93185-56-0249 in the spare relief valve.
3) Removed existing disc nozzle Serial No N93184-44-0112 from the spare relief valve.
4) Installed new replacement nozzle Serial No N93184-56-0174 in the spare relief valve.
5) Performed VT-3 visual examination on exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable.
6) Performed VT-3 visual examination on the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
7) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
8) Reassembled the spare relief valve.
9) Reinstalled VT-3 visually examined existing studs and nuts for the relief valve body to bonnet joint.
10) Performed VT-1 visual examination on three (3) new replacement studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
11) Installed VT-1 visually examined three (3) new replacement studs for the relief valve inlet joint.
12) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. Leakage was observed during VT-2 visual examination and was evaluated to be acceptable.

NOTES -

1) The spare relief valve Serial No N63790-00-0053 was installed in the plant in accordance with ASME Section XI Plan No 2-1493.
2) VT-3 visual examination on the existing nuts for the relief valve inlet joint was performed in accordance with ASME Section XI Plan No 2-1493.

PLAN No 2-1490

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 7.5 Psig Test Temperature: 71° F

Component Design Pressure: 1185 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 - Program Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)

Date 6/23/98 Date 6/23/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/4/97 to 7/1/98 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 7486W/7486 WISBES

National Board, State, and Endorsements

Date 7/1/98

PLAN No 2-1491

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-2A	Crosby	N63790-00-0053	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-2A	Crosby	N63790-00-0054	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-2A. The replacement work was performed as follows:
   1) Removed existing relief valve Serial No N63790-00-0053 with set pressure of 1185 Psig at rated temperature of 575° F.
   2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Performed VT-1 visual examination on four (4) new studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
   5) Installed replacement relief valve with Serial No N63790-00-0054 with set pressure of 1185 Psig at rated temperature of 575° F.
   6) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
   7) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
   8) Installed VT-1 visually examined new studs for the relief valve inlet joint.
   9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0054 was installed is Main Steam (MS) piping system B22-G001A-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0054 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
4) The replacement relief valve Serial No N63790-00-0054 was previously refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1533.

PLAN No 2-1491

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-00-0054, 2) See attached NV-1 Code Data Report for replacement relief valve Serial No N63790-00-0054, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/6/98 **Date** 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 11-2-97 *to* 6/10/98 *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 7418614/7486 NISB II

National Board, State, and Endorsements

Date 6/10/98

OF NUCLEAR PRESSURE RELIEF DEVICES PLAN No. 2-1491

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301 6/3/98

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

HB-65-BP-FN	N63790-00-0054	N/A	steam	6 x 10	1980
(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)

d: Construction Code:

ASME Sec. III Div. 1	1971	N/A	N/A	1
(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)

6. ASME Code Section XI applicable for inservice inspection: 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. ASME Code Section XI used for repairs, replacements: 1989 (edition) N/A (addenda) N/A (Code Case(s))

8. Construction Code used for repairs, replacements: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities: N/A

10. Opening pressure: 1185 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, nozzle ring set screw (0054), disc holder pin.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA
Date	(repair organization)	(authorized representative)	(title)

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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.

12/9/97	Carl Enos	NB 8460, A. N. I. TN 2236
Date	Inspector's Signature	Commissions (NB and endorsements), jurisdiction [illegible]

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1491

Q.C.-44D
Freedip Rupp
6/3/98

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

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0054 Drawing No. DS-A-63790 Rev. C

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

FOR INFORMATION ONLY

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

Stamped Capacity 891,750 @ 3 % Overpressure — Blowdown (psig) 2% to 11%

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

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0073	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0036	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. Bar Stock & Forgings		
Disc Insert	N93185-34-0086	ASME SA637 Gr. 718
Nozzle	N93184-33-0058	ASME SA182 Gr. F316
Disc Holder*K55484-35-0090	*N89714-34-0090	AMS 5662B
Spring Washers K62858-35-0036	K62856-35-0092 K62857-35-0057	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0061	ASME SA193 Gr. B6
Spindle Point K62873-35-0054	*N89720-34-0093	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0036	NX2689-0117	ASTM A304-66 Gr. 4161H
d. Bolting		7X00380137
e. Spindle Ball K62873-35-0054	N93213-0054	Stellite #6
Thrust Bearing Adapter	N93409-32-0056	ASME SA193 Gr. B6
Bonnet Stud (J17)	N93207-0645 thru 0656	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0865 thru 0876	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0647 thru 0658	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93[illegible]8-065[illegible] thru 0662	ASTM A194-71 Gr. 2H ASME SA[illegible]4 Gr. 2H

Adjusting Bolt, the Thrust Bearing Adapter, remachining of the Body, 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.

No 3790-00-0054

CERTIFICATE OF COMPLIANCE

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

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

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

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

FOR INFORMATION ONLY

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/19, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 11/19 1980

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

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery [illegible]

ZX00380138

PLAN No 2-1492

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-1B	Crosby	N63790-00-0139	N/A	N/A	1994	Replaced	Yes, Code Class 1
MS-RV-1B	Crosby	N63790-00-0140	N/A	N/A	1994	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 Serial No N63790-00-0139 with set pressure of 1165 Psig at rated temperature of 565° F.
2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
4) Performed VT-1 visual examination on three (3) new studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
5) Installed replacement relief valve with Serial No N63790-00-0140 with set pressure of 1165 Psig at rated temperature of 565° F.
6) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
7) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
8) Installed VT-1 visually examined new studs for the relief valve inlet joint.
9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -
1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0140 was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0140 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
4) The replacement relief valve Serial No N63790-00-0140 was previously refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1540.

PLAN No 2-1492

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-00-0140, 2) See attached NV-1 Code Data Report for replacement relief valve Serial No N63790-00-0140, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By** Kuldip Singh

Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/6/98 **Date** 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/2/97 *to* 6/10/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature **Commissions** 7486 W/7486 WIS & IL

National Board, State, and Endorsements

Date 6/10/98

OF NUCLEAR PRESSURE RELIEF DEVICES PLAN No. 2-1492

1. Work performed by: NWS Technologies; LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

HB-65-BP-DF	N63790-01-0140	N/A	steam	6 x 10	1994
(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)

d: Construction Code:

ASME Sec. III Div. 1	1971	N/A	N/A	1
(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)

6. ASME Code Section XI applicable for inservice inspection:

1989	N/A	N/A
(edition)	(addenda)	(Code Case(s))

7. ASME Code Section XI used for repairs, replacements:

1989	N/A	N/A
(edition)	(addenda)	(Code Case(s))

8. Construction Code used for repairs, replacements:

1971	N/A	N/A
(edition)	(addenda)	(Code Case(s))

9. Design responsibilities: N/A

10. Opening pressure: 1165 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

12/9/97	NWS Technologies, LLC		Manager, QA
Date	(repair organization)	(authorized representative)	(title)

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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.

12/9/97		NB 8460, A, N, I, TN 2236
Date	Inspector's Signature	Commissions (NB incl endorsements), jurisdiction & no.

1

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN No. 2-1492

Q.C.-44C-1
Quality Surv 6 ...

6/3/98

FORM NV-1, FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules
DATA REPORT
Safety and Safety Relief Valves

1. Manufactured by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address of N Certificate Holder)
Model No. HB-65-BP Order No. NV4000468 Contract Date 24 JAN 1994 National Board No. —

2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM RICHLAND, WA Order No. 238136 C/N 02
(Name and Address)

3. Owner WASHINGTON PUBLIC POWER SUPPLY SYSTEM RICHLAND, WA
(Name and Address)

4. Location of Plant HANFORD # 2

5. Valve Identification B22-F013 Serial No. N63790-01-0140 Drawing No. DS-A-63790-1 REV 0
Type MAIN STEAM (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size 4.532 (Inch) Pipe Size — (Inch) Inlet 6 (Inch) Outlet 10 (Inch)

6. Set Pressure 1165.0 565 F (Rated Temperature)
Stamped Capacity 876878 LB./HR.SAT.STM.@ 3 % Overpressure — Blowdown (psig) 2 THRU 11
Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 1100

7. The material, design, construction and workmanship comply with ASME Code, Section III.
Class 1 Edition 1971, Addenda Date NO, Case No. —

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body	N93183-47-0130	ASTM A105 GR.II
Bonnet	N93407-47-0058	ASTM A105 GR.II
b. Bar Stock & Forgings		
Support Rods	—	—
Nozzle	N93184-53-0167	ASME SA182 GR.F316
Disc	N93185-52-0204	ASME SA637 GR.718
	N93186-41-0060	
Spring Washers	N93187-40-0007	ASTM A105 GR.II
Adjusting Bolt	N93410-33-0007	ASME SA193 GR.B6
Spindle	N96461-34-0015	ASTM A564 TYPE 630
c. Spring	NX2689-0138	ASTM A304 GR.4161 H
d. Bolting	—	—
e. Other Pieces		
DISC HOLDER	N89714-42-0279	AMS5662B(INCONEL718)
SPINDLE BALL	N96460	ASTM A276 T440C
ADJ BOLT BUTTON	N93411-36-0015	ASME SA193 GR.B6
THRUST BEARING ADAPTER	N93409-35-0012	ASTM A193 GR.B6
BONNET STUD	N93207	ASTM A193 GR.B7
BONNET NUT	N93210	ASME SA194 CL.2H
INLET STUD	N93216	ASTM A193 Gr.B7
INLET NUT	N93218	ASTM A194 CL.2H

We certify that the statements made in this report are correct.

Date 27 May 94 Signed Crosby Valve & Gage Company by Lawrence [illegible]
Manufacturer

Certificate of Authorization No. 1878 expires 30 SEP 95.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Arkwright -Boston Manufacturers Mutual Insurance Company have inspected the equipment described in this Data Report on May 27, 19 94 and state that to the best of my knowledge and belief, the Manufacturer has constructed thisequipment in accordance with the applicable Subsections of ASME Section III

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

Factory Mutual System

Date 5/27, 19 94.

Signed [illegible]
(Inspector)

Commissions MA 145
(Nat'l. Bd., State, Prov. and No.)

PLAN No 2-1493

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced existing relief valve MS-RV-3B. The replacement work was performed as follows:
1) Removed existing relief valve Serial No N63790-00-0051 with set pressure of 1185 Psig at rated temperature of 575° F.
2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
4) Installed replacement relief valve with Serial No N63790-00-0053 with set pressure of 1185 Psig at rated temperature of 575° F.
5) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
6) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -
1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0053 was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0053 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
4) The replacement relief valve Serial No N63790-00-0053 was previously refurbished by Supply System and the refurbishment work performed is documented in ASME Section XI Plan No 2-1490.

PLAN No 2-1493

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NV-1 Code Data Report for replacement relief valve Serial No N63790-00-0053, 2) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 6/6/98 **Date** 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/2/97 *to* 6/10/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature **Commissions** 7486 W/ 7486 WDS & IS
National Board, State, and Endorsements

Date 6/10/98

MS-RV-3B

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1493

Q.C.-44D

FOR INFORMATION ONLY

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

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0053 Drawing No. DS-A-63790 Rev. C

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

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

Stamped Capacity 891,750 @ 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 ~~Castings~~		
Body	N93183-35-0072	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0035	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Bar Stock & Forgings~~ ~~Supplement~~ Disc Insert	N93185-34-0085	ASME SA637 Gr. 718
Nozzle	N93184-33-0057	ASME SA182 Gr. F316
Disc Holder *K55484-35-0082	*N89714-34-0089	AMS 5662B
Spring Washers K62858-35-0035	K62856-35-0091 K62857-35-0056	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0060	ASME SA193 Gr. B6
Spindle Point K62873-35-0053	*N89720-34-0085	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0035	*N89722-0011	ASTM A304-66 Gr. 4161H
d. Bolting		~~7X00380127~~
e. ~~Spindle~~ Spindle Ball K62873-35-0053	N93213-0053	Stellite #6
Thrust Bearing Adapter	N93409-32-0055	ASME SA193 Gr. B6
Bonnet Stud (I17, BW5)	N93207-0633 thru 0644	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0853 thru 0864	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0635 thru 0646	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0639 thru 0650	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-33-0062	ASME SA193 Gr. B6

modification consists of replacement of the Disc Insert, Nozzle, Bonnet Seat Ring, 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.

N63790-00-0053

CERTIFICATE OF COMPLIANCE

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

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

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

CERTIFICATION OF DESIGN

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

[1]Signature not required - list name only.

FOR INFORMATION ONLY

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/21, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 11/21 1980.
Signed [illegible] Commissions MASS 1266
(Inspector) (Nat'l. Bd., State, Prov. and

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

ZX00380128

PLAN No 2-1494

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-4B	Crosby	N63790-00-0055	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-4B	Crosby	N63790-00-0058	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-4B. The replacement work was performed as follows:
1) Removed existing relief valve Serial No N63790-00-0055 with set pressure of 1195 Psig at rated temperature of 575° F.
2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
4) Performed VT-1 visual examination on three (3) new studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
5) Installed replacement relief valve with Serial No N63790-00-0058 with set pressure of 1195 Psig at rated temperature of 575° F.
6) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
7) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
8) Installed VT-1 visually examined new studs for the relief valve inlet joint.
9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -
1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0058 was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0058 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
4) The replacement relief valve Serial No N63790-00-0058 was previously refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1535.

PLAN No 2-1494

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-00-0058, 2) See attached NV-1 Code Data Report for replacement relief valve Serial No N63790-00-0058, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By** Kuldip Singh

Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/6/98 **Date** 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/4/97 *to* 6/10/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature **Commissions** 7486/7486 NB18 IS

National Board, State, and Endorsements

Date 6/10/98

OF NUCLEAR PRESSURE RELIEF DEVICES PLAN No. 2-1498

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2.

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

HB-65-BP-FN	N63790-00-0058	N/A	steam	6 x 10	1980
(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)

d: Construction Code:

ASME Sec. III Div. 1	1971	N/A	N/A	1
(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)

6. ASME Code Section XI applicable for inservice inspection:

1989	N/A	N/A
(edition)	(addenda)	(Code Case(s))

7. ASME Code Section XI used for repairs, replacements:

1989	N/A	N/A
(edition)	(addenda)	(Code Case(s))

8. Construction Code used for repairs, replacements:

1971	N/A	N/A
(edition)	(addenda)	(Code Case(s))

9. Design responsibilities: N/A

10. Opening pressure: 1195 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, inlet studs (GQH), disc holder pin.

CERTIFICATE OF COMPLIANCE

I, Cesar V Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

12/9/97	NWS Technologies, LLC		Manager QA
Date	(repair organization)	(authorized representative)	(title)

CERTIFICATE OF INSPECTION

I, Carl R Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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

12/9/97		NB 8460, A N , TN 2236
Date	Inspector's Signature	Commissions (NB and endorsements)

PLAN NO. 2-1494.
[illegible]
6/4/98

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

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

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

5. Valve Identification MPL 0822-F013 Serial No. N63790-00-0058 Drawing No. DS-A-63790 Rev. C

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

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

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

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

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0077	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0040	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.		
Disc Insert	N93185-34-0090	ASME SA637 Gr. 7
Nozzle	N93184-33-0062	ASME SA182 Gr. F3
Disc Holder *K55484-35-0093	*N89714-34-0094	AMS 5662B
Spring Washers K62858-35-0040	K62856-35-0096 K62857-35-0061	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0065	ASME SA193 Gr. B6
Spindle Point K62873-35-0058	*N89720-34-0070	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0040	*N89722-0016	ASTM A304-66 Gr. 4161H
d. Bolting		
e. Spindle Ball K62873-35-0058	N93213-0058	Stellite #6
Thrust Bearing Adapter	N93409-32-0060	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0693 thru 0704	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0913 thru 0924	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0695 thru 0706	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0699 thru 0710	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button K63618-33-0067	N93411-33-0067	ASME SA193 Gr. B6

MAB

2

FOR INFORMATION ONLY

ZX00382751

S/N N63790-00-0058.
Rudip Ewe
3/1

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

CERTIFICATE OF COMPLIANCE

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

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

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

CERTIFICATION OF DESIGN

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

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/25, 19[illegible] 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 warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11/25 1980.
Signed [illegible] (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

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

MAB

3 4 5 6
7 8 9 10
11

FOR INFORMATION ONLY

ZX0038275

PLAN No 2-1495

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-5B	Crosby	N63790-00-0059	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-5B	Crosby	N63790-00-0062	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-5B. The replacement work was performed as follows:
   1) Removed existing relief valve Serial No N63790-00-0059 with set pressure of 1205 Psig at rated temperature of 575° F.
   2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Installed replacement relief valve with Serial No N63790-00-0062 with set pressure of 1205 Psig at rated temperature of 575° F.
   5) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
   6) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
   7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0062 was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0062 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
4) The replacement relief valve Serial No N63790-00-0062 was previously refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1536.

PLAN No 2-1495

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-00-0062, 2) See attached NV-1 Code Data Report for replacement relief valve Serial No N63790-00-0062, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/6/98 **Date** 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/2/97 *to* 6/10/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature

Commissions 7486/7486 NB/IS-ID

National Board, State, and Endorsements

Date 6/10/98

OF NUCLEAR PRESSURE RELIEF DEVICES PLAN No. 2-1495

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301 Philip Lamb 6/4/98

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System
WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

HB-65-BP-FN	N63790-00-0062	N/A	steam	6 x 10	1980
(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)

d: Construction Code:

ASME Sec. III Div. 1	1971	N/A	N/A	1
(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)

6. ASME Code Section XI applicable for inservice inspection: 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. ASME Code Section XI used for repairs, replacements: 1989 (edition) N/A (addenda) N/A (Code Case(s))

8. Construction Code used for repairs, replacements: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities: N/A

10. Opening pressure: 1205 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replaced gaskets & locking washers. Replaced one inlet stud (GQH). Replaced disc holder pin.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA
Date	(repair organization)	(authorized representative)	(title)

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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.

12/9/97	Carl R. Enos	NB 8460, A. N. I. TN 2236
Date	Inspector's Signature	Commissions (NB (incl endorsements) Jurisdiction & No.

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN. NO. 2-1495

Q.C.-44D
6/4/98

FOR INFORMATION ONLY

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

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0062 Drawing No. DS-A-63790 Rev. C

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

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

Stamped Capacity 906,621 @ 3 % Overpressure — Blowdown (psig) 2% or 11%

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

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0081	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0044	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.		
Disc Insert	N93185-34-0094	ASME SA637 Gr. 718
Nozzle	N93184-33-0066	ASME SA182 Gr. F316
Disc Holder*K55484-35-0088	*N89714-34-0119	AMS 5662B
Spring Washers K62858-35-0044	K62856-35-0100 K62857-35-0065	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0069	ASME SA193 Gr. B6
Spindle Point K62873-35-0062	*N89720-34-0074	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0044	*N89722-0020	ASTM A304-66 Gr. 4161H
d. Bolting		
e. Spindle Ball K62873-35-0062	N93213-0062	Stellite #6
Thrust Bearing Adapter	N93409-32-0064	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0741 thru 0752	ASTM A193-71 Br. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0961 thru 0972	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0743 thru 0754	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0747 thru 0758	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H

7X00380156

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.

N63790-00-00102

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 & 171[illegible]
(Date)

Class 1

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

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

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

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

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

FOR INFORMATION ONLY

Date 11/18 1980.

Signed John E. Morris (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

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

ZX00380157

PLAN No 2-1496

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-3C	Crosby	N63790-00-0052	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-3C	Crosby	N63790-00-0138 (N56000-01-0038)	N/A	N/A	1973	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-3C. The replacement work was performed as follows:
   1) Removed existing relief valve Serial No N63790-00-0052 with set pressure of 1185 Psig at rated temperature of 575° F.
   2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Installed replacement relief valve with Serial No N63790-00-0138 with set pressure of 1185 Psig at rated temperature of 575° F.
   5) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
   6) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
   7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0138 was installed is Main Steam (MS) piping system B22-G001C-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0138 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements. Relief valve Serial No N56000-01-0038 (Pre - Modification Serial No) was previously modified by Crosby to Serial No N63790-00-0138.
4) The replacement relief valve Serial No N63790-00-0138 was previously refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1539.

PLAN No 2-1496

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-00-0138, 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) for relief valve Serial No N63790-00-0136, 3) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0038, 4) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) *Signed By* Kuldip Singh - Program Lead Engineer (PLE)

Date 6/6/98 *Date* 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/4/97 *to* 6/10/98 *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* 7486W/7486 WIIC-25
National Board, State, and Endorsements

Date 6/16/98

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN NO.2-1496

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

Rudolph Eng 6/4/98

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0138	N/A	steam	6 x 10	1971

d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

7. ASME Code Section XI used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

8. Construction Code used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1185 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB and endorsements), jurisdiction & no.
12/9/97	Carl Enos	NB 8460, A N I, TN 2236

CROSBY

WRENTHAM, MA

PLAN No. 2-1496

Q.C.-292, REV.A
SHEET 1 OF 2

6/4/98

REPAIR AND REPLACEMENT TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.). NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND,WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND ,WA

5. a. Identifying Nos. N63790-00-0138 – – ----- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component –
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) Pneumatic ( ) Design Pressure ( ) Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO Code Case –

9. Description of work N56000-01-0038 WAS MODIFIED TO N63790-00-0138
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-44-0127
BONNET	N89717	N93407-45-0056
SPINDLE ASSY	K55465	K62873-43-0057
SPR.WASHER	N89724	K62856-45-0204
SPR.WASHER	N89723	K62857-45-0204
SPRING ASSY	K55466	K62858-31-0002
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0154
DISC INSERT	N89715	N93185-52-0201
THR.BRG.ADAPT.	N89725	N93409-34-0011
ADJ.BOLT	N89726	N93410-31-0004
ADJ.BOLT BUTT.	COMMERCIAL	N93411-33-0011
ADJ.BOLT ASSY	COMMERCIAL	K63618-31-0004

2/23/96

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Lisa QA Eng Manager 24 Feb, 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

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

Factory Mutual Systems

Date 2/25, 1994

Signed [illegible] Commissions MA 1455
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-1496
Kuldip Singh
6/4/98

WPPSS S/N	WPPSS Set	Bailly S/N	Bailly Set
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1496

Q.C.-44A

Philip Sipp
6/4/98

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

DATA REPORT
Safety and Safety Relief Valves

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

Model No. HB-65-BP-FN Order No. N-105286 Contract Date 6/28/71

2. Manufactured For General Electric Company San Jose, California Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I, Baileytown, Indiana
Name and Address

4. Location of Plant Baileytown, Indiana

5. Valve Identification MPL #B-22-F013 Serial No. N56000-01-0038 Drawing No. H-56000 Rev. C

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

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

Stamped Capacity 883950 Lbs. Hr. (Sat. Steam) 3 % Overpressure - Blowdown ~~XXXXX~~ 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 (I or II) Edition 1971 Addenda Date Summer 1972

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. ~~XXXXXX~~ Forgings		
Body	N90118-32-0009	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
Bonnet ~~XXXXX~~	N89717-32-0022	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
b. Bar Stock and Forgings		
~~XXXXXXXXX~~ Disc Insert	N89715-32-0018	ASTM A-461-65 Type 630
Nozzle	N89713-32-0028	ASTM A-182-71 F316 ASME SA-182 F316
Disc Holder	N89714-32-0038	AMS 5662 B
Spring Washers Top	N89724-32-0038	ASTM A-105-71 Gr. II
Spring Washers Bottom	N89723-32-0023	ASME SA-105 Gr. II
Adjusting ~~XXXXX~~ Bolt	N89726-32-0015	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
Spindle Point	N89720-32-0044	ASTM A-564-72 Type 630

BWRPD-QC
EHR
3-3-75

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX2689-0043	ASTM A-304-66 Gr. 4161H
d. Bolting		
e.		
Inlet Stud	N89727-0445 thru 0456	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Inlet Stud Nut	N89728-0449 thru 0460	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
Bonnet Stud	N89718-0449 thru 0460	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Bonnet Stud Nut	N89719-0451 thru 0462	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
OTHER PARTS		
Spindle Ball	N89721-0044	Stellite 6
BARS & FORGINGS		
Thrust Bearing Adapter	N89725-32-0033	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6

We certify that the statements made in this report are correct.

Date 10-31 19 73 Signed Crosby Valve & Gage Co. (Manufacturer) By [signature] QA Manager

Certificate of Authorization No. 331 expires November 9, 1974

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Mutual Boiler & Machinery Insurance Co.*, Waltham, Mass. have inspected the equipment described in this Data Report on October 31 1973 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

*Factory Mutual Group of Insurance Co.

Date October 31 19 73

[signature] (Inspector) Commissions N.B. 6665 Mass. 1096 (National Board, State, Province and No.)

BWRPD-QC EHB 3-3-75

PLAN No 2-1497

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-5C	Crosby	N63790-00-0060	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-5C	Crosby	N63790-00-0135 (N56000-01-0099)	N/A	N/A	1973	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-5C. The replacement work was performed as follows:
   1) Removed existing relief valve Serial No N63790-00-0060 with set pressure of 1205 Psig at rated temperature of 575° F.
   2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Installed replacement relief valve with Serial No N63790-00-0135 with set pressure of 1205 Psig at rated temperature of 575° F.
   5) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
   6) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
   7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0135 was installed is Main Steam (MS) piping system B22-G001C-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0135 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements. Relief valve Serial No N56000-01-0099 (Pre - Modification Serial No) was previously modified by Crosby to Serial No N63790-00-0135.
4) The replacement relief valve Serial No N63790-00-0135 was previously refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1538.

PLAN No 2-1497

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-00-0139, 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) for relief valve Serial No N63790-00-0139, 3) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0099, 4) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 6/6/98 **Date** 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/4/97 *to* 6/10/98 *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** 7486W/7486 WFSB IS

National Board, State, and Endorsements

Date 6/10/98

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

PLAN No. 2-1497

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

Building Supt
6/4/98

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System
WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0135	N/A	steam	6 x 10	1976

d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

7. ASME Code Section XI used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

8. Construction Code used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1205 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, disc holder pin, inlet studs(GQH), nozzle ring set screw (0135).

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar V. Sierra	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB (incl endorsements) ,jurisdiction & no.
12/9/97	Carl R. Enos	NB 8460, A, N, I, TN 2236

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN NO. 2-1497

Q.C.-292, REV.A
SHEET 1 OF 2

Rudolf Sarch
3/10/94
6/4/98

REPAIR AND REPLACEMENT TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.). NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND,WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND ,WA

5. a. Identifying Nos. N63790-00-0135 -- -- ----- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component --
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) Pneumatic ( ) Design Pressure ( ) Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO Code Case --

9. Description of work N56000-01-0099 WAS MODIFIED TO N63790-00-0135
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-46-0129
BONNET	N89717	N93407-42-0053
SPINDLE ASSY	K55465	K62873-45-0059
SPR.WASHER	N89724	K62856-42-0201
SPR.WASHER	N89723	K62857-42-0201
SPRING ASSY	K55466	K62858-31-0003
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0155
DISC INSERT	N89715	N93185-52-0199
SPRING	NX2689	N89722-0072
THR.BRG.ADAPT.	N89725	N93409-32-0006
ADJ.BOLT	N89726	N93410-32-0005
ADJ.BOLT BUTT.	COMMERCIAL	N93411-33-0012
ADJ.BOLT ASSY	COMMERCIAL	K63618-31-0005

1-2/23/96

Certificate Holder's Serial No. N63790-00-0135

Q.C.-292, REV. A
SHEET 2 OF 2

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Lane QA Eng Manager 24 Feb, 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

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

Factory Mutual Systems

Date 2/25, 1994.

Signed [illegible] Commissions MA 1455
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-1497
Philip Bugs
6/4/98

WPPSS S/N	WPPSS Set	Bailly S/N	Bailly Set
N63790-00-0134	1175	N56000-01-0037	1175
~~N63790-00-0135~~	~~1205~~	~~N56000-01-0099~~	~~1130~~
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

PLAN NO. 2-1471

Rudolph Guy's 3/10/84 6448

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MASS

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

DATA REPORT
Safety and Safety Relief Valves

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

HB-65-BP-

Model No. FN Order No N-51726 Contract Date 1/27/75 National Board No.

2. Manufactured For General Electric Co., 175 Curtner Ave., San Jose, California 95125 Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I
Name and Address

4. Location of Plant Baileytown, Indiana

5. Valve Identification Spare MPL#B22-F013 Serial No. N56000-01-0099 Drawing No. H-56000 Rev. C

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

6. Set Pressure (PSIG) 1130 575° F Rated Temperature

Stamped Capacity 850500#/Hr. Sat. 3 % Overpressure Blowdown (PSIG) 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971, Addenda Date Summer 1972, Case No.

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. ~~Castings~~ Forging		
Body	N90118-35-0032	ASTM A105-71 ASME SA105
Bonnet	N89717-36-0083	ASTM A105-71 ASME SA105
b. Bar Stock and Forgings		
~~XXXXXXXXX~~ Disc Insert	N89715-36-0106	ASTM A564-71 Type 630 ASME SA564 Type 630
Nozzle	N89713-36-0106	ASTM A182-71 Type 316 ASME SA182 Type 316
Disc Holder K55484-39-0135	N89714-35-0173	AMS 5662B
Spring Washers K55466-36-0093	N89724-36-0122 N89723-38-0131	ASTM A105-71 ASME SA105
Adjusting Bolt	N89726-40-0119	ASTM A193-71 Gr. B6 ASME SA193 Gr. B6
Spindle K55465-35-0106	N89720-38-0129	ASTM A564 Type 630 ASME SA564 Type 630
Spindle Ball	N89721-0206	Stoody No. 6
Thrust Bearing Adapter	N89725-34-0116	ASTM A193-71 Gr. B6 ASME SA193 Gr. B6

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	N89722-0072	ASTM A304-66
d. Bolting		
e. Other Parts such as Pilot Components		
Inlet Stud	N89727-1203 thru 1214	ASME SA193 Gr. B7
Inlet Nut	N89728-1197 thru 1208	ASME SA194 Gr. 2H
Bonnet Stud	N89718-1222 thru 1233	ASME SA193 Gr. B7
Bonnet Nut	N89719-1216 thru 1227	ASME SA194 Gr. 2H

We certify that the statements made in this report are correct.

Date 6-22 19 76 Signed Crosby Valve & Gage Co. (Manufacturer) By [signature] QA Manager

Certificate of Authorization No. 926 expires October 28, 1977

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on _____ 19____ and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date 6/22/76 19 _____

[signature] Inspector Commissions MA 1209 National Board, State, Province and No.

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

PLAN No 2-1498

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-1D	Crosby	N63790-00-0049	N/A	N/A	1980	Replaced	Yes, Code Class 1
MS-RV-1D	Crosby	N63790-00-0050	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-1D. The replacement work was performed as follows:
   1) Removed existing relief valve Serial No N63790-00-0049 with set pressure of 1175 Psig at rated temperature of 575° F.
   2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Performed VT-1 visual examination on three (3) studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
   5) Installed replacement relief valve with Serial No N63790-00-0050 with set pressure of 1175 Psig at rated temperature of 575° F.
   6) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
   7) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
   8) Installed VT-1 visually examined new studs for the relief valve inlet joint.
   9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0050 was installed is Main Steam (MS) piping system B22-G001D-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0050 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
4) The replacement relief valve Serial No N63790-00-0050 was previously refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1532.

PLAN No 2-1498

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-00-0050, 2) See attached NV-1 Code Data Report for replacement relief valve Serial No N63790-00-0050, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/6/98 *Date* 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/4/97 *to* 6/10/98 *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 7486W/7486 NB 8 IS

National Board, State, and Endorsements

Date 6/10/98

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

PLAN No. Z-1498

1. Work performed by: NWS Technologies, LLC. Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

Rudolph Ruf b. 6/4/98

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4 Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0050	N/A	steam	6 x 10	1980

d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

7. ASME Code Section XI used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

8. Construction Code used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1175 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, disc insert (N93185-56-0253), nozzle (N93184-52-0159), inlet studs (GQH.K4K), disc holder pin.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar V. Sierra	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB (incl endorsements) Jurisdiction & No
12/9/97	Carl Enos	NB 8460, A, N I, TN 2236

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1498

Q.C.-44D
6/14/98

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

DATA REPORT
Safety and Safety Relief Valves

FOR INFORMATION ONLY

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0050 Drawing No. DS-A-63790 Rev. C

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

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

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

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

Pressure Retaining Pieces

Bar Stock & Forgings	Serial No. Identification	Material Specification Including Type or Grade
a. ~~Castings~~		
Body	N93183-35-0069	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0032	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Bar Stock & Forgings~~		
~~Spacer~~ ~~Rod~~ Disc Insert	N93185-34-0082	ASME SA637 Gr. 718
Nozzle	N93184-33-0054	ASME SA182 Gr. F316
Disc Holder*K55484-35-0097	*N89714-34-0101	AMS 5662B
Spring Washers K62858-35-0032	K62856-35-0088 K62857-35-0053	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0057	ASME SA193 Gr. B6
Spindle Point K62873-35-0050	*N89720-34-0066	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0032	*N89722-0008	ASTM A304-66 Gr. 4161H
d. Bolting		7X00580116
e. ~~Castings~~ Spindle Ball K62873-35-0050	N93213-0050	Stellite #6
Thrust Bearing Adapter	N93409-32-0052	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0597 thru 0608	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (I87)	N93210-0817 thru 0828	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0599 thru 0610	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0603 thru 0614	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-33-0058	ASTM [illegible] Gr. B6

Bonnet and Spindle Assembly, and adding an Adjusting Bolt Section Assembly, ... serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

N63790-00-0050

CERTIFICATE OF COMPLIANCE

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

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

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

CERTIFICATION OF DESIGN

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

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 12/5, 19 80 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 12/5 19 80

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

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

ZX00380117

PLAN No 2-1499

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-3D	Crosby	N63790-00-0126	N/A	N/A	1981	Replaced	Yes, Code Class 1
MS-RV-3D	Crosby	N63790-00-0057	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-3D. The replacement work was performed as follows:
   1) Removed existing relief valve Serial No N63790-00-00126 with set pressure of 1195 Psig at rated temperature of 575° F.
   2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Performed VT-1 visual examination on six (6) new nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
   5) Installed replacement relief valve with Serial No N63790-00-0057 with set pressure of 1195 Psig at rated temperature of 575° F.
   6) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
   7) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
   8) Installed VT-1 visually examined new nuts for the relief valve inlet joint.
   9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0057 was installed is Main Steam (MS) piping system B22-G001D-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0057 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.
4) The replacement relief valve Serial No N63790-00-0057 was previously refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1534.

PLAN No 2-1499

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-00-0057, 2) See attached NV-1 Code Data Report for replacement relief valve Serial No N63790-00-0057, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 6/6/98 **Date** 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/1/97 *to* 6/10/98 *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** 7486L/7486 NI5 8 IS

National Board, State, and Endorsements

Date 6/10/98

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No.2-1499

1. Work performed by: **NWS Technologies, LLC** Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

HB-65-BP-FN	N63790-00-0057	N/A	steam	6 x 10	1980
(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)

d: Construction Code:

ASME Sec. III Div. 1	1971	N/A	N/A	1
(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)

6. ASME Code Section XI applicable for inservice inspection: 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. ASME Code Section XI used for repairs, replacements: 1989 (edition) N/A (addenda) N/A (Code Case(s))

8. Construction Code used for repairs, replacements: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities: N/A

10. Opening pressure: 1195 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, inlet studs (GQH).

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.
National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA
Date	(repair organization)	(authorized representative)	(title)

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.
By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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.

12/9/97	Carl Enos	NB 8460, A.N.I. TN 2235
Date	Inspector's Signature	Commissions (NB incl endorsements) jurisdiction & no

5/4/68

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1499

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

Q.C.-44D

Philip Sing 5
6/4/98

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

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

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

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

Stamped Capacity 899,185 @ 3 %Overpressure — Blowdown (psig) 2 % to
975 psig (Assembled Valve)

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

Pressure Retaining Pieces

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

Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

Rudolp Bug 3
NC3790-00-00007

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda (Date), Code Case No. 1567 & 171[illegible]

Class 1

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

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

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

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

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

Date 12-9 1980.

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

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

ZX00380091

PLAN No 2-1505

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 10/23/97
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(13)-4CL2	WPPSS	RCIC(13)-4CL2-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing level switch RCIC-LS-N010. The replacement work was performed as follows:
   1) Removed existing valve level switch RCIC-LS-N010.
   2) Installed new piping material such as pipe and pipe cap.
   3) Installed new replacement level switch RCIC-LS-N010.
   4) Made required socket welds.
   5) Performed visual examination on the final socket welds. Visual examination results acceptable.
   6) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

PLAN No 2-1505

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 10/28/97 — Date 10/28/97

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1506

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 04/02/98
Sheet: 1 of 1
Unit: WNP-2

1. Owner: Washington Public Power Supply System (WPPSS)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Control Rod Drive (CRD) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD-V-101A/1411	Dragon	DL 10284	N/A	N/A	1977	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced vent and stem cover plugs for existing valve CRD-V-101A/1411. The replacement work was performed as follows:

1) Installed new replacement vent plug for existing valve CRD-V-101A/1411, Serial No DL 10284.
2) Installed new replacement stem cover plug for existing valve CRD-V-101A/1411, Serial No DL 10284.

PLAN No 2-1506

WASHINGTON PUBLIC POWER SUPPLY SYSTEM.

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement vent and stem cover plugs, Heat No 73746.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 4/2/98 — Date 4/2/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

As required by the Provision of the ASME Code Rules, Section III, Div. 1 7T1-100

PLAN NO. 2-1506

1. (a) Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA 90650
(Name and address of NPT Certificate Holder)

(b) Manufactured for General Electric Company, I&SE, Richland, WA 99352
(Name and address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holder's Serial No. of Part HT #73746 Nat'l Bd. No. —

(a) Constructed According to Drawing No. 7441 Drawing Prepared by Dragon Valves, Inc.

(b) Description of Part Inspected Plug for Vent and Drain Valves CRD-V-101A) 1411 S/N DL10284

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date 12-31-74, Case No. — Class 2

3. Remarks: Plug is for replacement in 1" and 3/4" Vent and Drain Valves, Valve Nos.
(Brief description of service for which component was designed)
10649-3 and 10649-5 for Control Rod Drive System. (50 pcs part number 7C-7441-115)
CRD-V-102 CRD-V-101

Rudolf Engels 4/15/91

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date November 10, 1978 Signed Dragon Valves, Inc. By [signature]
(NPT Certificate Holder)

Certificate of Authorization Expires May 6, 1981 Certificate of Authorization No. N-1034

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co.

Stress analysis report on file at not applicable

Design specifications certified by David J. Murphy Prof. Eng. State WA Reg. No. 12542

Stress analysis report certified by not required Prof. Eng. State ____ Reg. No. ____

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of CALIFORNIA and employed by Division of Industrial Safety of California have inspected the part of a pressure vessel described in this Partial Data Report on 11-10- 1978 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

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

Date 11-10- 1978

J Warren
Inspector's Signature

Commissions CA 857
National Board, State, Province and No.

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

(10/77) This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

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FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)									
(b)									

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

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

8. Design pressure[2] _____ 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 _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. ____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)	Top, bottom, ends								
(b)	Channel								

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

14. Design pressure[2] _____ psi at _____ °F Drop Weight _____ Charpy Impact _____ ft-lb at temp. of _____ °F

Items below to be completed for all vessels where applicable.

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

16. Nozzles:

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

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

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

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with coincident temperature when applicable.

SPEC. NO. 2808.215
SECTION 58,15M
PARA. NO. N/A
QA ENGR.
DATE
ENGINEER R. Sponer
DATE 4-9-82

2 1 0 0 0 5 5 9

PLAN No 2-1507

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 04/02/98
Sheet: 1 of 1
Unit: WNP-2

1. Owner: Washington Public Power Supply System (WPPSS)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Control Rod Drive (CRD) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD-V-102A/1411	Dragon	DL 10154	N/A	N/A	1977	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced vent and stem cover plugs for existing valve CRD-V-102A/1411. The replacement work was performed as follows:

1) Installed new replacement vent plug for existing valve CRD-V-101A/1411, Serial No DL 10154.
2) Installed new replacement stem cover plug for existing valve CRD-V-101A/1411, Serial No DL 10154.

PLAN No 2-1507

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

9. Remarks: See attached N-2 Code Data Report for the new replacement vent and stem cover plugs, Heat No 73746.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 4/2/98 **Date** 4/2/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Inspector's Signature National Board, State, and Endorsements

Date _____

As required by the Provision of the ASME Code Rules, Section III, Div. 1 TT-100

PLAN No. 2-1507

1. (a) Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA 90650
(Name and address of NPT Certificate Holder)

(b) Manufactured for General Electric Company, I&SE, Richland, WA 99352
(Name and address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holder's Serial No. of Part HT #73746 Nat'l Bd. No. —

(a) Constructed According to Drawing No. 7441 Drawing Prepared by Dragon Valves, Inc.

(b) Description of Part Inspected Plug for Vent and Drain Valves CRD-V-102A/1481, S/N DL1015

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date 12-31-74, Case No. — Class 2

3. Remarks: Plug is for replacement in 1" and 3/4" Vent and Drain Valves, Valve Nos.
(Brief description of service for which component was designed)
10649-3 and 10649-5 for Control Rod Drive System. (50 pcs part number 24-7441-115)
CRD-V-102 CRD-V-101

Rudolf Ruiz 4/15/91

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date November 10, 1978 Signed Dragon Valves, Inc. By [signature]
(NPT Certificate Holder)

Certificate of Authorization Expires May 6, 1981 Certificate of Authorization No. N-1034

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co.

Stress analysis report on file at not applicable

Design specifications certified by David J. Murphy Prof. Eng. State WA Reg. No. 12542

Stress analysis report certified by not required Prof. Eng. State ____ Reg. No. ____

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of CALIFORNIA and employed by Division of Industrial Safety of California have inspected the part of a pressure vessel described in this Partial Data Report on 11-10- 19 78 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

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

Date 11-10- 1978

J Warren Commissions CA 857
Inspector's Signature National Board, State, Province and No.

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

(10/77) This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)									
(b)									

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

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

8. Design pressure[2] _____ 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 _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. ____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str or U)

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)	Top, bottom, ends								
(b)	Channel								

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

14. Design pressure[2] _____ psi at _____ °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

SPEC. NO. 2808-215
SECTION 50, 15M
PARA. NO. N/A
QA ENGR.
ENGINEER R. Spencer
DATE 4-9-82

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	Location	Material	Thickness	Reinforcement Material	How Attached

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

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

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with coincident temperature when applicable.

PLAN No 2-1508

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 04/02/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Control Rod Drive (CRD) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD-V-102A/1443	Dragon	DL 10129	N/A	N/A	1977	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced vent and stem cover plugs for existing valve CRD-V-102A/1443. The replacement work was performed as follows:

1) Installed new replacement vent plug for existing valve CRD-V-101A/1443, Serial No DL 10129.

PLAN No 2-1508

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached N-2 Code Data Report for the new replacement vent and stem cover plugs, Heat No 73746.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 4/2/98 — Date 4/2/98.

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

As required by the Provision of the ASME Code Rules, Section III, Div. 1 ITI-100

PLAN No. 2-1508.

1. (a) Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA 90650
(Name and address of NPT Certificate Holder)

(b) Manufactured for General Electric Company, I&SE, Richland, WA 99352
(Name and address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holder's Serial No. of Part HT #73746 Nat'l Bd. No. —

(a) Constructed According to Drawing No. 7441 Drawing Prepared by Dragon Valves, Inc.

(b) Description of Part Inspected Plug for Vent and Drain Valves CRD-V-102|1443,S|NDL1012

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date 12-31-74, Case No. — Class 2

3. Remarks: Plug is for replacement in 1" and 3/4" Vent and Drain Valves, Valve Nos.
(Brief description of service for which component was designed)
10649-3 and 10649-5 for Control Rod Drive System. (50 pcs part number 24-7441-115)
CRD-V-102 CRD-V-101

Rudolf Smith 4/15/91

We certify that the statements made in this report are correct and this vessel, part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date November 10, 1978 Signed Dragon Valves, Inc. By R. L. Snyder
(NPT Certificate Holder)

Certificate of Authorization Expires May 6, 1981 Certificate of Authorization No. N-1034

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co.

Stress analysis report on file at not applicable

Design specifications certified by David J. Murphy Prof. Eng. State WA Reg. No. 12542

Stress analysis report certified by not required Prof. Eng. State ____ Reg. No. ____

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of CALIFORNIA and employed by Division of Industrial Safety of California have inspected the part of a pressure vessel described in this Partial Data Report on 11-10- 1978 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

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

Date 11-10- 1978

J Warren Commissions CA 857
Inspector's Signature National Board, State, Province and No.

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

(10/77) This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

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

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

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a)								
(b)								

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

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

8. Design pressure[2] _____ 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 _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. ____ in. Thickness _____ inches or gage. Number _____ Type _____ (St or U)

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

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

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends								
(b) Channel								

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

14. Design pressure[2] _____ psi at _____ °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

SPEC. NO. 2808-215
SECTION 5B, 15M
PARA. NO. N/A
QA ENGR.
DATE
ENGINEER R. Sponer
DATE 4-9-82

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 _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with coincident temperature when applicable.

PLAN No 2-1509

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:** 05/19/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Reactor Pressure Vessel (RPV)
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	9	N/A	1974	Replacement	Yes, Code Class 1
LPRM	General Electric	6615137	N/A	N/A	1979	Replaced	Yes, Code Class 1
LPRM	General Electric*	M433	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric	6615110	N/A	N/A	1979	Replaced	Yes, Code Class 1
LPRM	General Electric*	M3353	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric	6615135	N/A	N/A	1979	Replaced	Yes, Code Class 1
LPRM	General Electric*	M431	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric	6612561	N/A	N/A	1978	Replaced	Yes, Code Class 1
LPRM	General Electric*	M423	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric	6612555	N/A	N/A	1978	Replaced	Yes, Code Class 1
LPRM	General Electric*	M3798	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric	6615112	N/A	N/A	1979	Replaced	Yes, Code Class 1
LPRM	General Electric*	M432	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric	6615122	N/A	N/A	1979	Replaced	Yes, Code Class 1
LPRM	General Electric*	M427	N/A	N/A	1993	Replacement	Yes, Code Class 1
LPRM	General Electric	6615109	N/A	N/A	1979	Replaced	Yes, Code Class 1
LPRM	General Electric*	95S01116	N/A	N/A	1995	Replacement	Yes, Code Class 1
LPRM	General Electric	6612559	N/A	N/A	1978	Replaced	Yes, Code Class 1
LPRM	General Electric*	95S01115	N/A	N/A	1995	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced existing Local Power Range Monitoring (LPRM) incore assemblies. The replacement work was performed as follows:

1) Removed existing Local Power Range Monitoring (LPRM) Incore assemblies Serial No's 6615137, 6615110, 6615135, 6612561, 6612555, 6615112, 6615122, 6615109 and 6612559 from the Reactor Pressure Vessel core locations listed below.
2) Installed new replacement Local Power Range Monitoring (LPRM) Incore assemblies Serial No's M433, M3353, M431, M423, M3798, M432, M427, 95S01116 and 95S01115 in the Reactor Pressure Vessel core locations listed below.

Core Location	Core Location	Core Location	Core Location
08-49	24-49	40-25	48-09
16-57	32-49	40-57	56-17
24-25			

NOTES -

1) * General Electric (GE) Reuter-Stokes
2) ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda for the Reactor Pressure Vessel (RPV)
3) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new replacement Local Power Range Monitoring (LPRM) Incore assemblies Serial No's M433, M3353, M431, M423, M3798, M432, M427, 95S01116 and 95S01115

PLAN No 2-1509

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

9. Remarks: See attached N-2 Code Data Reports for the following new replacement Local Power Range Monitoring (LPRM) Incore assemblies:

Core Location	LPRM Serial No	Core Location	LPRM Serial No
08-49	M433	40-25	M432
16-57	M3353	40-57	M427
24-25	M431	48-09	95S01116
24-49	M423	56-17	95S01115
32-49	M3798		

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Date 5/20/98 **Date** 5/20/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/28/98 *to* 5/28/98 *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 7486W; 7486N; 8ES
National Board, State, and Endorsements

Date 5/28/98

WORK ORDER NUMBER: 2548

PLAN NO. 2-1509

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

5/19/98

1. (a) Manufactured by GE REUTER-STOKES, INC. 8499 DARROW ROAD, TWINSBURG, OHIO 44087
(Name and address of Manufacturer of part)

(b) Manufactured for WNP-2 - WASHINGTON PUBLIC POWER SUPPLY SYSTEM, RICHLAND, WA 99352
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part SEE PAGE 2 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. RS-E5-1260-201 Drawing Prepared by GE REUTER-STOKES.

(b) Description of Part Inspected POWER RANGE DETECTOR DRY TUBE

(c) Applicable ASME Code: Section III, Edition 1977, Addenda date SUMMER 1977, Case No. N/A Class 1

3. Remarks: DESIGN: PRESSURE 1250 PSIG, DESIGN TEMPERATURE 575°F
(Brief description of service for which component was designed)

HYDROSTATIC TEST PRESSURE: 1925 PSIG

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 10/18 1993 Signed GE REUTER-STOKES (Manufacturer) By [signature] QUALITY ASSURANCE

Certificate of Authorization Expires SEPTEMBER 16, 1994 Certificate of Authorization No. N-2703

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE REUTER-STOKES, INC. TWINSBURG, OHIO CDS-C-5026-1

Stress analysis report on file at GE REUTER-STOKES, INC. TWINSBURG, OHIO CDR-C-5253-05

Design specifications certified by SURINDER L. KAMPANI Prof. Eng. State OH Reg. No. E-034113

Stress analysis report certified by DOUGLAS E. BACSO Prof. Eng. State OH Reg. No. E-044071

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of OHIO and employed by H.S.B.I. & I. Co. of HARTFORD, CT have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 10-18 1993, 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 1993

[signature] Inspector's Signature Commissions NB7920 AN OHIO PANC2454-N National Board, State, Province and No.

10/26/93

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by GE REUTER-STOKES, INC. 8499 DARROW ROAD, TWINSBURG, OHIO 44087
(Name and address of Manufacturer of part)

(b) Manufactured for WNP-2 - WASHINGTON PUBLIC POWER SUPPLY SYSTEM, RICHLAND, WA 993
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part SEE BELOW Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. RS-E5-1260-201 Drawing Prepared by GE REUTER-STOKES

(b) Description of Part Inspected POWER RANGE DETECTOR DRY TUBE

(c) Applicable ASME Code: Section III, Edition 1977, Addenda date SUMMER 1977, Case No. N/A Class 1

3. Remarks: DESIGN: PRESSURE 1250 PSIG, DESIGN TEMPERATURE 575°F
(Brief description of service for which component was designed)
HYDROSTATIC TEST PRESSURE: 1925 PSIG

SERIAL NUMBERS: M3341 thru M3355
M3791 thru M3801
M3803, M3804, M3805
M5263

James H Holmes	10/18/93	Jack P Schell	10-18-93
QUALITY ASSURANCE	DATE	ANI	DATE

NB7920-OHIO-PAWC2454-N

PLAN No. 2-1509

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

Philip Smith 5/19/98

1. (a) Manufactured by GE REUTER-STOKES, INC. 8499 DARROW ROAD, TWINSBURG, OHIO 44087
(Name and address of Manufacturer of part)

(b) Manufactured for WNP-2 - WASHINGTON PUBLIC POWER SUPPLY SYSTEM, RICHLAND, WA 99352
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part M423 thru M437 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. RS-E5-1260-201 Drawing Prepared by GE REUTER-STOKES

(b) Description of Part Inspected POWER RANGE DETECTOR DRY TUBE

(c) Applicable ASME Code: Section III, Edition 1977, Addenda date SUMMER 1977, Case No. N/A Class 1

3. Remarks: DESIGN: PRESSURE 1250 PSIG. DESIGN TEMPERATURE 575°F
(Brief description of service for which component was designed)

HYDROSTATIC TEST PRESSURE: 1925 PSIG

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

2/25 19 92 Signed GE REUTER-STOKES (Manufacturer) By James V. Holmes QUALITY ASSURANCE

Certificate of Authorization Expires SEPTEMBER 16, 1994 Certificate of Authorization No. N-2703

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE REUTER-STOKES, INC. TWINSBURG, OHIO CDS-C-5026-1

Stress analysis report on file at GE REUTER-STOKES, INC. TWINSBURG, OHIO CDR-C-5253-04

Design specifications certified by SURINDER L. KAMPANI Prof. Eng. State OH Reg. No. E-034113

Stress analysis report certified by DOUGLAS E. BACSO Prof. Eng. State OH Reg. No. E-044071

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of OHIO and employed by H.S.B.I. & I. Co. of HARTFORD, CT have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 2-24 19 93, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date 2-25 19 93

Jacob C. Schell
Inspector's Signature

Commissions NB7920-A-N-OHIO-PA WC 2454
National Board, State, Province and No.

2-25-93

WORK ORDER NUMBER: 7316

PLAN NO. 2-1509

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules.

5/19/98

1. (a) Manufactured by GE REUTER-STOKES, INC. 8499 DARROW ROAD, TWINSBURG, OHIO 44087
(Name and address of Manufacturer of part)

(b) Manufactured for WNP-2, WASHINGTON PUBLIC POWER SUPPLY SYSTEM, RICHLAND, WA 99352
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 95S01114 - 95S01116 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. RS-C6-1315-201 Drawing Prepared by GE REUTER-STOKES

(b) Description of Part Inspected NA-300 POWER RANGE DETECTOR

(c) Applicable ASME Code: Section III, Edition 1977, Addenda date SUMMER 1977, Case No. N-176-1 Class 1

3. Remarks: DESIGN: PRESSURE 1250 PSIG, TEMPERATURE - VESSEL 575°F. SEAL 300°F.
(Brief description of service for which component was designed)

HYDROSTATIC TEST PRESSURE: 1925 PSIG

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 10/17 1995 Signed GE REUTER-STOKES (Manufacturer) By [signature] QUALITY ASSURANCE

Certificate of Authorization Expires SEPTEMBER 16, 1997 Certificate of Authorization No. N-2703

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

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

Stress analysis report on file at GE REUTER-STOKES, INC. TWINSBURG, OHIO CDR-C-5320-139

Design specifications certified by SURINDER L. KAMPANI Prof. Eng. State OH Reg. No. E-034113

Stress analysis report certified by DOUGLAS E. BACSO Prof. Eng. State OH Reg. No. E-044071

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of OHIO and employed by H.S.B.I. & I. Co. of HARTFORD, CT have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 10-17 1995, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date 10-17 1995

[signature] Commissions OHIO - NB7920 AN
Inspector's Signature National Board, State, Province and No.

WSPSS Approved [signature] 10/18/95

PLAN No 2-1511

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 05/22/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Reactor Recirculation Cooling (RRC) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC(51)-4	WPPSS	RRC(51)-4-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
RRC-V-20	Target Rock	2	N/A	N/A	1986	Replaced	Yes, Code Class 1
RRC-V-20	Target Rock	5	N/A	N/A	1997	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing valve RRC-V-20. The replacement work was performed as follows:
   1) Removed existing valve RRC-V-20, Serial No 2, Model No 86Q-001-1.
   2) Prepped the existing elbow socket end surfaces.
   3) Performed liquid penetrant (PT) examination on the existing elbow socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
   4) Installed new replacement piping material such as flanges and pipe.
   5) Installed new replacement valve RRC-V-20, Serial No 5, Model No 96T-001.
   6) Made required socket welds.
   7) Performed visual examination on the final socket welds. Visual examination results acceptable.
   8) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.
   9) Installed new replacement studs and nuts for the flanged joints associated with the new replacement valve RRC-V-20, Serial No 5, Model No 96T-001.

NOTES -

1) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the Reactor Recirculation Cooling (RRC) piping system RRC(51)-4-P1.
2) ASME Section III, Code Class 1; 1980 Edition with Winter 1981 Addenda for the new replacement valve RRC-V-20, Serial No 5, Model No 96T-001.

PLAN No 2-1511

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve RRC-V-20, Serial No 5, Model No 96T-001.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/22/98 — Date 5/22/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN NO. 2-1511

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

1. Manufactured and certified by Target Rock Corp.; 1966E Broadhollow Rd.; Farmingdale, N 11735
(name and address of N Certificate Holder)

2. Manufactured for Washington Public Power Supply System; Richland, WA
(name and address of Purchaser)

3. Location of installation WNP-2, North Power Plant Loop; Richland, WA
(name and address)

4. Model No., Series No., or Type 96T-001 Drawing 96T-001 Rev. B CRN NA

5. ASME Code, Section III, Division 1: 1980 (edition) Winter 1981 (addenda date) 1 (class) None (Code Case no.)

6. Pump or valve Valve Nominal inlet size 1 (in.) Outlet size 1 (in.)

7. Material: Body SA479 316 Bonnet SA479 XM-19 Disk SA479 347 Bolting SA453 660

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
1	NA	12	14	13
2	NA	20	13	15
3	NA	9	11	12
4	NA	19	18	14
5	NA	1	6	11
NA				

RRC-V-20, S/N 5

Rudolph Sumb
5/21/98

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

Certificate Holder's Serial No. 1-5

8. Design conditions 1550 (pressure) psi 575 (temperature) °F or valve pressure class N/A (1)

9. Cold working pressure 3600 psi at 100°F

10. Hydrostatic test 6575 psi. Disk differential test pressure N/A psi

11. Remarks: Indicator Tube SA479 316 S/N 4503, 4502, 4499, 4500, 4501

Clamp Ring SA479 XM-19 S/N 243, 239, 240, 242, 241

Flange & Stub End SA182 F316 S/N 1-10

CERTIFICATION OF DESIGN

Design Specification certified by Abbas A. Mostala P.E. State WA Reg. no. 28777

Design Report certified by S. Karidas P.E. State NY Reg. no. 056047

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-1947 Expires 12/12/98

Date 4/22/97 Name Target Rock Corp. (N Certificate Holder) Signed (authorized representative)

R. Glazier, Mgr., Q.E.

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 New York and employed by Commercial Union Ins. of Boston, MA have inspected the pump, or valve, described in this Data Report on 4/22/97, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 4/22/97 Signed (Authorized Inspector) Commissions N. Y. STATE COMMISSION NO. 2288 ALSO COMMISSIONED IN PENN., OHIO & CONN. (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

PLAN No 2-1512

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:** 05/22/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Process Sampling Radioactive (PSR) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X77Ac	JCI	PI(1)-4S-X77Ac	N/A	N/A	1983	Replacement	Yes, Code Class 1
PSR-V-X77A/1	Target Rock	1	N/A	N/A	1986	Replaced	Yes, Code Class 1
PSR-V-X77A/1	Target Rock	6	N/A	N/A	1998	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced existing valve PSR-V-X77A/1. The replacement work was performed as follows:
1) Removed existing valve PSR-V-X77A/1, Serial No 1, Model No 86Q-001-1.
2) Prepped the existing tee socket end surfaces and coupling socket end surfaces.
3) Performed liquid penetrant (PT) examination on the existing tee socket end prepped surfaces and coupling socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
4) Prepped the replacement flange socket end surfaces.
5) Performed liquid penetrant (PT) examination on the replacement flange socket end prepped surfaces. Liquid penetrant (PT) examination results acceptable.
6) Installed new replacement piping material such as flanges and pipe.
7) Installed new replacement valve PSR-V-X77A/1, Serial No 6, Model No 96T-001.
8) Made required socket welds.
9) Performed visual examination on the final socket welds. Visual examination results acceptable
10) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.
11) Installed new replacement studs and nuts for the flanged joints associated with the new replacement valve PSR-V-X77A/1, Serial No 6, Model No 96T-001.

NOTES -
1) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the Process Sampling Radioactive (PSR) System PI(1)-4S-X77Ac.
2) ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda for the new replacement valve PSR-V-X77A/1, Serial No 6, Model No 96T-001.

PLAN No.2-1512

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve PSR-V-X77A/1, Serial No 6, Model No 96T-001.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/22/98 — Date 5/22/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No. 2-1512

Rudolf Sueb 5/21/98

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

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735
(name and address of N Certificate Holder)

2. Manufactured for Washington Public Power Supply System; Richland, WA
(name and address of Purchaser)

3. Location of installation WNP-2, North Power Plant Loop; Richland, WA
(name and address)

4. Model No., Series No., or Type 96T-001 Drawing 96T-001 Rev. B CRN N/A

5. ASME Code, Section III, Division 1: 1980 (edition) Winter 1981 (addenda date) 1 (class) None (Code Case no.)

6. Pump or valve Valve Nominal inlet size 1 (in.) Outlet size 1 (in.)

7. Material: Body SA479 316 Bonnet SA479 XM-19 Disc SA479 348 Bolting SA453 660

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disc Serial No.
6	N/A	11	2	65
N/A		N/A	N/A	N/A

PSR-V-X77A/1, S/N 6

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

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300 REPRINT 6/93

Certificate Holder's Serial No. 6

8. Design conditions 1550 psi 575 °F or valve pressure class N/A (1)
(pressure) (temperature)

9. Cold working pressure 3600 psi at 100 °F

10. Hydrostatic test 6575 psi. Disc differential test pressure N/A psi

11. Remarks: Indicator Tube, SA479 316, S/N 4651

Clamp Ring, SA479 XM-19, S/N 298

Flange & Stub End SA182 F316 S/N 11 & 12

CERTIFICATION OF DESIGN

Design Specification certified by Abbas A. Mostala P.E. State WA Reg. No. 28777

Design Report certified by S. Karidas P.E. State NY Reg. No. 056047

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-1947 Expires 12/12/98

Date 2/24/98 Name Target Rock Signed
N Certificate Holder) R. E. Glazier, Manager, Q.E.
(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 of Province of New York and employed by Commercial Union Ins. of Boston, MA have inspected the pump, or valve, described in this Data Report on 2/24/98 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

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

Date 2/24/98 Signed Commission N.Y. STATE COMMISSION NO. 2288 COMMISSIONED IN PENN., OHIO & CONN.
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

PLAN No 2-1513

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 05/18/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Standby Liquid Control (SLC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC(2)-3S	WPPSS	SLC(2)-3S-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
SLC-RV-29A	Lonergan	137180-1-1	N/A	N/A	1994	Replaced	Yes, Code Class 2
SLC-RV-29A	Lonergan	509258-82-1	N/A	N/A	1978	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing relief valve SLC-RV-29A. The replacement work was performed as follows:
   1) Removed existing relief valve SLC-RV-29A, Serial No 137180-1-1.
   2) Performed VT-3 visual examination on the existing studs for the relief valve outlet bolted joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing nuts for the relief valve outlet bolted joint. VT-3 visual examination results acceptable.
   4) Installed replacement relief valve SLC-RV-29A, Serial No 509258-82-1.
   5) Reinstalled VT-3 visually examined existing studs for relief valve outlet bolted joint.
   6) Reinstalled VT-3 visually examined existing nuts for relief valve outlet bolted joint.
   7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet bolted joint. No evidence of leakage during the pressure test.

NOTES -

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the Standby Liquid Control (SLC) System.
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda for the replacement relief valve SLC-RV-29A, Serial No 509258-82-1.

PLAN No 2-1513

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Static Head **Test Temperature:** 71.8° F

Component Design Pressure: 150* Psig **Temperature:** 150*° F

9. Remarks: 1) See attached NV-1 Code Data Report for the replacement relief valve SLC-RV-29A, Serial No 509258-82-1.
2) * Component design pressure and temperature is for the relief valve outlet bolted joint piping system.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By** Kuldip Singh

Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 5/18/98 **Date** 5/18/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 12/18/97 *to* 5/20/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature **Commissions** 7486 W/7486 WSIB IS

National Board, State, and Endorsements

Date 5/20/98

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES*

As required by the Provisions of the ASME Code Rules

PLAN No. 2-1513
Philip Sup 5/10/98

1. Manufactured by J. E. Lonergan Company, Red Lion Rd., W. of Verree, Philadelphia, Pa. 19115
Name and Address

Model No. D-50D/S4 Order No. 509258 Contract Date 8/5/75 National Board No.

2. Manufactured For Bovee & Crail Const. Co. and General Energy Resources, Inc., Richland, Wash. Order No. 215-15190
Name and Address

3. Owner Washington Public Power, Hanford, Washington 99352
Name and Address

4. Location of Plant Hanford #2 Jobsite, 12 Miles North of Richland, Washington 99352

5. Valve Identification SLC-RV-29A Serial No. 509258-82-1 Drawing No. A-2346, No Rev.

Type Safety Relief Valve (Safety; Safety Relief; Pilot; Power Actuated) Orifice Size 0.110 Sq. Inch Pipe Size Inch Inlet 1" Inch Outlet 2" Inch

6. Set Pressure (PSIG) 1400 * 200 °F
Rated Temperature 12/15/78

Stamped Capacity 67.2 G.P.M. Blowdown 10 % Overpressure Blowdown (PSIG) **

Hydrostatic Test (PSIG) Inlet 2100 Outlet Valve 425

7. The material, design, construction and workmanship comply with ASME Code, Section III, Winter Addenda

Class 2, Edition 1974, Addenda Date 12/31/74, Code No. 1555

BOVEE & CRAIL / G.E.R.I.
Q.A./Q.C. APPROVED
SIGN
DATE 1-22-78 TAG # 34316

Pressure Containing or Pressure Retaining Components

a. Castings	Serial No. or Identification	Material Specification Including Type or Grade
Body	D371-1	ASME SA-351 (CF8M) Type 316
Bonnet	E5369-1	ASME SA-351 (CF8M) Type 316
b. Bar Stock and Forgings		WBG BR. 215 1501B
Support Rods		
Nozzle	02607	ASME SA-479 Type 316
Disc	G8864	ASME SA-479 Type 316
Spring Washers	02607	ASME SA-479 Type 316
Adjusting Screw	G9913	ASME SA-479 Type 316
Spindle	G9938	ASME SA-479 Type 316

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1-2 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.

	Serial No. or Identification Heat No.	Material Specification Including Type or Grade
c. Spring	00653	ASTM A-313 Type 316
d. Bolting Studs - Cert. of Conformance		ASME SA-320, GR.B8
Nuts - Cert. of Conformance		ASME SA-194, GR. 8

e. Other Parts such as Pilot Components

Cap	02977	ASME SA-479 Type 316

BOVE
Q.I.
SIGN: SWR
DATE: 12-22-79
IL / G.E.R.I.
OVED
34332

** Blowdown not specified by code.

We certify that the statements made in this report are correct.

Date 12-15 19 78 Signed J. E. LONERGAN CO. (Manufacturer) By T. A. NICKEY

Certificate of Authorization No. N-1443 expires Aug. 9, 1979

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Penna. and employed by Hartford Stm. Boiler I.&I. Co. of Hartford, Conn. have inspected the equipment described in this Data Report on Dec 15 19 78 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date Dec 15 19 78 WBG BR 215 15018

Walter J Comerford (Inspector) Commissions Pa 1786 (National Board, State, Province and No.)

2 1279 1005

3

PLAN No 2-1514

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:** 05/18/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Standby Liquid Control (SLC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC(2)-3S	WPPSS	SLC(2)-3S-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
SLC-RV-29B	Lonergan	137180-1-2	N/A	N/A	1994	Replaced	Yes, Code Class 2
SLC-RV-29B	Lonergan	139407-1-2	N/A	N/A	1994	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced existing relief valve SLC-RV-29B. The replacement work was performed as follows:
1) Removed existing relief valve SLC-RV-29B, Serial No 137180-1-2.
2) Performed VT-3 visual examination on the existing studs for the relief valve outlet bolted joint. VT-3 visual examination results acceptable.
3) Performed VT-3 visual examination on the existing nuts for the relief valve outlet bolted joint. VT-3 visual examination results acceptable.
4) Installed replacement relief valve SLC-RV-29B, Serial No 139407-1-2.
5) Reinstalled VT-3 visually examined existing studs for relief valve outlet bolted joint.
6) Reinstalled VT-3 visually examined existing nuts for relief valve outlet bolted joint.
7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet bolted joint. No evidence of leakage during the pressure test.

NOTES -
1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the Standby Liquid Control (SLC) System.
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda for the replacement relief valve SLC-RV-29B, Serial No 139407-1-2.

PLAN No 2-1514

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Static Head
Test Temperature: 71.8° F
Component Design Pressure: 150* Psig
Temperature: 150*° F

9. Remarks: 1) See attached NV-1 Code Data Report for the replacement relief valve SLC-RV-29B, Serial No 139407-1-2.
2) * Component design pressure and temperature is for the relief valve outlet bolted joint piping system.

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 5/18/98

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 5/18/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/18/97 to 5/20/98 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 7486W/7486 WISP IS
National Board, State, and Endorsements

Date 5/20/98

PLAN No. 2-1514:

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES*

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

1. Manufactured and certified by Kunkle Industries, Inc. Lonergan Valve Division, 8222 Bluffton Road, Fort Wayne, IN 46809 (name and address of NV Certificate Holder)

2. Manufactured for Washington Public Power Supply System, Accts. Payable, MD 055, P.O. 968, Richland, WA 99352-0968 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHS Complex, Whse. #1, North Power Plant Loop Richland, WA 99352 (name and address)

4. Valve ND50DS421-DG1400 (model no., series no.) Orifice size .394 (in.) Nom. inlet size 1" (in.) Outlet size 2" (in.)

5. ASME Code, Section III, Division 1: 1974 (edition) Winter 1974 (addenda date) 2 (class) N/A (Code Case no.)

6. Type Spring (spring, pilot or power operated) 1400 (set pressure, psig) N/A (blowdown, psi) 100° F (rated temp.) 2100 (hydro. test, psig, inlet) at 33° min. °F

7. Identification 139407-1-1 through 139407-1-2 (Cert. Holder's serial no.) N/A (CRN) A940014 Rev. 0 (drawing no.) N/A (Nat'l. Bd. no.) 1994 (year built)

8. Control ring settings N/A

SLC-RV-29B, S/N 139407-1-2

9. Pressure retaining items:

Rudolph Swyb 5/10/98

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body	S6601-1, -2	SA-351 CF8M	70 ksi
Bonnet ~~XXXXX~~	T4795-5, -6	SA-351 CF8M	70 ksi
~~XXXXXXXXX~~ 3/8" Plug	18450 / 73028	SA-479 TY316	75 ksi
Nozzle	703685	SA-479 TY316	75 ksi
Disk	97477	SA-479 TY316	75 ksi
Spring~~XXXXXX~~ Step	31828	SA-479 TY316	75 ksi
~~XXXXXXXXXXXX~~ Cap	H8506-4, -12	SA-351 CF8M	70 ksi
~~XXXX~~ Gag Plug Screw	30091	SA-479 TY316	75 ksi
ring	20330	ASTM A-313 TY316	*
~~XXXX~~ Ring Pin Screw	30091	SA-479 TY316	75 ksi
~~XXXXXXX~~ Stem	704631	SA-479 TY316	75 ksi

(Continued below)

10. Relieving capacity 63,500 (127 GPM) (steam or fluid, lb/hr) @ 10% (psi) overpressure as certified by the National Board 01/25/85 (date)

11. Remarks: * Spring exempt from material requirements of NC-2000 but meets design requirements of NC-3595.

9. Pressure Retaining Items: (Continued)

Compression Screw	700737	SA-479 TY316	75 ksi
Heavy Hex Nut	8079541/N4C	SA-194 GR 2H	N/A
Stud	8866612	SA-193 GR B7	125 ksi

CERTIFICATION OF DESIGN

Design Specification certified by D. Murphy P.E. State WA Reg. no. 12542

Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

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

NV Certificate of Authorization No. N-2853 Expires November 18, 1994

Date 8-3-94 Name Kunkle Industries, Inc. Lonergan Valve Division (NV Certificate Holder) Signed Debra A. Wetzel (authorized representative)

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

(12/88) This form (E00042) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

8/4/94

Certificate Holder's Serial No. 139407-1-1 thru 139407-1-2

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by HSBI & I Co. of Hartford, CT have inspected the valve described in this Data Report on August 4, 1994, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

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

Date 8-4-94 Signed [signature] (Authorized Inspector) Commissions N137444 (NB)(H), Ind 840 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

PLAN No 2-1515

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/10/98
Sheet: 1 of 1
Unit: WNP-2

1. Owner: Washington Public Power Supply System (WPPSS)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment System - Emergency Core Cooling System (ECCS) Suction Strainers For Pump RHR-P-2A
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-ST-5A	PCI	RHR-ST-5A	N/A	N/A	1998	Replacement	No, Code Class 2
RHR-ST-5B	PCI	RHR-ST-5B	N/A	N/A	1998	Replacement	No, Code Class 2

7. Description Of Work Performed: Replaced the existing Emergency Core Cooling System (ECCS) suction strainers RHR-ST-5A and RHR-ST-5B for RHR-P-2A pump suction piping. The replacement work was performed as follows:

1) Removed existing suction strainer RHR-ST-5A.
2) Installed new replacement suction strainer RHR-ST-5A.
3) Installed new replacement studs for suction strainer RHR-ST-5A to pipe flange bolted joint.
4) Installed new replacement nuts for suction strainer RHR-ST-5A to pipe flange bolted joint.
5) Removed existing suction strainer RHR-ST-5B.
6) Installed new replacement suction strainer RHR-ST-5B.
7) Installed new replacement studs for suction strainer RHR-ST-5B to pipe flange bolted joint.
8) Installed new replacement nuts for suction strainer RHR-ST-5B to pipe flange bolted joint.

This Owner's Data Report covers only the make-up of bolting material between the non-Code suction strainers and the Code Class 2 pump suction piping.

NOTES -

1) The existing ASME Code Stamped piping system in which the new replacement Emergency Core Cooling System (ECCS) suction strainers RHR-ST-5A and RHR-ST-5B for RHR-P-2A pump suction piping were installed is Containment System, Serial No 16713 CSM. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
2) The new replacement Emergency Core Cooling Spray (ECCS) suction strainers are non-Code items designed and fabricated in accordance with ASME Section III, Code Class 2, 1977 Edition with Summer 1977 Addenda requirements with the following exceptions as stated in Supply System's Procurement Specification No 12023: No ASME Code stamping, no ASME Code Data Report and no hydrostatic testing.
3) The new replacement studs and nuts comply with Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
4) The jurisdictional boundary between ASME Section III, Code Class 2 pump suction piping and the non-Code suction strainers is at the bolted flanged joints.

PLAN No 2-1515

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 6/10/98

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 6/10/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/22/98 to 6/15/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7486 W/7486 NISB FS
National Board, State, and Endorsements

Date 6/15/98

PLAN No 2-1516

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352.

Date: 06/10/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment System - Emergency Core Cooling System (ECCS) Suction Strainers For Pump RHR-P-2B
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-ST-3A	PCI	RHR-ST-3A	N/A	N/A	1998	Replacement	No, Code Class 2
RHR-ST-3B	PCI	RHR-ST-3B	N/A	N/A	1998	Replacement	No, Code Class 2

7. Description Of Work Performed: Replaced the existing Emergency Core Cooling System (ECCS) suction strainers RHR-ST-3A and RHR-ST-3B for RHR-P-2B pump suction piping. The replacement work was performed as follows:

1) Removed existing suction strainer RHR-ST-3A.
2) Installed new replacement suction strainer RHR-ST-3A.
3) Installed new replacement studs for suction strainer RHR-ST-3A to pipe flange bolted joint.
4) Installed new replacement nuts for suction strainer RHR-ST-3A to pipe flange bolted joint.
5) Removed existing suction strainer RHR-ST-3B.
6) Installed new replacement suction strainer RHR-ST-3B.
7) Installed new replacement studs for suction strainer RHR-ST-3B to pipe flange bolted joint.
8) Installed new replacement nuts for suction strainer RHR-ST-3B to pipe flange bolted joint.

This Owner's Data Report covers only the make-up of bolting material between the non-Code suction strainers and the Code Class 2 pump suction piping.

NOTES -

1) The existing ASME Code Stamped piping system in which the new replacement Emergency Core Cooling System (ECCS) suction strainers RHR-ST-3A and RHR-ST-3B for RHR-P-2B pump suction piping were installed is Containment System, Serial No 16713 CSM. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
2) The new replacement Emergency Core Cooling Spray (ECCS) suction strainers are non-Code items designed and fabricated in accordance with ASME Section III, Code Class 2, 1977 Edition with Summer 1977 Addenda requirements with the following exceptions as stated in Supply System's Procurement Specification No 12023: No ASME Code stamping, no ASME Code Data Report and no hydrostatic testing.
3) The new replacement studs and nuts comply with Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
4) The jurisdictional boundary between ASME Section III, Code Class 2 pump suction piping and the non-Code suction strainers is at the bolted flanged joints.

PLAN No 2-1516

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/10/98 — Date 6/10/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/22/98 to 6/15/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature — Commissions 7486 M/7486 NFSB IS — National Board, State, and Endorsements

Date 6/15/98

PLAN No 2-1517

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/10/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment System - Emergency Core Cooling System (ECCS) Suction Strainers For Pump RHR-P-2C
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-ST-4A	PCI	RHR-ST-4A	N/A	N/A	1998	Replacement	No, Code Class 2
RHR-ST-4B	PCI	RHR-ST-4B	N/A	N/A	1998	Replacement	No, Code Class 2

7. **Description Of Work Performed:** Replaced the existing Emergency Core Cooling System (ECCS) suction strainers RHR-ST-4A and RHR-ST-4B for RHR-P-2C pump suction piping. The replacement work was performed as follows:
   1) Removed existing suction strainer RHR-ST-4A.
   2) Installed new replacement suction strainer RHR-ST-4A.
   3) Installed new replacement studs for suction strainer RHR-ST-4A to pipe flange bolted joint.
   4) Installed new replacement nuts for suction strainer RHR-ST-4A to pipe flange bolted joint.
   5) Removed existing suction strainer RHR-ST-4B.
   6) Installed new replacement suction strainer RHR-ST-4B.
   7) Installed new replacement studs for suction strainer RHR-ST-4B to pipe flange bolted joint.
   8) Installed new replacement nuts for suction strainer RHR-ST-4B to pipe flange bolted joint.

This Owner's Data Report covers only the make-up of bolting material between the non-Code suction strainers and the Code Class 2 pump suction piping.

NOTES -

1) The existing ASME Code Stamped piping system in which the new replacement Emergency Core Cooling System (ECCS) suction strainers RHR-ST-4A and RHR-ST-4B for RHR-P-2C pump suction piping were installed is Containment System, Serial No 16713 CSM. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
2) The new replacement Emergency Core Cooling Spray (ECCS) suction strainers are non-Code items designed and fabricated in accordance with ASME Section III, Code Class 2, 1977 Edition with Summer 1977 Addenda requirements with the following exceptions as stated in Supply System's Procurement Specification No 12023: No ASME Code stamping, no ASME Code Data Report and no hydrostatic testing.
3) The new replacement studs and nuts comply with Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
4) The jurisdictional boundary between ASME Section III, Code Class 2 pump suction piping and the non-Code suction strainers is at the bolted flanged joints.

PLAN No 2-1517

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/10/98 — Date 6/10/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/22/98 to 6/15/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature — Commissions 7486 W/7486 WISB IS (National Board, State, and Endorsements)

Date 6/15/98

PLAN No 2-1518

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 06/10/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment System - Emergency Core Cooling System (ECCS) Suction Strainers For Pump LPCS-P-1
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
LPCS-ST-2	PCI	LPCS-ST-2	N/A	N/A	1998	Replacement	No, Code Class 2
LPCS-ST-3	PCI	LPCS-ST-3	N/A	N/A	1998	Replacement	No, Code Class 2

7. Description Of Work Performed: Replaced the existing Emergency Core Cooling System (ECCS) suction strainers LPCS-ST-2 and LPCS-ST-3 for LPCS-P-1 pump suction piping. The replacement work was performed as follows:

1) Removed existing suction strainer LPCS-ST-2.
2) Installed new replacement suction strainer LPCS-ST-2.
3) Installed new replacement studs for suction strainer LPCS-ST-2 to pipe flange bolted joint.
4) Installed new replacement nuts for suction strainer LPCS-ST-2 to pipe flange bolted joint.
5) Removed existing suction strainer LPCS-ST-3.
6) Installed new replacement suction strainer LPCS-ST-3.
7) Installed new replacement studs for suction strainer LPCS-ST-3 to pipe flange bolted joint.
8) Installed new replacement nuts for suction strainer LPCS-ST-3 to pipe flange bolted joint.

This Owner's Data Report covers only the make-up of bolting material between the non-Code suction strainers and the Code Class 2 pump suction piping.

NOTES -

1) The existing ASME Code Stamped piping system in which the new replacement Emergency Core Cooling System (ECCS) suction strainers LPCS-ST-2 and LPCS-ST-3 for LPCS-P-1 pump suction piping were installed is Containment System, Serial No 16713 CSM. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
2) The new replacement Emergency Core Cooling Spray (ECCS) suction strainers are non-Code items designed and fabricated in accordance with ASME Section III, Code Class 2, 1977 Edition with Summer 1977 Addenda requirements with the following exceptions as stated in Supply System's Procurement Specification No 12023: No ASME Code stamping, no ASME Code Data Report and no hydrostatic testing.
3) The new replacement studs and nuts comply with Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
4) The jurisdictional boundary between ASME Section III, Code Class 2 pump suction piping and the non-Code suction strainers is at the bolted flanged joints.

PLAN No 2-1518

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/10/98 — Date 6/10/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/22/98 to 6/15/98 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 7458 W/7458 NFSB IS (National Board, State, and Endorsements)

Date 6/15/98

PLAN No 2-1519

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/10/98
Sheet: 1 of 1
Unit: WNP-2

1. Owner: Washington Public Power Supply System (WPPSS)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment System - Emergency Core Cooling System (ECCS) Suction Strainers For Pump HPCS-P-1
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS-ST-2	PCI	HPCS-ST-2	N/A	N/A	1998	Replacement	No, Code Class 2
HPCS-ST-3	PCI	HPCS-ST-3	N/A	N/A	1998	Replacement	No, Code Class 2

7. Description Of Work Performed: Replaced the existing Emergency Core Cooling System (ECCS) suction strainers HPCS-ST-2 and HPCS-ST-3 for HPCS-P-1 pump suction piping. The replacement work was performed as follows:

1) Removed existing suction strainer HPCS-ST-2.
2) Installed new replacement suction strainer HPCS-ST-2.
3) Installed new replacement studs for suction strainer HPCS-ST-2 to pipe flange bolted joint.
4) Installed new replacement nuts for suction strainer HPCS-ST-2 to pipe flange bolted joint.
5) Removed existing suction strainer HPCS-ST-3.
6) Installed new replacement suction strainer HPCS-ST-3.
7) Installed new replacement studs for suction strainer HPCS-ST-3 to pipe flange bolted joint.
8) Installed new replacement nuts for suction strainer HPCS-ST-3 to pipe flange bolted joint.

This Owner's Data Report covers only the make-up of bolting material between the non-Code suction strainers and the Code Class 2 pump suction piping.

NOTES -

1) The existing ASME Code Stamped piping system in which the new replacement Emergency Core Cooling System (ECCS) suction strainers HPCS-ST-2 and HPCS-ST-3 for HPCS-P-1 pump suction piping were installed is Containment System, Serial No 16713 CSM. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
2) The new replacement Emergency Core Cooling Spray (ECCS) suction strainers are non-Code items designed and fabricated in accordance with ASME Section III, Code Class 2, 1977 Edition with Summer 1977 Addenda requirements with the following exceptions as stated in Supply System's Procurement Specification No 12023: No ASME Code stamping, no ASME Code Data Report and no hydrostatic testing.
3) The new replacement studs and nuts comply with Code Class 2, 1971 Edition with Summer 1972 Addenda requirements.
4) The jurisdictional boundary between ASME Section III, Code Class 2 pump suction piping and the non-Code suction strainers is at the bolted flanged joints.

PLAN No 2-1519

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/10/98 — Date 6/10/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/22/98 to 6/15/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature — Commissions 7486 NI/7486 NI S8 EI — National Board, State, and Endorsements

Date 6/15/98

PLAN No 2-1520

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:** 06/23/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(16)-1	WPPSS	RCIC(16)-1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced rupture discs for RCIC-RD-1 and RCIC-RD-2. The replacement work was performed as follows:

1) Removed existing rupture discs.
2) Performed VT-3 visual examination on the existing studs for both the bolted joints. VT-3 visual examination results acceptable.
3) Performed VT-3 visual examination on the existing nuts for both the bolted joints. VT-3 visual examination results acceptable.
4) Installed new rupture discs in RCIC-RD-1 and RCIC-RD-2.
5) Reinstalled VT-3 visually examined existing studs for both the bolted joints.
6) Reinstalled VT-3 visually examined existing nuts for both the bolted joints.
7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of both the bolted joints. No evidence of leakage during the pressure test.

PLAN No 2-1520

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: 3 Psig
Test Temperature: 186° F
Component Design Pressure: 150 Psig
Temperature: 267° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/98

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 6/23/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/5/98 to 7/1/98 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.

[illegible]
Inspector's Signature

Commissions 7486 WA/7486 NB IS-[illegible]
National Board, State, and Endorsements

Date 7/1/98

PLAN No 2-1521

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/04/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Atmosphere Control (CAC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CAC-HR-1A	Air Products	76-129-3	5209	N/A	1977	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced rupture disc for CAC-RD-1A. The replacement work was performed as follows:
   1) Removed existing rupture disc from CAC-RD-1A.
   2) Performed VT-3 visual examination on the existing studs for CAC-RD-1A bolted joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing nuts for CAC-RD-1A bolted joint. VT-3 visual examination results acceptable.
   4) Installed new rupture disc in CAC-RD-1A.
   5) Reinstalled VT-3 visually examined existing studs for CAC-RD-1A bolted joint.
   6) Reinstalled VT-3 visually examined existing nuts for CAC-RD-1A bolted joint.
   7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of CAC-RD-1A bolted joint. No evidence of leakage during the pressure test.

PLAN No 2-1521

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 39 Psig
Test Temperature: 77° F
Component Design Pressure: 50 Psig
Temperature: 350° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Date 6/4/98
Date 6/4/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2/19/98 to 6/8/98 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 7486W/7486 NISB IW
National Board, State, and Endorsements

Date 6/8/98

PLAN No 2-1522

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/04/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment Atmosphere Control (CAC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CAC-HR-1B	Air Products	76-130-3	5210	N/A	1977	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced rupture disc for CAC-RD-1B. The replacement work was performed as follows:
   1) Removed existing rupture disc from CAC-RD-1B.
   2) Performed VT-3 visual examination on the existing studs for CAC-RD-1B bolted joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing nuts for CAC-RD-1B bolted joint. VT-3 visual examination results acceptable.
   4) Installed new rupture disc in CAC-RD-1B.
   5) Reinstalled VT-3 visually examined existing studs for CAC-RD-1B bolted joint.
   6) Reinstalled VT-3 visually examined existing nuts for CAC-RD-1B bolted joint.
   7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of CAC-RD-1B bolted joint. No evidence of leakage during the pressure test.

PLAN No 2-1522

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 39 Psig **Test Temperature:** 76.8° F

Component Design Pressure: 50 Psig **Temperature:** 350° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 6/4/98 **Date** 6/4/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2-19-98 *to* 6/8/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature **Commissions** 7486 W/7486 WTSB IS

National Board, State, and Endorsements

Date 6/8/98

PLAN No 2-1523

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 04/02/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Room Chilled Water (CCH) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

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

7. **Description Of Work Performed:** Replaced rupture disc for CCH-RD-1B. The replacement work was performed as follows:
   1) Removed existing rupture disc from CCH-RD-1B.
   2) Performed VT-3 visual examination on the existing studs for CCH-RD-1B bolted joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing nuts for CCH-RD-1B bolted joint. VT-3 visual examination results acceptable.
   4) Installed new rupture disc in CCH-RD-1B.
   5) Reinstalled VT-3 visually examined existing studs for CCH-RD-1B bolted joint.
   6) Reinstalled VT-3 visually examined existing nuts for CCH-RD-1B bolted joint.
   7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of CCH-RD-1B bolted joint. No evidence of leakage during the pressure test.

PLAN No 2-1523

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 33 Psig — Test Temperature: 72° F

Component Design Pressure: 309 Psig — Temperature: 150° F

9. Remarks: See attached NR-1 Code Data Report for the new replacement rupture disc.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 4/2/98 — Date 4/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 1/13/98 to 4/2/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature — Commissions 7486 W/7486 NIB IS

National Board, State, and Endorsements

Date 4/2/98

PLAN NO. 2-1523

Lindy Smith
4/2/88

BS&B SAFETY SYSTEMS

CUSTOMER: WASHINGTON PUBLIC POWER
P.O.#: 86553

FORM NR-1
DATA REPORT OF RUPTURE DISKS
As Required by the Provisions of the
ASME Code Rules, Section III, Div. 1

1. Manufactured by: BS&B Safety Systems, Inc., Tulsa, Oklahoma
(Name and address of Manufacturer)

IDENTIFICATION OF RUPTURE DISK

2. Type of Style: BV Lot No.: 87090001-1

3. Disk Dimensional Characteristics:

Size: 3" Capacity: 10,510 SCFM Air

4. Material Specification: ASTM A-167, 316 SS ANNEAL.

5. Drawing No.: N/A

6. Burst Pressure: 103.95 PSIG Max. 94.05 PSIG Min.

7. Coincident Disk Temperature: 100 DEG F

8. Element used in test: AIR

9. Cyclic Test Results: N/A
(if required)

CERTIFICATION

10. Place of Test: Tulsa, Oklahoma Date of Test: 01/15/87

WE CERTIFY THE ABOVE DATA TO BE CORRECT AND THAT THESE DISKS HAVE BEEN MANUFACTURED AND TESTED TO THE REQUIREMENTS OF THE ASME CODE.

DATE: JANUARY 21, 1987 ISSUED BY: BS&B Safety Systems, Inc.

APPROVED BY: Jay B. Vance, Quality Control Manager
Jay B. Vance

No. of Pieces Shipped: 12

Actual Burst Test Results: 104, 102 PSIG @ 72 DEG F

STAMP DISK TAB: SUPPLY SYSTEM PO #86553; SUPPLY SYSTEM PO ITEM #1

BS&B SAFETY SYSTEMS, INC. • 7455 E. 46th Street • P.O. Box 470590 • Tulsa, Ok. 74147-0590 • Phone 918/622-5960
TELEX 49-2479 BS&B GEN TUL • FAX 918/665-3906

PLAN No 2-1524

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 03/23/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Residual Heat Removal (RHR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Relief Valve (RHR-RV-1B)	Crosby	N60597-00-0003	N/A	N/A	1979	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced parts for spare relief valve Serial No N60597-00-0003. The replacement work was performed as follows:
   1) Removed existing disc from the spare relief valve.
   2) Installed new replacement disc Serial No N91855-45-0086 in the spare relief valve.
   3) Removed existing base from the spare relief valve.
   4) Installed new replacement base Serial No N91850-37-0025 in the spare relief valve.

NOTES -

1) Spare relief valve Serial No N60597-00-0003 was previously installed in the plant as RHR-RV-1B.

PLAN No 2-1524

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 3/23/98 — Date 3/23/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 11/24/97 to 3/25/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature — Commissions 7486 W; 7486 NIS8 IS (National Board, State, and Endorsements)

Date 3/25/98

PLAN No 2-1525

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:** 05/23/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Residual Heat Removal (RHR) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-RV-1A	Crosby	N60597-00-0019	N/A	N/A	1990	Replaced	Yes, Code Class 2
RHR-RV-1A	Crosby	N60597-00-0018	N/A	N/A	1990	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced existing relief valve RHR-RV-1A. The replacement work was performed as follows:
1) Removed existing relief valve RHR-RV-1A, Serial No N60597-00-0019.
2) Installed spare relief valve RHR-RV-1A, Serial No N60597-00-0018.

NOTES -
1) The ASME Code Stamped piping system applicable to the relief valve inlet side is Residual Heat Removal (RHR) piping system RHR(1)-2A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
2) The ASME Code Stamped piping system applicable to the relief valve outlet side is Residual Heat Removal (RHR) piping system RHR(4)-1A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
3) Relief valve RHR-RV-1A, Serial No N60597-00-0018 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda requirements.

PLAN No 2-1525

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: See attached NV-1 Code Data Report for the spare relief valve RHR-RV-1A, Serial No N60597-00-0018.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/23/98 — Date 5/23/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 12/16/97 to 5/23/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7416 W/7416 NISB IS — National Board, State, and Endorsements

Date 5/28/98

PLAN NO. 2-1525

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES Q.C.-4C-1
As required by the Provisions of the ASME Code Rules

DATA REPORT
Safety and Safety Relief Valves

Rudolf Sapp 5/19/98

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

Model No. JR-WR Order No N06360 Contract Date 3/7/90 National Board No. —

2. Manufactured For Washington Public Power Supply System PO Box 968 Richland, WA 99352-0968 Order No. 204649
Name and Address

3. Owner Washington Public Power Supply System
Name and Address

4. Location of Plant Hanford II RHR-RV-1A, S/N N60597-00-0018

5. Valve Identification MPL E12B001 Serial No. N60597-00-0018 Drawing No. DS-C-60597 Rev. E

Type Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size .280 Inch Pipe Size -- Inch Inlet 3/4 Inch Outlet 1 Inch

6. Set Pressure (PSIG) 500 480° F
Rated Temperature

Stamped Capacity 20 GPM WTR @ 70°F ± 10 % Overpressure — Blowdown (PSIG) 15% of SP

Hydrostatic Test (PSIG) Inlet 750 Complete Valve 225

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 2 Edition 1974, Addenda Date Summer 1975, Case No. 1567 & N242-1 1711

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body		
~~XXXXX~~ Cylinder	N91851-34-0025	ASME SA 216 Gr. WCB
b. Bar Stock and Forgings		
Support Rods		
~~XXXXX~~ Base	N91850-37-0028	ASME SA 479 Type 316
Disc	N91855-46-0092	ASME SB 164 CL. A
Spring Washers	N92220-36-0085 N92220-36-0087	ASME SA 193 Gr. B6
Adjusting Bolt	N92221-34-0027	ASME SA 193 Gr. B6
Spindle K61719-39-0030	N92219-39-0030	ASME SA 193 Gr. B6

CROSBY VALVE & GAGE COMPANY

CROSBY

VERIFIED & ACCEPTED _____ REC. INSPECTOR

LEVEL II DATE 10-22-90

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX3119-0026	ASTM B166
d. Bolting		
e. Other Parts such as Pilot Components		

We certify that the statements made in this report are correct.

Date 9/29/ 19 90 Signed Crosby Valve & Gage Co. By J. J. Fune
Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1992

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Arkwright Mutual Insurance Company have inspected the equipment described in this Data Report on Sept 29 19 90 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date Sept 29 19 90 Factory Mutual System

W E [illegible] Commissions MA 1207
(Inspector) (National Board, State, Province and No.)

PLAN No 2-1526

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:** 05/22/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Standby Liquid Control (SLC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC-V-4B	Conax	N/A	90	N/A	1975	Replacement	Yes, Code Class 1
Trigger Body	Conax	4296	N/A	N/A	1993	Replaced	Yes, Code Class 1
Trigger Body	Conax	4295	N/A	N/A	1993	Replacement	Yes, Code Class 1
Inlet Fitting	Conax	4329	N/A	N/A	1993	Replaced	Yes, Code Class 1
Inlet Fitting	Conax	4328	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced parts for the existing valve SLC-V-4B. The replacement work was performed as follows:

1) Removed the existing Trigger Body Subassembly Serial No 4296 from the valve.
2) Installed new Trigger Body Subassembly Serial No 4295 in the valve.
3) Removed the existing Inlet Fitting Serial No 4329 from the valve.
4) Installed new Inlet Fitting Serial No 4328 in the valve.
5) Performed VT-3 visual examination on the existing studs for the valve joint. VT-3 visual examination results acceptable. Note - One (1) set of studs cover both the inlet and the outlet joints.
6) Performed VT-3 visual examination on the existing nuts for the valve inlet joint. VT-3 visual examination results acceptable.
7) Performed VT-3 visual examination on the existing nuts for the valve outlet joint. VT-3 visual examination results acceptable.
8) Reinstalled refurbished valve SLC-V-4B, National Board No 90.
9) Reinstalled VT-3 visually examined existing studs and nuts for the valve inlet and outlet joints.
10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

1) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the Standby Liquid Control (SLC) piping system SLC(2)-4S-P1
2) ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda for the existing valve SLC-V-4B, national Board No 90.
3) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new Trigger Body Subassembly Serial No 4295. The new Trigger Body Subassembly certified to 1977 Edition with Summer 1977 Addenda is acceptable for use in the existing valve certified to 1971 Edition with Winter 1972 Addenda. This acceptability is documented in ASME Section XI Plan No 2-1526.
4) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new Inlet Fitting Serial No 4328. The new Inlet Fitting certified to 1977 Edition with Summer 1977 Addenda is acceptable for use in the existing valve certified to 1971 Edition with Winter 1972 Addenda. This acceptability is documented in ASME Section XI Plan No 2-1526.

PLAN No 2-1526

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: 1172/1240 Psig **Test Temperature:** Ambient/72.8° F

Component Design Pressure: 1400 Psig **Temperature:** 150° F

9. Remarks: 1) See attached N-2 Code Data Reports for the following new replacement valve parts:

Valve Part	Serial No
Trigger Body Subassembly	4295
Inlet Fitting	4328

2) The design pressure of 1400 Psig and design temperature of 150° F are for both valve SLC-V-4B and Standby Liquid Control (SLC) piping system SLC(2)-4S-P1

3) Test pressure on the down stream side of valve SLC-V-4B (RPV Side) - Test pressure of 1172 Psig and test temperature of Ambient.

4) Test pressure on the up stream side of valve SLC-V-4B (SLC-P-1B Side) - Test pressure of 1240 Psig and test temperature of 72.8° F.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/22/98 **Date** 5/22/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5/1/98 *to* 5/23/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] — Inspector's Signature

Commissions 7486w/7486 NB IS — National Board, State, and Endorsements

Date 5/23/98

NUCLEAR PARTS AND APPURTENANCES*

PLAN No. 2-1526

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

Not To Exceed One Day's Production

1. Manufactured and certified by Conax Buffalo Corporation, 2300 Walden Ave., Cheektowaga, NY 14225
(name and address of certificate holder)

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

3. Location of installation WNP-2, WA
(name and address)

4. Type N-20000 Rev. F (drawing no.) 304SST SA479 (mat'l spec no.) 75KSI (tensile strength) NA (CRN) 1993 (year built)

5. ASME Code, Section III: 77 (edition) S77 (addenda) 1 (class) NA (Code Case no.)

6. Fabricated in accordance with Const. Spec (Div 2 only) NA (No.) 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. USED S/N 4295 Rudolph Supp 5/21/98

8. Nom. thickness (in.) *see remarks Min. design thickness (in.) _____ Dia. ID (ft. & in.) _____ Length overall (ft. & in.) _____

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

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board Number In Numerical Order
(1) 4295	4295	(26)	
(2) 4296	4296	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(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)	

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

*Supplemental information in form of lists, sketches or drawings may be used provided (1) size is 8½ X 11, (2) information in items 2 and 3 on this data report is included on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of this form, and (4) each additional sheet shall be signed by the Certificate Holder and the AI.

(6/83) This form (200040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

CERTIFICATE OF DESIGN

Design specifications certified by Clyde T. Nieh P. E. state CA Reg. no. [illegible]

Design report* certified by Francis J. Domino P. E. state NY Reg. no. 36832
(when applicable)

CERTIFICATE OF SHOP COMPLIANCE

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

ASME Certificate of Authorization no. N-1850 Expires Sept. 2, 1995

Date 9/20/93 Name Conax Buffalo Corporation Signed Curtis M. Pratt
(NPT Certificate Holder) (Authorized representative)
Curt M. Pratt, Quality Engineer

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of New York and employed by H.S.B.I. & I. Co. of Hartford, CT have inspected these items described in this data report on SEPT 21, 1993 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 9/21/93 Signed [signature] Commissions NB 9155 AN
(Authorized Inspector) (Nat'l Bd (incl endorsements) state or prov and no.)

FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES* PLAN NO. 2-1526
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 14225
(name and address of certificate holder)

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

3. Location of installation WNP-2, WA
(name and address)

4. Type N38017. Rev. F (drawing no.) 304SST SA479 (mat'l spec. no.) 75KSI (tensile strength) NA (CRN) 1993 (year built)

5. ASME Code, Section III 77 (edition) S77 (addenda) 1 (class) NA (Code Case no.)

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

7. Remarks: Inlet Fitting for explosive actuated valve replacement kit for standby liquid control system. Pressure tested at 2800 PSI for 10 minutes.

USED S/N 4328 Rudolph Swift 5/21/98

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) 4328	4328	(26)	
(2) 4329	4329	(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)	

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

*Supplemental information in form of lists, sketches or drawings may be used provided (1) size is 8½ x 11, (2) information in items 2 and 3 on this data report is included on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of this form, and (4) each additional sheet shall be signed by the Certificate Holder and the AI.

(6/83)

This form (500948) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

CERTIFIC · TE OF DESIGN

Design specifications certified by Clyde T. Nieh P. E. state CA Reg. no. [illegible]58

Design report* certified by Francis J. Domino P. E. state NY Reg. no. 3683
(when applicable)

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, 1995

Date 9/21/93 Name Conax Buffalo Corporation (NPT Certificate Holder) Signed Curtis Pratt (Authorized representative)
Curt M. Pratt, Quality Engine

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of New York and employed by H.S.B.I. & I. Co. of Hartford, CT have inspected these items described in this data report on SEPT 21, 1993 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 9/21/93 Signed [illegible] (Authorized Inspector) Commissions NB 9157 GN
(Nat'l Bd (incl endorsements) state or prov and n

PLAN No 2-1527

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:** 05/19/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Low Pressure Core Spray (LPCS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
LPCS-V-3	Anchor Darling	2N-563	N/A	N/A	1975	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced stud for the South side hinge pin cover plate for valve LPCS-V-3. The replacement work was performed as follows:

1) Performed VT-3 visual examination on the existing studs for the South side hinge pin cover plate. VT-3 visual examination results acceptable.
2) Performed VT-3 visual examination on the existing nuts for the South side hinge pin cover plate. VT-3 visual examination results acceptable.
3) Performed VT-3 visual examination on the existing studs for the North side hinge pin cover plate. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing nuts for the North side hinge pin cover plate. VT-3 visual examination results acceptable.
5) Reinstalled VT-3 visually examined existing studs and nuts for the South side hinge pin cover plate.
6) Installed one (1) new replacement stud for the South side hinge pin cover plate.
7) Reinstalled VT-3 visually examined existing studs and nuts for the North side hinge pin cover plate. No new replacement studs and nuts were installed the North side hinge pin cover plate.
8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the South side hinge pin cover plate. No evidence of leakage during the pressure test.
9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the North side hinge pin cover plate. No evidence of leakage during the pressure test.

PLAN No 2-1527

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 320 Psig — Test Temperature: 73.4° F

Component Design Pressure: 720 Psig — Temperature: 100° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/20/98 — Date 5/20/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/12/98 to 5/23/98 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 7486W/7486 NBSB-IS (National Board, State, and Endorsements)

Date 5/23/98

PLAN No 2-1528

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 06/15/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Miscellaneous Drains (MD) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Valve - MD-V-71	Velan	111	N/A	N/A	1978		Yes, Code Class 2
Bonnet - MD-V-71	Velan	048	N/A	N/A	1978	Replaced	No, Code Class 2
Valve - Spare	Velan	1241	N/A	N/A	1978		Yes, Code Class 2
Bonnet - Spare	Velan	2013	N/A	N/A	1978	Replacement	No, Code Class 2

7. Description Of Work Performed: Replaced bonnet on existing valve MD-V-71, Serial No 111. The replacement work was performed as follows:

1) Removed bonnet Serial No 048 from existing valve MD-V-71 Serial No 111.
2) Performed VT-3 visual examination on the existing studs for valve MD-V-71 Serial No 111. VT-3 visual examination results acceptable.
3) Performed VT-3 visual examination on the existing nuts for valve MD-V-71, Serial No 111. VT-3 visual examination results acceptable.
4) Removed bonnet Serial No 2013 from spare valve Serial No 1241.
5) Installed bonnet Serial No 2013 on existing valve MD-V-71 Serial No 111.
6) Reinstalled VT-3 visually examined existing studs and nuts.
7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

1) The existing valve MD-V-71 Serial No 111 is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Summer 1973 Addenda requirements.
2) The spare valve Serial No 1241 is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1972 Addenda requirements.

PLAN No 2-1528

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 941 Psig — Test Temperature: 539° F (Saturated)

Component Design Pressure: 1250 Psig — Temperature: 575° F

9. Remarks: See attached NPV-1 Code Data Report for the spare valve Serial No 1241.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/15/98 — Date 6/15/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/15/98 to 6/18/98 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 7486W/7486 NB IS.

National Board, State, and Endorsements

Date 6/18/98

U.U 1 2 4 1

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

(As Required by the Provisions of the ASME Code, Section III, Div. 1) PLAN No. 2-1528

1. Manufactured by VELAN ENGINEERING COMPANIES 2125 Ward Avenue Montreal, Que.
(Name and Address of Manufacturer)
2. Manufactured for CORNELL & UNDERHILL, INC. (Owner: Long Island Lighting Company)
(Name and Address of Purchaser or Owner)
3. Location of Installation Shoreham Nuclear Power Station
(Name and Address)
4. Pump or Valve 3"-900# BB GATE VALVE Nominal Inlet Size 3" (inch) Outlet Size 3"

	(a) Model No., Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	B10-07054B-02WN	#1241	N/A	P2-3288-N-4	2.	N/A	1978.
(3)				Rev. E			
(4)							
(5)							
(6)							
(7)							
(8)	INSTALLED BONNET FROM THIS VALVE						
(9)							
(10)	ON VALVE MD-V-71						

5. Philip Swift 6/4/98
(Brief description of service for which equipment was designed)

6. Design Conditions _____ (Pressure) psi _____ (Temperature) °F or Valve Pressure Class 900 LB (1)
7. Cold Working Pressure 2160 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
WEDGE S/N: 9247	SA-216 WC-B	Vestshell, Inc.	
H/C: V-1253			
(b) Forgings			
BODY S/N: 1241	SA-105	The Steel Improvement	
H/C: Code-N1		& Forge Company	
BONNET S/N: 2013	SA-105	Galt-British Forge Ltd.	
H/C: D-4128			

INSPECTED NOV - 6 1978

(1) For manually operated valves only.

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

(1/76) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
Studs	SA-193 B7	(C of C Attached)	
Nuts	SA-194 2H	(C of C Attached)	
(d) Other Parts			
WELD ROD H/C: 422A0721	SFA-5.18E70S3	Chemetron Corporation	

9. Hydrostatic test Shell: 3250 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 Winter, 1972 (Date), Code Case No. #1672. Date 4 November 1974

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

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

CERTIFICATION OF DESIGN

Design information on file at VELAN ENGINEERING COMPANIES Montreal, Quebec

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

Design specifications certified by (1) George Webster

PE State Mass., USA Reg. No. 2469

Stress analysis certified by (1) N/A

PE State _____ Reg. No. _____

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Quebec and employed by Government of Quebec have inspected the pump, or valve, described in this Data Report on Oct-13 19 78 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 Oct-13 19 78

Henri Bouchette (Inspector)

Commissions 215-937-343 (Nat'l Bd., State, Prov. and No.)

PLAN No 2-1532

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 01/30/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301
   (b) Repair Organization P.O. No, Job No, etc.: C31331
   (c) Type Code Symbol Stamp: NWS Technologies VR And NR
   (d) Certificate Of Authorization No.: NWS Technologies VR No 632 And NR No 81
   (e) Expiration Date: NWS Technologies VR - April 3, 2000 And NR - April 09, 2000
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0050	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. Description Of Work Performed: **7. Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0050 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Removed existing disc insert Serial No N93185-56-0246 from the relief valve.
3) Installed new replacement disc insert Serial No N93185-56-0253 in the relief valve.
4) Removed existing nozzle Serial No N93184-33-0068 from the relief valve.
5) Installed new replacement nozzle Serial No N93184-52-0159 in the relief valve.
6) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for four (4) inlet studs. Seven (7) inlet studs were determined to be unacceptable during VT-3 visual examination. Note - One (1) inlet stud was missing.
7) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
8) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
9) Reassembled the relief valve.
10) Installed five (5) new replacement studs for the relief valve inlet joint. Note - The remaining three (3) inlet studs will be installed by Supply System at the time when relief valve is ready to be installed in the plant.
11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.
12) Tested the relief valve at set pressure of 1175 PSIG. Test results acceptable.

NOTES -

1) Supply System performed VT-1 visual examination on five (5) new replacement studs for the relief valve inlet joint. VT-1 visual examination results acceptable.

PLAN No 2-1532

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 10 Psig — Test Temperature: 73° F

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

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for relief valve Serial No N63790-00-0050.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0050.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 2/2/98 — Date 2/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2-10-98 *to* 2-10-98 *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 7486W, 7486 NISP IS (National Board, State, and Endorsements)

Date 2/10/98

FORM NVR-1 REPORT OF REPAIR ☒ · REPLACEMENT ☒
OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-1532

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331 Kulcinp Singh 2/2/98
   131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System
   WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
   b: Name of manufacturer: Crosby Valve & Gage Co.
   c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0050	N/A	steam	6 x 10	1980

   d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

7. ASME Code Section XI used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

8. Construction Code used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1175 psig
    Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, disc insert (N93185-56-0253), nozzle (N93184-52-0159), inlet studs (GQH,K4K), disc holder pin.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB (incl endorsements), jurisdiction & no
12/9/97	Carl Enos	NB 8460, A, N, I, TN 2236

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1532

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

Shelly Sup't Q.C.-44D 2/2/98

DATA REPORT
Safety and Safety Relief Valves

FOR INFORMATION ONLY

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0050 Drawing No. DS-A-63790 Rev. C

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

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

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

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

Pressure Retaining Pieces

Bar Stock & Forgings	Serial No. Identification	Material Specification Including Type or Grade
a. ~~Castings~~		
Body	N93183-35-0069	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0032	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Bar Stock & Forgings~~		
~~Spindle~~ ~~Rod~~ Disc Insert	N93185-34-0082	ASME SA637 Gr. 718
Nozzle	N93184-33-0054	ASME SA182 Gr. F316
Disc Holder*K55484-35-0097	*N89714-34-0101	AMS 5662B
Spring Washers K62858-35-0032	K62856-35-0088 K62857-35-0053	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0057	ASME SA193 Gr. B6
Spindle Point K62873-35-0050	*N89720-34-0066	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0032	*N89722-0008	ASTM A304-66 Gr. 4161H
d. Bolting		ZX00580116
Spindle Ball		
e. ~~Stems~~ K62873-35-0050	N93213-0050	Stellite #6
Thrust Bearing Adapter	N93409-32-0052	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0597 thru 0608	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0817 thru 0828	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0599 thru 0610	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0603 thru 0614	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button K63518-33-0058	N93411-33-0058	ASME SA193 Gr. B6

Adjusting Bolt, and Upper Bearing
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.

N63790-00-0050

CERTIFICATE OF COMPLIANCE

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

Class 1

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

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

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 12/5, 19 80 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 12/5 19 80

Signed John E. Mc Gee (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

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

ZX00380117

PLAN No 2-1533

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 01/30/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301
   (b) **Repair Organization P.O. No, Job No, etc.:** C31331
   (c) **Type Code Symbol Stamp:** NWS Technologies VR And NR
   (d) **Certificate Of Authorization No.:** NWS Technologies VR No 632 And NR No 81
   (e) **Expiration Date:** NWS Technologies VR - April 3, 2000 And NR - April 09, 2000
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0054	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. Description Of Work Performed: **7. Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0054 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for nine (9) inlet studs. Two (2) inlet studs were determined to be unacceptable during VT-3 visual examination. Note - One (1) inlet stud was missing.
3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
5) Reassembled the relief valve.
6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.
7) Tested the relief valve at set pressure of 1185 PSIG. Test results acceptable.

NOTES -

1) Three (3) inlet studs will be installed by Supply System at the time when relief valve is ready to be installed in the plant.

PLAN No 2-1533

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 10 Psig **Test Temperature:** 73° F

Component Design Pressure: 1185 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for relief valve Serial No N63790-00-0054.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0054.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 2/2/98 **Date** 2/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2-10-98 *to* 2-11-98 *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** 7486W; 7486 NIB IS
National Board, State, and Endorsements

Date 2/11/98

FORM NVR-1 REPORT OF REPAIR or REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES PLAN NO: 2-1533

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0054	N/A	steam	6 x 10	1980

d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

7. ASME Code Section XI used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

8. Construction Code used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1185 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, nozzle ring set screw (0054), disc holder pin.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB and endorsements), jurisdiction & no
12/9/97	Carl Enos	NB 8460, A, N, I, TN 2236

~~NS-NV-2A~~

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1533

Checked by Q.C.-44D 2/2/98

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

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0054 Drawing No. DS-A-63790 Rev. C

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

FOR INFORMATION ONLY

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

Stamped Capacity 891,750 @ 3 % Overpressure — Blowdown (psig) 2% to 11%

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

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. ~~Castings~~ Bar Stock & Forgings		
Body	N93183-35-0073	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0036	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Bar Stock & Forgings~~		
~~Support~~ Disc Insert	N93185-34-0086	ASME SA637 Gr. 718
Nozzle	N93184-33-0058	ASME SA182 Gr. F316
Disc Holder*K55484-35-0090	*N89714-34-0090	AMS 5662B
Spring Washers K62858-35-0036	K62856-35-0092 K62857-35-0057	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0061	ASME SA193 Gr. B6
Spindle Point K62873-35-0054	*N89720-34-0093	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0036	NX2689-0117	ASTM A304-66 Gr. 4161H
d. Bolting		7X00380137
e. ~~Xxxxxxxxxx~~ Spindle Ball K62873-35-0054	N93213-0054	Stellite #6
Thrust Bearing Adapter	N93409-32-0056	ASME SA193 Gr. B6
Bonnet Stud (J17)	N93207-0645 thru 0656	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0865 thru 0876	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0647 thru 0658	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0651 thru 0662	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H

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.

N63790-00-0054

CERTIFICATE OF COMPLIANCE

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

Class 1

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

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

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

FOR INFORMATION ONLY

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/19, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 11/19 1980

Signed John P. Morris (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and

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

ZX00380138

PLAN No 2-1534

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 01/30/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301
   (b) **Repair Organization P.O. No, Job No, etc.:** C31331
   (c) **Type Code Symbol Stamp:** NWS Technologies VR And NR
   (d) **Certificate Of Authorization No.:** NWS Technologies VR No 632 And NR No 81
   (e) **Expiration Date:** NWS Technologies VR - April 3, 2000 And NR - April 09, 2000
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0057	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** 7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0057 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for eight (8) inlet studs. Two (2) inlet studs were determined to be unacceptable during VT-3 visual examination. Note - Two (2) inlet studs were missing.
3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
5) Reassembled the relief valve.
6) Installed four (4) new replacement studs for the relief valve inlet joint.
7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. Leakage was observed during the pressure test. The leakage was evaluated to be acceptable.
8) Tested the relief valve at set pressure of 1195 PSIG. Test results acceptable.

NOTES -

1) Supply System performed VT-1 visual examination on four (4) new replacement studs for the relief valve inlet joint. VT-1 visual examination results acceptable.

PLAN No 2-1534

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 10 Psig **Test Temperature:** 73° F

Component Design Pressure: 1195 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for relief valve Serial No N63790-00-0050.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0057.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Date 2/2/98 **Date** 2/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2-10-98 *to* 2-11-98 *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.

[illegible] **Commissions** 7486 W; 7486 NI58 IS
Inspector's Signature National Board, State, and Endorsements

Date 2-11-98

FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☒

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-1534

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System
WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0057	N/A	steam	6 x 10	1980

d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

7. ASME Code Section XI used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

8. Construction Code used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1195 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, inlet studs (GQH).

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB and endorsements) jurisdiction & no
12/9/97	Carl Enos	NB 8460, A N I, TN 2236

5/4/68

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1534

Q.C.-44D

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

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

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

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

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

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

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

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
Bar Stock & Forgings		
a. ~~Castings~~		
Body	N93183-35-0076	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0039	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. ~~Forgings~~		
~~Upper Cross~~ Disc Insert	N93185-34-0089	ASME SA637 Gr. 718
Nozzle	N93184-33-0061	ASME SA182 Gr. F316
Disc Holder *K55484-35-0083	*N89714-34-0093	AMS 5662B
Spring Washers K62858-35-0039	K62856-35-0095 K62857-35-0060	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0064	ASME SA193 Gr. B6
Spindle Point K62873-35-0057	*N89720-34-0073	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0039	*N89722-0015	ASTM A304-66 Gr. 4161 H
d. Bolting		7X00380090
e. ~~Connections~~ Spindle Ball K62873-35-0057	N93213-0057	Stellite #6
Thrust Bearing Adapter	N93409-32-0059	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0681 thru 0692	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0901 thru 0912	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0683 thru 0694	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0687 thru 0698	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-13-0065	ASME SA193 Gr. B6

Bonnet, and Spindle Assembly, and adding an Adjusting
Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

MS-RV-4B
Rudip Sup 3
N63790-00-0047

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 & 171[illegible].
(Date)

Class 1

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

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

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

FOR INFORMATION ONLY

CERTIFICATE OF SHOP INSPECTION

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

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

Date 12-9 1980.

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

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

ZX00380091

PLAN No 2-1535

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 01/30/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301
   (b) Repair Organization P.O. No, Job No, etc.: C31331
   (c) Type Code Symbol Stamp: NWS Technologies VR And NR
   (d) Certificate Of Authorization No.: NWS Technologies VR No 632 And NR No 81
   (e) Expiration Date: NWS Technologies VR - April 3, 2000 And NR - April 09, 2000
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0058	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. Description Of Work Performed: 7. Description Of Work Performed: Spare main steam relief valve Serial No N63790-00-0058 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for six (6) inlet studs. Five (5) inlet studs were determined to be unacceptable during VT-3 visual examination. Note - One (1) inlet stud was missing.
3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
5) Reassembled the relief valve.
6) Installed three (3) new replacement studs for the relief valve inlet joint. Note - The remaining three (3) inlet studs will be installed by Supply System at the time when relief valve is ready to be installed in the plant.
7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.
8) Tested the relief valve at set pressure of 1195 PSIG. Test results acceptable.

NOTES -

1) Supply System performed VT-1 visual examination on three (3) new replacement studs for the relief valve inlet joint. VT-1 visual examination results acceptable.

PLAN No 2-1535

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 10 Psig **Test Temperature:** 73° F

Component Design Pressure: 1195 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for relief valve Serial No N63790-00-0058.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0058.

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 2/2/98 **Date** 2/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2-10-98 *to* 2-11-98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature **Commissions** 7486 W; 7486 NB 8 IS
National Board, State, and Endorsements

Date 2/11/98

FORM NVR-1 REPORT OF REPAIR ☑ REPLACEMENT ☐

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-1535

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2.

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System
WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0058	N/A	steam	6 x 10	1980

d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

7. ASME Code Section XI used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

8. Construction Code used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1195 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, inlet studs (GQH), disc holder pin.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar V. Sierra	Manager QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB and endorsements)
12/9/97	Carl R. Enos	NB 8460, A N I TN 2236

PLAN No. 2-1535

Timothy Sings 2/2/84

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

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

Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

5. Valve Identification MPL 0822-F013 Serial No. N63790-00-0058 Drawing No. DS-A-63790 Rev. C

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

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

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

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

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0077	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0040	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.		
Disc Insert	N93185-34-0090	ASME SA637 Gr. 7
Nozzle	N93184-33-0062	ASME SA182 Gr. F3
Disc Holder*K55484-35-0093	*N89714-34-0094	AMS 5662B
Spring Washers K62858-35-0040	K62856-35-0096 K62857-35-0061	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0065	ASME SA193 Gr. B6
Spindle Point K62873-35-0058	*N89720-34-0070	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0040	*N89722-0016	ASTM A304-66 Gr. 4161H
d. Bolting		
e. Spindle Ball K62873-35-0058	N93213-0058	Stellite #6
Thrust Bearing Adapter	N93409-32-0060	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0693 thru 0704	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0913 thru 0924	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0695 thru 0706	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0699 thru 0710	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt button K63618-33-0067	N93411-33-0067	ASME SA193 Gr. B6

MAB

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FOR INFORMATION ONLY

ZX00382751

S/N N 63290-00-0058.
Rudip Su...
3/1...

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

CERTIFICATE OF COMPLIANCE

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

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

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

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 11/25, 19..., and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 11/25 1980.

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

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

MAB

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7 8 9 10
11

FOR INFORMATION ONLY ZX0038275

PLAN No 2-1536

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 01/30/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301
   (b) Repair Organization P.O. No, Job No, etc.: C31331
   (c) Type Code Symbol Stamp: NWS Technologies VR And NR
   (d) Certificate Of Authorization No.: NWS Technologies VR No 632 And NR No 81
   (e) Expiration Date: NWS Technologies VR - April 3, 2000 And NR - April 09, 2000
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0062	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. Description Of Work Performed: 7. Description Of Work Performed: Spare main steam relief valve Serial No N63790-00-0062 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for eleven (11) inlet studs. One (1) inlet studs were determined to be unacceptable during VT-3 visual examination.
3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
5) Reassembled the relief valve.
6) Installed one (1) new replacement stud for the relief valve inlet joint.
7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. Leakage was observed during the pressure test. The leakage was evaluated to be acceptable.
8) Tested the relief valve at set pressure of 1205 PSIG. Test results acceptable.

NOTES -

1) Supply System performed VT-1 visual examination on one (1) new replacement stud for the relief valve inlet joint. VT-1 visual examination results acceptable.

PLAN No 2-1536

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 10 Psig **Test Temperature:** 73° F

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

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for relief valve Serial No N63790-00-0062.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0062.

CERTIFICATE OF COMPLIANCE

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

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

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Date 2/2/98 **Date** 2/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2-10-98 *to* 2-11-98 *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 7486a, 7486 NISP II
National Board, State, and Endorsements

Date 2/11/98

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

PLAN No. 2-1536

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System
WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0062	N/A	steam	6 x 10	1980

d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

	(edition)	(addenda)	(Code Case(s))
6. ASME Code Section XI applicable for inservice inspection:	1989	N/A	N/A
7. ASME Code Section XI used for repairs, replacements:	1989	N/A	N/A
8. Construction Code used for repairs, replacements:	1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1205 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replaced gaskets & locking washers. Replaced one inlet stud (GQH). Replaced disc holder pin.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB (incl endorsements) jurisdiction
12/9/97	Carl R. Enos	NB 8460, A. N. I. TN 2236

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1536

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

Rec'd by Smyth 7/2/98 W.C.-44D

FOR INFORMATION ONLY

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0062 Drawing No. DS-A-63790 Rev. C

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

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

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

Hydrostatic Test (psig) Inlet 2370 Outlet 1100 psig (Body Only) 575 psig (Assembled Valve)
(Applicable to Valves for Closed Systems Only)

Pressure Retaining Pieces

	Serial No. Identification	Material Specification Including Type or Grade
a. Bar Stock & Forgings		
Body	N93183-35-0081	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0044	ASTM A105-71 Gr. II ASME SA105 Gr. II
b.		
Disc Insert	N93185-34-0094	ASME SA637 Gr. 718
Nozzle	N93184-33-0066	ASME SA182 Gr. F316
Disc Holder *K55484-35-0088	*N89714-34-0119	AMS 5662B
Spring Washers K62858-35-0044	K62856-35-0100 K62857-35-0065	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0069	ASME SA193 Gr. B6
Spindle Point K62873-35-0062	*N89720-34-0074	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0044	*N89722-0020	ASTM A304-66 Gr. 4161H
d. Bolting		
e. Spindle Ball K62873-35-0062	N93213-0062	Stellite #6 7X00380156
Thrust Bearing Adapter	N93409-32-0064	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0741 thru 0752	ASTM A193-71 Br. B7 ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0961 thru 0972	ASME SA194 Gr. 2H
Inlet Stud (BW6)	N93216-0743 thru 0754	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0747 thru 0758	ASTM A194-71 Gr. 2H ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-33-0071	ASME SA193 Gr. B6

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.

N63790-00-00102

CERTIFICATE OF COMPLIANCE

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

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

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

symbol expires September 30, 1983.
(Date)

CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

CERTIFICATE OF SHOP INSPECTION

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

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

FOR INFORMATION ONLY

Date 11/18 1980.

Signed John E. Morris (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

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

ZX00380157

PLAN No 2-1537

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 01/30/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301
   (b) **Repair Organization P.O. No, Job No, etc.:** C31331
   (c) **Type Code Symbol Stamp:** NWS Technologies VR And NR
   (d) **Certificate Of Authorization No.:** NWS Technologies VR No 632 And NR No 81
   (e) **Expiration Date:** NWS Technologies VR - April 3, 2000 And NR - April 09, 2000
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0134 (N56000-01-0037)	N/A	N/A	1973	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** 7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0134 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for seven (7) inlet studs. One (1) inlet studs were determined to be unacceptable during VT-3 visual examination. Note - Four (4) inlet studs were missing.
3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
5) Reassembled the relief valve.
6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.
7) Tested the relief valve at set pressure of 1175 PSIG. Test results acceptable.

NOTES -

1) Five (5) inlet studs will be installed by Supply System at the time when relief valve is ready to be installed in the plant.
2) "Bailly" relief valve Serial No N56000-01-0037 was modified (upgraded) to Serial No N63790-00-0134 by Crosby.
3) ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda in accordance with the NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0037.

PLAN No 2-1537

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 10 Psig **Test Temperature:** 73° F

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

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for relief valve Serial No N63790-00-0134.
2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) documenting the modification (upgrade) work performed by Crosby for relief valve Serial No Serial No N63790-00-0134 (N56000-01-0037).
3) See attached NV-1 Code Data Report for relief valve Serial No N56000-01-0037 (N63790-00-0134).

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Date 2/2/98 **Date** 2/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2-10-98 *to* 2-11-98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7486 W; 7486 NB B FS
National Board, State, and Endorsements

Date 2/11/98

FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☐

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No 2-1537

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0134	N/A	steam	6 x 10	1971

d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection: 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. ASME Code Section XI used for repairs, replacements: 1989 (edition) N/A (addenda) N/A (Code Case(s))

8. Construction Code used for repairs, replacements: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities: N/A

10. Opening pressure: 1175 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, disc holder pin.

CERTIFICATE OF COMPLIANCE

I Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB, and endorsements) Jurisdiction & No
12/9/97	Carl R. Enos	NB 8460, A, N, I, TN 2236

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

Q.C.-292, REV.A
SHEET 1 OF 2

PLANNO 2-1537

Philip Smith 3/10/94 2/12/98

REPAIR AND REPLACEMENT TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.). NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND,WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND ,WA

5. a. Identifying Nos. N63790-00-0134 ✓ -- -- ----- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component --
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) · Pneumatic ( ) Design Pressure ( ) Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO , Code Case --

9. Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 ✓
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-43-0126
BONNET	N89717	N93407-41-0052
SPINDLE ASSY	K55465	K62873-46-0060
SPR.WASHER	N89724	K62856-41-0200
SPR.WASHER	N89723	K62857-41-0200
SPRING ASSY	K55466	K62858-31-0006
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0156
DISC INSERT	N89715	N93185-52-0202
SPRING	NX2689	NX2689-0134
THR.BRG.ADAPT.	N89725	N93409-34-0008
ADJ.BOLT	N89726	N93410-36-0132
ADJ.BOLT BUTT.	COMMERCIAL	N93411-33-0008
ADJ.BOLT ASSY	COMMERCIAL	K63618-31-0001
INLET STUD	N89727	N93216/NAD QTY 10

9- 2/22/94

Certificate Holder's Serial No. N63790-00-0134

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. (repair/replacement) conforms to the applicable section of the ASME Code.

Signed Lawrence J. Lewis (Authorized Rep. of Repair Organization) QA Eng Manager (Title) 24 Feb (Date) 1994

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 Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 24, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

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

Date 2/24, 1994

Factory Mutual Systems

Signed [illegible] (Inspector)

Commissions MA 1455 (Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-1537
[illegible]
2/2/98

WPPSS S/N	WPPSS Set	Bailly S/N	Bailly Set
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

PLAN No. 2-1537

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Checking Supply 2/2/98

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

Q.C.-44A

DATA REPORT
Safety and Safety Relief Valves

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

Model No. HB-65-BP-FN Order No. N-105286 Contract Date 6/28/71

2. Manufactured For General Electric Company San Jose, California Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I, Baileytown, Indiana
Name and Address

4. Location of Plant Baileytown, Indiana

5. Valve Identification MPL #B-22-F013 Serial No. N56000-01-0037 Drawing No. H-56000 Rev. C

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

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

Stamped Capacity 883950 (Sat. Steam) Lbs. Hr. + 3 % Overpressure - Blowdown (PSIG) 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971 Addenda Date Summer 1972

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Forgings		
Body	N90118-32-0008	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
Bonnet	N89717-32-0021	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
b. Bar Stock and Forgings		
Disc Insert	N89715-31-0028	ASTM A-461-65 Type 630
Nozzle	N89713-32-0039	ASTM A-182-71 F316 ASME SA-182 F316
Disc Holder	N89714-32-0037	AMS 5662 B
Spring Washers Top	N89724-32-0037	ASTM A-105-71 Gr. II
Spring Washers Bottom	N89723-31-0008	ASME SA-105 Gr. II
Adjusting Bolt	N89726-33-0046	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
Spindle Point	N89720-32-0046	ASTM A-564-72 Type 630

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Back Page -0037

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX2689-0042	ASTM A-304-66 Gr. 4161H
d. Bolting		
e.		
Inlet Stud	N89727-0433 thru 0444	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Inlet Stud Nut	N89728-0437 thru 0448	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
Bonnet Stud	N89718-0437 thru 0448	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Bonnet Stud Nut	N89719-0439 thru 0450	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
OTHER PARTS		
Spindle Ball	N89721-0046	Stellite 6
BARS & FORGINGS		
Thrust Bearing Adapter	N89725-32-0035	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6

We certify that the statements made in this report are correct.

Date 10-31 1973 Signed Crosby Valve & Gage Co. (Manufacturer) By [signature] QA Manager

Certificate of Authorization No. 331 expires November 9, 1974

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Mutual Boiler & Machinery Insurance Co.*, Waltham, Mass. have inspected the equipment described in this Data Report on October 31 1973 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

*Factory Mutual Group of Insurance Co.

Date October 31, 1973

[signature] (Inspector) Commissions N.B. 6663, Mass. 1096 (National Board, State, Province and No.)

PLAN No 2-1538

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 01/30/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301
   (b) Repair Organization P.O. No, Job No, etc.: C31331
   (c) Type Code Symbol Stamp: NWS Technologies VR And NR
   (d) Certificate Of Authorization No.: NWS Technologies VR No 632 And NR No 81
   (e) Expiration Date: NWS Technologies VR - April 3, 2000 And NR - April 09, 2000
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0135 (N56000-01-0099)	N/A	N/A	1976	Replacement	Yes, Code Class 1

7. Description Of Work Performed: **7. Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0135 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint: VT-3 visual examination results acceptable for four (4) inlet studs - Out of the four (4) acceptable inlet studs, one (1) inlet stud was later found to be unacceptable (dented threads) during reassembly of the relief valve. Two (2) inlet studs were determined to be unacceptable during VT-3 visual examination. Note - Six (6) inlet studs were missing.
3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
5) Reassembled the relief valve.
6) Installed nine (9) new replacement stud for the relief valve inlet joint.
7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.
8) Tested the relief valve at set pressure of 1205 PSIG. Test results acceptable.

NOTES -

1) Supply System performed VT-1 visual examination on nine (9) new replacement studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
2) "Bailly" relief valve Serial No N56000-01-0099 was modified (upgraded) to Serial No N63790-00-0135 by Crosby.
3) ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda in accordance with the NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0099.

PLAN No 2-1538

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 10 Psig **Test Temperature:** Ambient

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

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for relief valve Serial No N63790-00-0135.
2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) documenting the modification (upgrade) work performed by Crosby for relief valve Serial No Serial No N63790-00-0135 (N56000-01-0099).
3) See attached NV-1 Code Data Report for relief valve Serial No N56000-01-0099 (N63790-00-0135).

CERTIFICATE OF COMPLIANCE

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

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

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Date 2/2/98 **Date** 2/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2-10-98 *to* 2-11-98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[signature]
Inspector's Signature

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

Date 2/11/98

FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☒

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No 2-1538

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331 Kristin Smith 7/98
   131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
   b: Name of manufacturer: Crosby Valve & Gage Co.
   c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-FN	N63790-00-0135	N/A	steam	6 x 10	1976

   d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

7. ASME Code Section XI used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

8. Construction Code used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1205 psig
    Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, disc holder pin, inlet studs(GQH), nozzle ring set screw (0135).

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	Cesar V. Sierra	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB (incl endorsements) ,jurisdiction & no
12/9/97	Carl R. Enos	NB 8460, A. N. I. TN 2236

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

Q.C.-292, REV.A
SHEET 1 OF 2

PLAN NO. 2-1538

Rudolph Lewis
3/10/94
2/2/98

REPAIR AND REPLACEMENT TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.). NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND,WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND ,WA

5. a. Identifying Nos. N63790-00-0135 -- -- ----- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component --
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) Pneumatic ( ) Design Pressure ( ) Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO Code Case --

9. Description of work N56000-01-0099 WAS MODIFIED TO N63790-00-0135
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-46-0129
BONNET	N89717	N93407-42-0053
SPINDLE ASSY	K55465	K62873-45-0059
SPR.WASHER	N89724	K62856-42-0201
SPR.WASHER	N89723	K62857-42-0201
SPRING ASSY	K55466	K62858-31-0003
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0155
DISC INSERT	N89715	N93185-52-0199
SPRING	NX2689	N89722-0072
THR.BRG.ADAPT.	N89725	N93409-32-0006
ADJ.BOLT	N89726	N93410-32-0005
ADJ.BOLT BUTT.	COMMERCIAL	N93411-33-0012
ADJ.BOLT ASSY	COMMERCIAL	K63618-31-0005

1-2-98

Certificate Holder's Serial No. N63790-00-0135

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. (repair/replacement) conforms to the applicable section of the ASME Code.

Signed Lawrence J. [illegible] (Authorized Rep. of Repair Organization) QA Eng Manager (Title) 24 Feb (Date), 1994

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 Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

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

Date 2/25, 1994.

Signed [illegible] (Inspector)

Factory Mutual Systems

Commissions [illegible] (Nat'l. Bd., State, Prov. and No.)

PLAN NO. 2-1538
Principal Groups
7/2/98

WPPSS S/N	WPPSS Set	Bailly S/N	Bailly Set
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

PLAN NO. 2-1555

Rudolph Sayles

3/10/74

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MASS

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

Q.C.-44C

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
HB-65-BP-
Name and Address

Model No. FN Order No N-51726 Contract Date 1/27/75 National Board No.

2. Manufactured For General Electric Co., 175 Curtner Ave., San Jose, California 95125 Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I
Name and Address

4. Location of Plant Baileytown, Indiana

5. Valve Identification Spare MPL#B22-F013 Serial No. N56000-01-0099 Drawing No. H-56000 Rev. C

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

6. Set Pressure (PSIG) 1130 575° F
Rated Temperature

Stamped Capacity 850500#/Hr. Sat. 3 % Overpressure Blowdown (PSIG) 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971, Addenda Date Summer 1972, Case No.

Pressure Containing or Pressure Retaining Components

a. ~~Castings~~ Forging	Serial No. Identification	Material Specification Including Type or Grade
Body	N90118-35-0032	ASTM A105-71 ASME SA105
Bonnet	N89717-36-0083	ASTM A105-71 ASME SA105
b. Bar Stock and Forgings		
~~XXXXXXXX~~ Disc Insert	N89715-36-0106	ASTM A564-71 Type 630 ASME SA564 Type 630
Nozzle	N89713-36-0106	ASTM A182-71 Type 316 ASME SA182 Type 316
Disc Holder K55484-39-0135	N89714-35-0173	AMS 5662B
Spring Washers K55466-36-0093	N89724-36-0122 N89723-38-0131	ASTM A105-71 ASME SA105
Adjusting Bolt	N89726-40-0119	ASTM A193-71 Gr. 36 ASME SA193 Gr. 36
Spindle K55465-35-0106	N89720-38-0129	ASTM A564 Type 630 ASME SA564 Type 630
Spindle Ball	N89721-0206	Stoody No. 6
Thrust Bearing Adapter	N89725-34-0116	ASTM A193-71 Gr. 36 ASME SA193 Gr. 36

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	N89722-0072	ASTM A304-66
d. Bolting		
e. Other Parts such as Pilot Components		
Inlet Stud	N89727-1203 thru 1214	ASME SA193 Gr. B7
Inlet Nut	N89728-1197 thru 1208	ASME SA194 Gr. 2H
Bonnet Stud	N89718-1222 thru 1233	ASME SA193 Gr. B7
Bonnet Nut	N89719-1216 thru 1227	ASME SA194 Gr. 2H

We certify that the statements made in this report are correct.

Date 6-22 1976 Signed Crosby Valve & Gage Co. By [signature]
Manufacturer QA Manager

Certificate of Authorization No. 926 expires October 28, 1977

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on _____ 19____ and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date 6/22/76 19____

[signature] Commissions MAD 1209
Inspector National Board, State, Province and No.

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

PLAN No 2-1539

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 01/30/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301
   (b) **Repair Organization P.O. No, Job No, etc.:** C31331
   (c) **Type Code Symbol Stamp:** NWS Technologies VR And NR
   (d) **Certificate Of Authorization No.:** NWS Technologies VR No 632 And NR No 81
   (e) **Expiration Date:** NWS Technologies VR - April 3, 2000 And NR - April 09, 2000
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0138 (N56000-01-0038)	N/A	N/A	1973	Replacement	Yes, Code Class 1

7. Description Of Work Performed: **7. Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0138 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable.
3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
5) Reassembled the relief valve.
6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.
7) Tested the relief valve at set pressure of 1185 PSIG. Test results acceptable.

NOTES -

1) "Bailly" relief valve Serial No N56000-01-0038 was modified (upgraded) to Serial No N63790-00-0138 by Crosby.
2) ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda in accordance with the NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0038.

PLAN No 2-1539

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 10 Psig **Test Temperature:** 73° F

Component Design Pressure: 1185 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for relief valve Serial No N63790-00-0138.
2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) documenting the modification (upgrade) work performed by Crosby for relief valve Serial No Serial No N63790-00-0138 (N56000-01-0038).
3) See attached NV-1 Code Data Report for relief valve Serial No N56000-01-0038 (N63790-00-0138).

CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 2/2/98 **Date** 2/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2-10-98 *to* 2-11-98 *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** 7486W; 7486 NISB IS
National Board, State, and Endorsements

Date 2/11/98

FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☐ 2-1551

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-15

1. Work performed by: NWS Technologies, LLC . Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

HB-65-BP-FN	N63790-00-0138	N/A	steam	6 x 10	1971
(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)

d: Construction Code:

ASME Sec. III Div. 1	1971	N/A	N/A	1
(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)

6. ASME Code Section XI applicable for inservice inspection:

1989	N/A	N/A
(edition)	(addenda)	(Code Case(s))

7. ASME Code Section XI used for repairs, replacements:

1989	N/A	N/A
(edition)	(addenda)	(Code Case(s))

8. Construction Code used for repairs, replacements:

1971	N/A	N/A
(edition)	(addenda)	(Code Case(s))

9. Design responsibilities: N/A

10. Opening pressure: 1185 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA
Date	(repair organization)	(authorized representative)	(title)

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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.

12/9/97	Carl Enos	NB 8460, A N I, TN 2236
Date	Inspector's Signature	Commissions (NB - incl endorsements), jurisdiction [illegible]

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN No. 2-1539

Q.C.-292, REV.A
SHEET 1 OF 2

Philip Sweeney 3/10/94 2/2/98

REPAIR AND REPLACEMENT TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.). NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND,WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND ,WA

5. a. Identifying Nos. N63790-00-0138 -- -- ----- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component --
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X). Pneumatic ( ) Design Pressure ( ) Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition.
Addenda NO Code Case --

9. Description of work N56000-01-0038 WAS MODIFIED TO N63790-00-0138
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-44-0127
BONNET	N89717	N93407-45-0056
SPINDLE ASSY	K55465	K62873-43-0057
SPR.WASHER	N89724	K62856-45-0204
SPR.WASHER	N89723	K62857-45-0204
SPRING ASSY	K55466	K62858-31-0002
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0154
DISC INSERT	N89715	N93185-52-0201
THR.BRG,ADAPT.	N89725	N93409-34-0011
ADJ.BOLT	N89726	N93410-31-0004
ADJ.BOLT BUTT.	COMMERCIAL	N93411-33-0011
ADJ.BOLT ASSY	COMMERCIAL	K63618-31-0004

2/23/94

Certificate Holder's Serial No. N63790.00.0138

Q.C.-292, REV. A
SHEET 2 OF 2

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. (repair/replacement) conforms to the applicable section of the ASME Code.

Signed Lawrence J. Lisi (Authorized Rep. of Repair Organization) QA Eng Manager (Title) 24 Feb (Date), 1994

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 Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

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

Factory Mutual Systems

Date 2/25, 1994

Signed [illegible] (Inspector)

Commissions MA 1455 (Nat'l. Bd., State, Prov. and No.)

PLAN No. 2-1539
[illegible] 7/2/98

WPPSS S/N	WPPSS Set	Bally S/N	Bally Set
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

PLAN NO. 2-1539

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Philip Engl 7/2/98

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

Q.C.-44A

DATA REPORT
Safety and Safety Relief Valves

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

Model No. HB-65-BP-FN Order No. N-105286 Contract Date 6/28/71

2. Manufactured For General Electric Company San Jose, California Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I, Baileytown, Indiana
Name and Address

4. Location of Plant Baileytown, Indiana

5. Valve Identification MPL #B-22-F013 Serial No. N56000-01-0038 Drawing No. H-56000 Rev. C

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

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

Stamped Capacity 883950 Lbs. Hr. Sat. Steam 3 % Overpressure - Blowdown ~~PSIG~~ 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III

Class 1 (I or II) Edition 1971 Addenda Date Summer 1972

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. ~~Castings~~ Forgings		
Body	N90118-32-0009	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
Bonnet ~~Casting~~	N89717-32-0022	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
b. Bar Stock and Forgings		
~~Supplementary~~ Disc Insert	N89715-32-0018	ASTM A-461-65 Type 630
Nozzle	N89713-32-0028	ASTM A-182-71 F316 ASME SA-182 F316
Disc Holder	N89714-32-0038	AMS 5662 B
Spring Washers Top	N89724-32-0038	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
Spring Washers Bottom	N89723-31-0023	
Adjusting ~~Screw~~ Bolt	N89726-32-0015	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
Spindle Point	N89720-32-0044	ASTM A-564-72 Type 630

BWRPD-QC EHR

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	Serial No. or Identification	Material Specification Including Type of Grade
c. Spring	NX2689-0043	ASTM A-304-66 Gr. 4161H
d. Bolting		
e.		
Inlet Stud	N89727-0445 thru 0456	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Inlet Stud Nut	N89728-0449 thru 0460	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
Bonnet Stud	N89718-0449 thru 0460	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Bonnet Stud Nut	N89719-0451 thru 0462	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
OTHER PARTS		
Spindle Ball	N89721-0044	Stellite 6
BARS & FORGINGS		
Thrust Bearing Adapter	N89725-32-0033	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6

We certify that the statements made in this report are correct.

Date 10-31 19 73 Signed Crosby Valve & Gage Co. By [signature]
Manufacturer QA Manager

Certificate of Authorization No. 331 expires November 9, 1974

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Mutual Boiler & Machinery Insurance Co.*, Waltham, Mass. have inspected the equipment described in this Data Report on October 31, 1973 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

*Factory Mutual Group of Insurance Co.

Date October 31 19 73

[signature] Commissions N.B. 6665, Mass. 1676
(Inspector) National Board, State, Province and No.)

BWRPD-OC
E.H.

3

PLAN No 2-1540

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 01/30/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301
(b) Repair Organization P.O. No, Job No, etc.: C31331
(c) Type Code Symbol Stamp: NWS Technologies VR And NR
(d) Certificate Of Authorization No.: NWS Technologies VR No 632 And NR No 81
(e) Expiration Date: NWS Technologies VR - April 3, 2000 And NR - April 09, 2000
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-01-0140	N/A	N/A	1994	Replacement	Yes, Code Class 1

7. Description Of Work Performed: **7. Description Of Work Performed:** Spare main steam relief valve Serial No N63790-01-0140 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for nine (9) inlet studs. One (1) inlet studs were determined to be unacceptable during VT-3 visual examination. Note - Two (2) inlet studs were missing.
3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
5) Reassembled the relief valve.
6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.
7) Tested the relief valve at set pressure of 1165 PSIG. Test results acceptable.

NOTES -

1) Three (3) inlet studs will be installed by Supply System at the time when relief valve is ready to be installed in the plant.

PLAN No 2-1540

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 10 Psig **Test Temperature:** 73° F

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

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for relief valve Serial No N63790-00-0140.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0140.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 2/2/98 ***Date*** 2/2/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington ***and employed by*** Arkwright Mutual Insurance Company of Waltham, Massachusetts ***have inspected the components described in this Owner's Report during the period*** 2-10-98 ***to*** 2-11-98 ***and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.***

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

Inspector's Signature

Commissions 7486 W; 7486 WFSB IS

National Board, State, and Endorsements

Date 2/11/98

FORM NVR-1 REPORT OF REPAIR or REPLACEMENT
OF NUCLEAR PRESSURE RELIEF DEVICES PLAN NO. 2-1540

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331 [illegible] 2/2/98
131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System
WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
HB-65-BP-DF	N63790-01-0140	N/A	steam	6 x 10	1994

d: Construction Code:

(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
ASME Sec. III Div. 1	1971	N/A	N/A	1

6. ASME Code Section XI applicable for inservice inspection:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

7. ASME Code Section XI used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1989	N/A	N/A

8. Construction Code used for repairs, replacements:

(edition)	(addenda)	(Code Case(s))
1971	N/A	N/A

9. Design responsibilities: N/A

10. Opening pressure: 1165 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

Date	(repair organization)	(authorized representative)	(title)
12/9/97	NWS Technologies, LLC	[signature]	Manager, QA

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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	Inspector's Signature	Commissions (NB (incl endorsements), jurisdiction & no.)
12/9/97	[signature]	NB 8460, A, N, I, TN 2236

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

Q.C.-44C-1

PLAN No 2-1540 [illegible] 2/2/98

FORM NV-1, FOR SAFETY AND SAFETY RELIEF VALVES
As Required by the Provisions of the ASME Code Rules
DATA REPORT
Safety and Safety Relief Valves

1. Manufactured by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address of N Certificate Holder)
Model No. HB-65-BP Order No. NV4000468 Contract Date 24 JAN 1994 National Board No. —

2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM RICHLAND, WA Order No. 238136 C/N 02
(Name and Address)

3. Owner WASHINGTON PUBLIC POWER SUPPLY SYSTEM RICHLAND, WA
(Name and Address)

4. Location of Plant HANFORD # 2

5. Valve Identification B22-F013 Serial No. N63790-01-0140 Drawing No. DS-A-63790-1 REV 0

Type MAIN STEAM Orifice Size 4.532 Pipe Size — Inlet 6 Outlet 10
(Safety, Safety Relief, Pilot, Power Actuated) (Inch) (Inch) (Inch) (Inch)

[illegible]t Pressure 1165.0 565 F
Rated Temperature
Stamped Capacity 876878 LB./HR.SAT.STM.@ 3 % Overpressure — Blowdown (psig) 2 THRU 11
Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 1100

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971, Addenda Date NO, Case No. —

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body	N93183-47-0130	ASTM A105 GR.II
Bonnet	N93407-47-0058	ASTM A105 GR.II
b. Bar Stock & Forgings		
Support Rods	—	—
Nozzle	N93184-53-0167	ASME SA182 GR.F316
Disc	N93185-52-0204 N93186-41-0060	ASME SA637 GR.718
Spring Washers	N93187-40-0007	ASTM A105 GR.II
Adjusting Bolt	N93410-33-0007	ASME SA193 GR.B6
Spindle	N96461-34-0015	ASTM A564 TYPE 630
c. Spring	NX2689-0138	ASTM A304 GR.4161 H
d. Bolting	—	—
e. Other Pieces		
DISC HOLDER	N89714-42-0279	AMS5662B(INCONEL718)
SPINDLE BALL	N96460	ASTM A276 T440C
ADJ BOLT BUTTON	N93411-36-0015	ASME SA193 GR.B6
THRUST BEARING ADAPTER	N93409-35-0012	ASTM A193 GR.B6
BONNET STUD	N93207	ASTM A193 GR.B7
BONNET NUT	N93210	ASME SA194 CL.2H
INLET STUD	N93216	ASTM A193 Gr.B7
INLET NUT	N93218	ASTM A194 CL.2H

[illegible] 2/2/98

We certify that the statements made in this report are correct.

Date 27 May 94 Signed Crosby Valve & Gage Company by Lawrence L. Lisix
Manufacturer

Certificate of Authorization No. 1878 expires 30 SEP 95.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Arkwright -Boston Manufacturers Mutual Insurance Company have inspected the equipment described in this Data Report on May 27, 19 94 and state that to the best of my knowledge and belief, the Manufacturer has constructed thisequipment in accordance with the applicable Subsections of ASME Section III

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

Factory Mutual System

Date 5/27, 19 94.

Signed [illegible]
(Inspector)

Commissions MA 1455
(Nat'l. Bd., State, Prov. and No.)

PLAN No 2-1541

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/10/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352.
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI-EFC-X41E	Dragon	GW 1059	N/A	N/A	1978	Replaced	Yes, Code Class 1
PI-EFC-X41E	Dragon	PB 1178	N/A	N/A	1992	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced existing valve PI-EFC-X41E. The replacement work was performed as follows:
   1) Removed existing valve PI-EFC-X41E, Serial No GW 1059.
   2) Installed new replacement valve PI-EFC-X41E, Serial No PB 1178.
   4) Made required socket weld.
   4) Performed visual examination on the final socket weld. Visual examination results acceptable.
   5) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable.

NOTES -

1) The existing ASME Code Stamped process instrumentation system in which the new replacement valve PI-EFC-X41E, Serial No PB 1178 was installed is Process Instrumentation (PI) system PI(1)-4S-X-41e. This process instrumentation system is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda requirements.
2) The new replacement valve PI-EFC-X41E, Serial No PB 1178 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1976 Addenda requirements. ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.

PLAN No 2-1541

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve PI-EFC-X41E, Serial No PB 1178.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By** Kuldip Singh

Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/10/98 **Date** 6/10/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5/30/98 *to* 6/15/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] **Commissions** 7486 W/7486 NB B IS

Inspector's Signature National Board, State, and Endorsements

Date 6/15/98

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

As Required by the Provisions of the ASME Code, Section III, Div. 1 PLAN No. 2-1541

1. Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA. 90650
(Name and Address of N Certificate Holder)

2. Manufactured for Wash. Public Power SUP. SYS. P. O. Box 968 Richland, WA. 99352-0968
(Name and Address of Purchaser or Owner)

3. Location of Installation WNP-2 OPS WHS Complex, WHS #1 No. Pwr. Plt. Loop, Richland, WA 99352
(Name and Address)

4. Pump or Valve Valve. Nominal Inlet Size 1" (inch) Outlet Size 1/2" (inch)

	(a) Model No., Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	12583	PB1169	N/A	12583	1	N/A	1992
(2)		Thru		REV. F			
(3)		PB1178					
(4)							
(5)							
(6)		PI-EFC-X41E, S/N PB1178					
(7)							
(8)				Kuldip Singh			
(9)				6/9/98			
(10)							

5. Excess Flow Check Valve (10 Pcs.)
(Brief description of service for which equipment was designed)

6. Design Conditions 1500 (Pressure) psi 600 (Temperature) °F or Valve Pressure Class _____ (1)

7. Cold Working Pressure 3600 psi at 100°F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings N/A			
(b) Forgings			
HT.31028	ASME SA182 Gr. F316	Coulter Steel Co.	Body
HT.31028	ASME SA182 Gr. F316	Coulter Steel Co.	Bonnet

(1) For manually operated valves only.

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

(10/77) This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting N/A			
(d) Other Parts			
HT.79193	ASME SA564 Gr. 630	Dragon Valves, Inc.	Disc
HT.853543	ASME SA564 Gr. 630	Carpenter Tech.	Disc
HT.856970	ASME SA564 Gr. 630	Carpenter Tech.	Cap Screw

9. Hydrostatic test 5400 psi. Disk Differential test pressure 4000 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 1974. Addenda W'76 (Date). Code Case No. N/A. Date September 22, 1992

Signed DRAGON VALVES, INC. (N Certificate Holder) by R. L. Snyder

Our ASME Certificate of Authorization No. N-1033 to use the N (N) symbol expires 5-6-93 (Date).

CERTIFICATION OF DESIGN

Design information on file at Washington Public Power Supply System

Stress analysis report (Class 1 only) on file at Washington Public Power Supply System

Design specifications certified by (1) James E. Hagan, Jr.

PE State WA Reg. No. 13579

Stress analysis certified by (1) James C. Tsacoyeanes

PE State MA Reg. No. 19797

(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 H.S.B. INSP. & INS CO. of HARTFORD, CT. have inspected the pump, or valve, described in this Data Report on 9-22 19 92, 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 9-22 19 92

William Meyer (Inspector) Commissions Ca 1494 (Nat'l Bd., State, Prov. and No.)

PLAN No 2-1542

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:** 05/25/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Reactor Recirculation Cooling (RRC) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC(51)-4	WPPSS	RRC(51)-4-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Modified existing support RRC-4300-33B associated with valve RRC-V-20. The replacement work was performed as follows:

1) Removed existing support material.
2) Installed new support material.
3) Made required welds.
4) Performed visual examination on the final welds. Visual examination results acceptable.
5) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable.
6) Installed new hex head cap screws and nuts.

NOTES -

1) ASME Section III, Code Class NF(1), 1971 Edition with Winter 1973 Addenda for the support work.
2) The existing support RRC-4300-33B associated with valve RRC-V-20 is for existing ASME Code Stamped piping system Reactor Recirculation Cooling (RRC), RRC(51)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

PLAN No 2-1542

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/25/98 Date 5/25/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1544

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 03/23/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Relief Valve (SW-RV-1B)	Crosby	N67441-00-0002	N/A	N/A	1983	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced parts for spare relief valve Serial No N67441-00-0002. The replacement work was performed as follows:
   1) Removed existing disc from the spare relief valve.
   2) Installed new replacement disc Serial No N91855-50-0099 in the spare relief valve.
   3) Removed existing base from the spare relief valve.
   4) Installed new replacement base Serial No N91850-37-0027 in the spare relief valve.

NOTES -

1) Spare relief valve Serial No N67441-00-0002 was previously installed in the plant as SW-RV-1B.

PLAN No 2-1544

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Date 3/23/98 Date 3/23/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2/19/98 to 3/25/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions 7486, 7486 WISS IS

National Board, State, and Endorsements

Date 3/25/98

PLAN No 2-1545

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 04/17/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Relief Valve	Crosby	N67441-00-0001	N/A	N/A	1983	Replacement	Yes, Code Class 3
Spare Relief Valve	Crosby	N67441-00-0002	N/A	N/A	1983	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing base and disc in relief valve Serial No N67441-00-0001 (SW-RV-1A). The replacement work was performed as follows:
   1) Removed existing base from the relief valve.
   2) Installed replacement base Serial No N91850-31-0013 in the relief valve. See Note 1 below for the background information pertaining to replacement base Serial No N91850-31-0013.
   3) Removed existing disc from the relief valve.
   4) Installed new replacement disc Serial No N91855-45-0087 in the relief valve.

NOTES -

1) The spare relief valve Serial No N67441-00-0001 was previously installed as SW-RV-1A and was removed from the plant in accordance with ASME Section XI Plan No 2-1278. This relief valve is now considered as spare stock. It was determined that the existing base Serial No N91850-31-0010 in the spare relief valve Serial No N67441-00-0001 (SW-RV-1A) was beyond repair and was scrapped. The replacement base Serial No N91850-31-0013 was removed from another spare relief valve Serial No N67441-00-0002 (SW-RV-1B) and was installed in the spare relief valve Serial No N67441-00-0001 (SW-RV-1A).
2) ASME Section III, Code Class 3, 1974 Edition with Summer 1975 Addenda for the spare relief valve Serial No N67441-00-0001 (SW-RV-1A).
3) ASME Section III, Code Class 3, 1974 Edition with Summer 1975 Addenda for the spare relief valve Serial No N67441-00-0002 (SW-RV-1B).

PLAN No 2-1545

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

9. Remarks: See attached NV-1 Code Data Reports for the following relief valves:

1) Spare relief valve Serial No N67441-00-0001 (SW-RV-1A). See Note 1 for the background information.
2) Spare relief valve Serial No N67441-00-0002 (SW-RV-1B). See Note 1 for the background information.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By** Kuldip Singh

Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 4/17/98 **Date** 4/17/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 2/24/98 *to* 4/21/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Commissions 7486 W / 7486 NISB IS

Inspector's Signature National Board, State, and Endorsements

Date 4/21/98

PLAN No. 2-1545

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Philip Sup b
4/17/98

Q.C.-44C-1

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

DATA REPORT
Safety and Safety Relief Valves

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

Model No. JR-WR Order No. N63949D Contract Date 8/4/83 National Board No. --

2. Manufactured For General Electric Company, 175 Curtner Ave. San Jose, CA 95125 Order No. 205-YF229
Name and Address

3. Owner Washington Public Power Supply System - Hanford 2
Name and Address

4. Location of Plant Richland, Washington 99350
MPL No. E12B001

5. Valve Identification Hanford 2 Serial No. N67441-00-0001 Drawing No. DS-C-67441 Rev. 0

Type Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size SPL Inch Pipe Size -- Inch Inlet 3/4 Inch Outlet 1 Inch

6. Set Pressure (PSIG) 275 480 °F Rated Temperature

Stamped Capacity 15 GPM Water @ 70°F @ 10 % Overpressure -- Blowdown (PSIG) 10% S.P.

Hydrostatic Test (PSIG) Inlet 750 Complete Valve 225

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 3 Edition 1974, Addenda Date Summer 1975, Case No. 1711, 1567, N242-1

Pressure Containing or Pressure Retaining Components

a. Castings	Serial No. Identification	Material Specification Including Type or Grade
Body		
~~Bonnet~~ Cylinder	N91851-31-0020	ASME SA216 Gr. WCB
b. Bar Stock and Forgings		
~~Supporting~~ Base	N91850-31-0010	ASME SA479 Type 316
Nozzle		
Disc	N91855-32-0028	ASME SB164 Class A
Spring Washers	N92220-31-0026 N92220-31-0039	ASME SA193 Gr. B6
Adjusting Bolt	N92221-31-0020	ASME SA193 Gr. B6
Spindle K61719-31-0014	N92219-31-0014	ASME SA193 Gr. B6

ZX00421604

QA-FE&C MAB 8-17-83

3

S/N N67441-00-0001
Rudolf Emp'b

2/19/98

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX4691-0001	ASTM B166
d. Bolting		
e. Other Parts such as Pilot Components		

We certify that the statements made in this report are correct.

Date 8/12 19 83 Signed Crosby Valve & Gage Co. By [signature]
Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1983

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Arkwright-Boston Manufacturers Mutual Insurance Company have inspected the equipment described in this Data Report on 8-12 19 83 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date 8-12 19 83 Factory Mutual System

[signature] (Inspector) Commissions Mass #1287 (National Board, State, Province and No.)

ZX00421605

MAB

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Philip Emps
2/19/98

*Corrected Report - 2-21-84

PLAN No. 2-1545 JC

CHECKED AND FOUND CERTIFICATION TO MEET THE REQUIREMENTS OF ASME B & PV CODE SECTIONS II AND III 1974 EDITION INCLUDING ADDENDA THRU SUMMER 1975.

MAB 2-21-84

PART: See Below
PART NUMBER: See Below
HEAT NUMBER: See Below
CUSTOMER ORDER NUMBER: 205-YF229
FACTORY ORDER NUMBER: N63949D
QAI: 32044 REV. 3

Linda Chartier 8/12/83 — N67441-00-0001

Linda Chartier - Quality Assurance Records Specialist — Valve Serial Number

PART	PART NUMBER	HEAT NUMBER
BASE	N91850-31-0010	386068
DISC	N91855-32-0028	M7127B
SPINDLE	N92219-31-0014	835273
SPRING WASHER	N92220-31-0026	G1636
" "	N92220-31-0039	"
CYLINDER	N91851-31-0020	9554A
SPRING	NX4691-0001	NX3503
*ADJUSTING BOLT JC 2-21-84	*N92221-31-0020 JC 2-21-84	*824616 JC 2-21-84

JM 8-12-83

MAB 8-12-83

ZX00421606

4

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1545

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

Q.C.-44C-1

Ruwalp Sing 4/17/85

DATA REPORT
Safety and Safety Relief Valves

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

Model No. JR-WR Order No. N63949D Contract Date 8/4/83 National Board No. --

2. Manufactured For General Electric Company, 175 Curtner Ave. San Jose, CA 95125 Order No. 205-YF229
Name and Address

3. Owner Washington Public Power Supply System - Hanford 2
Name and Address

4. Location of Plant Richland, Washington 99350

5. Valve Identification MPL No. E12B001 Hanford 2 Serial No. N67441-00-0002 Drawing No. DS-C-67441 Rev. 0

Type Relief (Safety, Safety Relief, Pilot, Power Actuated) Orifice Size SPL Inch Pipe Size -- Inch Inlet 3/4 Inch Outlet 1 Inch

6. Set Pressure (PSIG) 275 480 F
Rated Temperature

Stamped Capacity 15 GPM Water @ 70°F @ 10 % Overpressure -- Blowdown (PSIG) 10% S.P.

Hydrostatic Test (PSIG) Inlet 750 Complete Valve 225

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 3 Edition 1974, Addenda Date Summer 1975, Case No. 1711, 1567 N242-1

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body		
~~Bonnet~~ Cylinder	N91851-31-0002	ASME SA216 Gr. WCB
b. Bar Stock and Forgings		
~~Spindle~~ Base	N91850-31-0013	ASME SA479 Type 316
Nozzle		
Disc	N91855-32-0025	ASME SB164 Class A
Spring Washers	N92220-31-0043 N92220-31-0013	ASME SA193 Gr. B6
Adjusting Bolt	N92221-31-0009	ASME SA193 Gr. B6
Spindle K61719-31-0016	N92219-31-0016	ASME SA193 Gr. B6

ZX00421634

G.E.E.C. MAB 8/12/83

3

Rudolf Swob
2/19/98

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX4691-0002	ASTM B166
d. Bolting		
e. Other Parts such as Pilot Components		

We certify that the statements made in this report are correct.

Date 8/12 19 83 Signed Crosby Valve & Gage Co. By [signature]
Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1983

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Arkwright-Boston Manufacturers Mutual Insurance Company have inspected the equipment described in this Data Report on 8-12 19 83 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date 8-12 19 83 Factory Mutual System

[signature] Commissions Mass # 1287
(Inspector) (National Board, State, Province and No.)

QA-EE-8 GE MAB 8-1

ZX00421635

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Kulaip Sup 5
2/19/98

PLAN No. 2-1545

*Corrected Report - 2-21-84
dC

CHECKED AND FOUND CERTIFICATION TO MEET THE REQUIREMENTS OF ASME B & PV CODE SECTIONS II AND III 1974 EDITION INCLUDING ADDENDA THRU SUMMER 1975.

QA-EE 86 R MAB 2-21-84

PART: See Below
PART NUMBER: See Below
HEAT NUMBER: See Below
CUSTOMER ORDER NUMBER: 205-YF229
FACTORY ORDER NUMBER: N63949D
QAI: 32044 REV. 3

Linda Chartier 8-12-83
Linda Chartier - Quality Assurance Records Specialist

N67441-00-0002
Valve Serial Number

PART	PART NUMBER	HEAT NUMBER
BASE	N91850-31-0013	386068
DISC	N91855-32-0025	M7127B
SPINDLE	N92219-31-0016	835273
SPRING WASHER	N92220-31-0043	G1636
" "	N92220-31-0013	"
CYLINDER	N91851-31-0002	9554A
SPRING	NX4691-0002	NX3503
*ADJUSTING BOLT dC 2-21-84	*N92221-31-0009 dC 2-21-84	*824616 dC 2-21-84

QA-EE 86 R MAB 8-12-83

ZX00421636

PLAN No 2-1546

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 04/03/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment 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: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

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

7. **Description Of Work Performed:** Replaced existing tube fitting material for CIA supply to valve MS-V-22D. The work was performed as follows
   1) Removed existing tube fitting material.
   2) Installed new tube fitting material.

PLAN No 2-1546

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By Kuldip Singh

Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 4/3/98 Date 4/3/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

Not Required - Replacement 1" NPS And Smaller Commissions _____

Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN No 2-1547

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:** 06/03/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Traversing Incore Probe (TIP) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1986 Edition with 1986 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
TIP-V-3	Crosby	N96297-00-0003	N/A	N/A	1988	Replacement	Yes, Code Class 2
Existing Ball	Crosby	N95060-31-0003	N/A	N/A	1988	Replaced	No, Code Class 2
Replacement Ball	Crosby	N95060-33-0009	N/A	N/A	1998	Replacement	No, Code Class 2

7. Description Of Work Performed: Replaced existing ball for valve TIP-V-3, Serial No N96297-00-0003. The replacement work was performed as follows:

1) Removed existing ball, Serial No N95060-31-0003 from the valve.
2) Installed new replacement ball, Serial No N95060-33-0009 in the valve.

PLAN No 2-1547

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/3/98 — Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1549

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 05/04/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** 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: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
FPC-P-1A	Worthington	44 0000019 (3 LR 9)	N/A	N/A	1977	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced mechanical seals (gland plate) for pump FPC-P-1A. The replacement work was performed as follows:
   1) Removed existing inboard mechanical seal (gland plate) from the pump.
   2) Installed new inboard mechanical seal (gland plate) in the pump.
   3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

PLAN No 2-1549

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: 98 Psig
Test Temperature: 79° 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 Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 5/4/98

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 5/4/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 3-25-98 to 5-5-98 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 7486W/7486 NBIS IS
National Board, State, and Endorsements

Date 5/5/98

PLAN No 2-1550

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 05/20/98
Sheet: 1 of 1
Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment Vacuum Breaker (CVB) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1ST	Anderson Greenwood	VB 7899	N/A	N/A	1983	Replacement	Yes, Code Class 2

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

1) Removed existing front snubber Serial No 30494 from the valve.
2) Installed new replacement front snubber Serial No 30927 for the valve.

NOTES -

1) ASME Section III, Code Class 2 for valve CVB-V-1ST, Serial No VB 7899.
2) ASME Section III, Code Class NF(1) for snubber Serial No 30927. ASME Section III, Code Class NF(1) snubber for ASME Section III, Code Class NF(2) application.

PLAN No 2-1550

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/10/98 — Date 5/10/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/7/98 to 5/25/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486W/7486 NJSB IJ. — National Board, State, and Endorsements

Date 5/25/98

PLAN No 2-1551

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-2C	Crosby	N63790-00-0122	N/A	N/A	1981	Replaced	Yes, Code Class 1
MS-RV-2C	Crosby	N63790-00-0134 (N56000-01-0037)	N/A	N/A	1973	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 Serial No N63790-00-0122 with set pressure of 1175 Psig at rated temperature of 575° F.
2) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
3) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
4) Performed VT-1 visual examination on six (6) new studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
5) Installed replacement relief valve with Serial No N63790-00-0134 with set pressure of 1175 Psig at rated temperature of 575° F.
6) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
7) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
8) Installed VT-1 visually examined new studs for the relief valve inlet joint.
7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -
1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0134 was installed is Main Steam (MS) piping system B22-G001C-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The replacement relief valve Serial No N63790-00-0134 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements. Relief valve Serial No N56000-01-0037 (Pre - Modification Serial No) was previously modified by Crosby to Serial No N63790-00-0134.
4) The replacement relief valve Serial No N63790-00-0134 was previously refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1537.

PLAN No 2-1551

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-00-0134, 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) for relief valve Serial No N63790-00-0134, 3) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-01-0037, 4) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 6/6/98 **Date** 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/13/98 *to* 6/10/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature **Commissions** 7486 MW/7486 WI 5 IS

National Board, State, and Endorsements

Date 6/10/98

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

PLAN No. 2-1551

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331
131 Venture Boulevard, Spartanburg, SC 29301

6/4/98

2. Work performed for: Washington Public Power Supply System - WNP-2

3/4. Owner - name, address and identification of nuclear power plant: Washington Public Power Supply System WNP-2, North Power Plant Loop, Richland, WA 99352-0968

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer: Crosby Valve & Gage Co.
c: Identifying nos.

HB-65-BP-FN	N63790-00-0134	N/A	steam	6 x 10	1971
(type)	(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)

d: Construction Code:

ASME Sec. III Div. 1	1971	N/A	N/A	1
(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)

6. ASME Code Section XI applicable for inservice inspection: 1989 (edition) N/A (addenda) N/A (Code Case(s))

7. ASME Code Section XI used for repairs, replacements: 1989 (edition) N/A (addenda) N/A (Code Case(s))

8. Construction Code used for repairs, replacements: 1971 (edition) N/A (addenda) N/A (Code Case(s))

9. Design responsibilities: N/A

10. Opening pressure: 1175 psig
Set-pressure adjustment made at: NWS Technologies, LLC using steam

11. Description of work (include name and identifying number of replacement parts): Disassembled, lapped seats, cleaned, inspected, assembled. Certified set-pressure and seat tightness on steam.

12. Remarks Replacements: gaskets, locking washers, disc holder pin.

CERTIFICATE OF COMPLIANCE

I, Cesar V. Sierra certify that the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2000.
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2000.

12/9/97	NWS Technologies, LLC	Cesar Sierra	Manager, QA
Date	(repair organization)	(authorized representative)	(title)

CERTIFICATE OF INSPECTION

I, Carl R. Enos holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Tennessee and employed by Hartford Steam Boiler Inspection & Insurance Co., Hartford, CT have inspected the repair or replacement described in this report on 12/9/97 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Futhermore, neither the undersigned nor my 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.

12/9/97	Carl Enos	NB 8460, A. N. I. TN 2236
Date	Inspector's Signature	Commissions (NB : nd endorsements), jurisdiction & no

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN NO. 2-1551

Q.C.-292, REV.A
SHEET 1 OF 2

Philip Gupta
3/10/94
6/4/98

REPAIR AND REPLACEMENT TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address)
(Repair organization's P.O. No., Job No., etc.). NV4000020

2. Owner WASHINGTON PUBLIC POWER RICHLAND,WA 99352-0968
(Name and Address)

3. Name and Identification of Nuclear Power Plant HANFORD #2

4. Address of Nuclear Power Plant RICHLAND ,WA

5. a. Identifying Nos. N63790-00-0134 – – ----- 1973
(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)
b. Identification of component repaired or replacement component –
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY

6. Tests conducted: Hydrostatic (X) : Pneumatic ( ) Design Pressure ( ) Pressure 2370.0 psi

7. Identification of System MAIN STEAM

8. Applicable Section(s) III of ASME Code, 19 71 Edition
Addenda NO Code Case –

9. Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)
ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA.

10. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:

PART	PART NO.	MODIFIED TO PART NO.
BODY	N90118	N93183-43-0126
BONNET	N89717	N93407-41-0052
SPINDLE ASSY	K55465	K62873-46-0060
SPR.WASHER	N89724	K62856-41-0200
SPR.WASHER	N89723	K62857-41-0200
SPRING ASSY	K55466	K62858-31-0006
PART	PART NO.	REPLACED WITH
NOZZLE	N89713	N93184-51-0156
DISC INSERT	N89715	N93185-52-0202
SPRING	NX2689	NX2689-0134
THR.BRG,ADAPT.	N89725	N93409-34-0008
ADJ.BOLT	N89726	N93410-36-0132
ADJ.BOLT BUTT.	COMMERCIAL	N93411-33-0008
ADJ.BOLT ASSY	COMMERCIAL	K63618-31-0001
INLET STUD	N89727	N93216/NAD QTY 10

9-
2/22/94

Certificate Holder's Serial No. N63790.00.0134

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD. conforms to the applicable section of the ASME Code.
(repair/replacement)

Signed Lawrence J. Pina QA Eng Manager 24 Feb 1994
(Authorized Rep. of Repair Organization) (Title) (Date)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 24, 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.

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

Factory Mutual Systems

Date 2/24, 1994

Signed [illegible]
(Inspector)

Commissions MA 1455
(Nat'l. Bd., State, Prov. and No.)

PLAN NO. 2-1551
Kincaid Surg
6/4/98

WPPSS S/N	WPPSS Set	Bailly S/N	Bailly Set
N63790-00-0134	1175	N56000-01-0037	1175
N63790-00-0135	1205	N56000-01-0099	1130
N63790-00-0136	1205	N56000-02-0043	1205
N63790-00-0137	1195	N56000-02-0042	1195
N63790-00-0138	1185	N56000-01-0038	1175
N63790-00-0139	1165	N56000-01-0100	1130

PLAN NO. C-1551

Philip Swen 3/90/9c 6/4/98

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Q.C.-44A

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

DATA REPORT
Safety and Safety Relief Valves

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

Model No. HB-65-BP-FN Order No. N-105286 Contract Date 6/28/71

2. Manufactured For General Electric Company San Jose, California Order No. 205-AD148
Name and Address

3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I, Baileytown, Indiana
Name and Address

4. Location of Plant Baileytown, Indiana

5. Valve Identification MPL #B-22-F013 Serial No. N56000-01-0037 Drawing No. H-56000 Rev. C

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

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

Stamped Capacity 883950 Lbs. Hr. Sat. Steam 3 % Overpressure - Blowdown (PSIG) 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971 Addenda Date Summer 1972

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Forgings		
Body	N90118-32-0008	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
Bonnet	N89717-32-0021	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
b. Bar Stock and Forgings		
Disc Insert	N89715-31-0028	ASTM A-461-65 Type 630
Nozzle	N89713-32-0039	ASTM A-182-71 F316 ASME SA-182 F316
Disc Holder	N89714-32-0037	AMS 5662 B
Spring Washers Top	N89724-32-0037	ASTM A-105-71 Gr. II
Spring Washers Bottom	N89723-31-0008	ASME SA-105 Gr. II
Adjusting Bolt	N89726-33-0046	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
Spindle Point	N89720-32-0046	ASTM A-564-72 Type 630

BWRPD-DC
E.H.B.

3-3-75

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX2689-0042	ASTM A-304-66 Gr. 4161H
d. Bolting		
e.		
Inlet Stud	N89727-0433 thru 0444	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Inlet Stud Nut	N89728-0437 thru 0448	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
Bonnet Stud	N89718-0437 thru 0448	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Bonnet Stud Nut	N89719-0439 thru 0450	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
OTHER PARTS		
Spindle Ball	N89721-0046	Stellite 6
BARS & FORGINGS		
Thrust Bearing Adapter	N89725-32-0035	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6

We certify that the statements made in this report are correct.

Date 10-31 1973 Signed Crosby Valve & Gage Co. (Manufacturer) By [signature] QA Manager

Certificate of Authorization No. 331 expires November 9, 1974

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Mutual Boiler & Machinery Insurance Co.*, Waltham, Mass. have inspected the equipment described in this Data Report on October 31, 1973 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

*Factory Mutual Group of Insurance Co.

Date October 31, 1973

[signature] (Inspector) Commissions N.B. 6065, Mass. 1070 (National Board, State, Province and No.)

PLAN No 2-1552

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:** 05/25/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Service Water (SW) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired; Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(71)-1-HPCS	WPPSS	SW(71)-1-HPCS-P1	N/A	N/A	1983	Repaired	Yes, Code Class 3

7. Description Of Work Performed: Cut and rewelded existing welds for flow element SW-FE-8B. The repair work was performed as follows:

1) Cut/ground existing welds.
2) Made required welds.
3) Performed visual examination on the final welds. Visual examination results acceptable.

PLAN No 2-1552

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/25/98 — Date 5/25/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/9/98 to 5/25/98 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 8486W/7486 NBSB IS (National Board, State, and Endorsements)

Date 5/25/98

PLAN No 2-1553

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:** 05/22/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Residual Heat Removal (RHR) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Relief Valve	Anderson Greenwood	97-16627	N/A	N/A	1997	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Installed test port for spare relief valve Serial No 97-16627. The work was performed as follows:
1) Machined groove in the spare relief valve discharge flange.
2) Surface finished the grooved surfaces in the spare relief valve discharge flange.
3) Drilled holes in the spare relief valve discharge flange.
4) Installed new male connector on the spare relief valve discharge flange.
5) Made required weld.
6) Performed visual examination on the final weld. Visual examination results acceptable.
7) Performed liquid penetrant (PT) examination on the final weld. Liquid penetrant (PT) examination results acceptable.
8) Installed new cap on the male connector.

NOTES -
1) The modified spare relief valve Serial No 97-16627 was installed in the plant as RHR-RV-5 in accordance with ASME Section XI Plan No 2-1554.

PLAN No 2-1553

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NV-1 Code Data Report for the spare relief valve Serial No 97-16627.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/22/98 — Date 5/22/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/17/98 to 5/23/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature — Commissions 7486 W/7486 NB & IS — National Board, State, and Endorsements

Date 5/23/98

PLAN NO. 2-1553 S189230000.014 · P.O. 248960 | PAGE | 2

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES*

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

1. Manufactured and certified by Anderson, Greenwood & Co., 3950 Greenbriar, Stafford, TX 77477 (name and address of NV Certificate Holder)

2. Manufactured for Washington Public Power & Supply, P.O. Box 968, Richland, WA 99352 (name and address of Purchaser)

3. Location of installation Washington Nuclear Power Plant, N. Power Plant Loop, Richland, WA 99352 (name and address)

4. Valve ND20DS121ADG0183 (model no., series no.) Orifice size 0.394 (in.) Nom. inlet size 1 (in.) Outlet size 2 (in.)

5. ASME Code, Section III, Division 1: 1974 (edition) W-743 (addenda date) 2 (class) NA (Code Case no.)

6. Type Spring (spring, pilot or power operated) 183 (set pressure, psig) Fixed (blowdown, psi) 70°F (rated temp.) 275 (hydro. test, psig, inlet) at ambient °F

7. Identification 97-16627 (Cert. Holder's serial no.) NA (CRN) N11.1314 R/A (drawing no.) NA (Nat'l. Bd. no.) 1997 (year built)

8. Control ring settings NA

SPARE VALVE FOR RHR-RV-5

9. Pressure retaining items:

	Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body	B635	SA216-WCB	70
Bonnet or Yoke	B623	SA216-WCB	70
~~Support Rods~~ Cap	J3288	SA216-WCB	70
Nozzle	B613	SA351-CF8M	70
Disk	B607	SA479-316	75
~~Spring Washers~~ Disc Holder	B614	SA351-CF8M	70
~~Adjusting Screws~~ Nut	B548	SA479-316	75
~~Spindle~~ Screw Gag Plug	B488	SA479-316	75
~~Spring~~ Screw Ring Pin	B530	SA479-316	75
~~Bolting~~ Stud	8866612	SA193-B7	105
Other Items Pipe Plug	599VNF	SA105-	70
Nut	N4C	SA194-2H	NA

5/10/98

10. Relieving capacity 46 GPM (steam or fluid, lb/hr) @ 10% (psi) overpressure as certified by the National Board 4-16-85 (date)

11. Remarks:

CERTIFICATION OF DESIGN

Design Specification certified by David Michael Bosi P.E. State WA Reg. no. 20941

Design Report certified by NA P.E. State NA Reg. no. NA

CERTIFICATE OF COMPLIANCE

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

NV Certificate of Authorization No. N-2825 Expires 9/10/99

Date 6/19/97 Name Anderson, Greenwood & Co. (NV Certificate Holder) Signed Joseph A. Parks (authorized representative)

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

(12/88) This form (E00042) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Certificate Holder's Serial No. 97-16627

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 TX and employed by C.U.I.C. of Boston, MA have inspected the valve described in this Data Report 6-19-97, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

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

Date 6-19-97 Signed [signature] (Authorized Inspector) Commissions Tex803 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

SATISFACTORY ✓ UNSATISFACTORY ____

[signature] I 7-1-97

RECEIPT INSPECTOR / LEVEL / DATE

PLAN No 2-1554

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:** 05/23/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Residual Heat Removal (RHR) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-RV-5	Anderson Greenwood	509258-86-1	N/A	N/A	1979	Replaced	Yes, Code Class 2
RHR-RV-5	Anderson Greenwood	97-16627	N/A	N/A	1997	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced existing relief valve RHR-RV-5. The replacement work was performed as follows:
1) Removed existing relief valve RHR-RV-5, Serial No 509258-86-1.
2) Installed spare relief valve RHR-RV-5, Serial No 97-16627.
3) Installed new replacement studs and nuts for the relief valve inlet bolted joint.
4) Installed new replacement studs and nuts for the relief valve outlet bolted joint.
5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet bolted joint. No evidence of leakage during the pressure test.

NOTES -
1) The ASME Code Stamped piping system applicable to the relief valve inlet side is Residual Heat Removal (RHR) piping system RHR(3)-2A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
2) The ASME Code Stamped piping system applicable to the relief valve outlet side is Residual Heat Removal (RHR) piping system RHR(4)-1B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
3) Relief valve RHR-RV-5, Serial No 97-16627 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements.

PLAN No 2-1554

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: 38.7 Psig **Test Temperature:** 81° F

Component Design Pressure: 128 Psig **Temperature:** 480° F

9. Remarks:

1) See attached NV-1 Code Data Report for the spare relief valve RHR-RV-5, Serial No 97-16627.
2) * VT-2 visual examination to confirm pressure boundary integrity of the relief valve outlet bolted joint was performed during 10CFR50, Appendix J Local Leak Rate Test (LLRT)
3) Component design pressure of 128 Psig and design temperature of 480° F is for the relief valve outlet piping.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/23/98 *Date* 5/23/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/22/98 *to* 5/25/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature

Commissions 7486 w/7486 NISB IS

National Board, State, and Endorsements

Date 5/25/98

PLAN NO. 2-1554 S189230000.014 P.O. 248960 PAGE 2

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES*

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

1. Manufactured and certified by Anderson, Greenwood & Co., 3950 Greenbriar, Stafford, TX 77477 (name and address of NV Certificate Holder)

2. Manufactured for Washington Public Power & Supply, P.O. Box 968, Richland, WA 99352 (name and address of Purchaser)

3. Location of installation Washington Nuclear Power Plant, N. Power Plant Loop, Richland, WA 99352 (name and address)

4. Valve ND20DS121ADG0183 (model no., series no.) Orifice size 0.394 (in.) Nom. inlet size 1 (in.) Outlet size 2 (in.)

5. ASME Code, Section III, Division 1: 1974 (edition) W-743 (addenda date) 2 (class) NA (Code Case no.)

6. Type Spring (spring, pilot or power operated) 183 (set pressure, psig) Fixed (blowdown, psi) 70°F (rated temp.) 275 (hydro. test, psig, inlet) at ambient °F

7. Identification 97-16627 (Cert. Holder's serial no.) NA (CRN) N11.1314 R/A (drawing no.) NA (Nat'l. Bd. no.) 1997 (year built)

8. Control ring settings NA RHR-RV-5, S/N 97-16627

9. Pressure retaining items:

Rudolph Eurb 5/19/98

		Serial No. or Identification	Mat'l. Spec., Including Type or Grade	Tensile Strength
Body		B635	SA216-WCB	70
Bonnet or Yoke		B623	SA216-WCB	70
~~Support Rods~~	Cap	J3288	SA216-WCB	70
Nozzle		B613	SA351-CF8M	70
Disk		B607	SA479-316	75
~~Spring Washers~~	Disc Holder	B614	SA351-CF8M	70
~~Adjusting Screws~~	Nut	B548	SA479-316	75
Spindle	Screw Gag Plug	B488	SA479-316	75
Spring	Screw Ring Pin	B530	SA479-316	75
Bolting	Stud	8866612	SA193-B7	105
Other Items	Pipe Plug	599VNF	SA105-	70
	Nut	N4C	SA194-2H	NA

10. Relieving capacity 46 GPM (steam or fluid, lb/hr) @ 10% (psi) overpressure as certified by the National Board 4-16-85 (date)

11. Remarks:

CERTIFICATION OF DESIGN

Design Specification certified by David Michael Bosi P.E. State WA Reg. no. 20941

Design Report certified by NA P.E. State NA Reg. no. NA

CERTIFICATE OF COMPLIANCE

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

NV Certificate of Authorization No. N-2825 Expires 9/10/99

Date 6/19/97 Name Anderson, Greenwood & Co. (NV Certificate Holder) Signed Joseph A. Parks (authorized representative)

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

(12/88) This form (E00042) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Certificate Holder's Serial No. 97-16627

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 TX and employed by C.U.I.C. of Boston, MA have inspected the valve described in this Data Report 6-19-97, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance with the ASME Code, Section III, Division 1.

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

Date 6-19-97 Signed [signature] (Authorized Inspector) Commissions Tex 803 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

SATISFACTORY ✓ UNSATISFACTORY ___

[signature] I 7-1-97

RECEIPT INSPECTOR / LEVEL / DATE

PLAN No 2-1556

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:** 06/19/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Residual Heat Removal (RHR) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-4B	WPPSS	RHR(1)-4B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced (fabricated and installed modified vent connection) the existing vent connection with valves RHR-V-606 and RHR-V-631. The replacement (fabrication and installation) work was performed as follows:

1) Fabricated new pipe nipple.
2) Performed liquid penetrant (PT) examination on all the accessible internal final machined surfaces of the new pipe nipple. Liquid penetrant (PT) examination results acceptable.
3) Performed liquid penetrant (PT) examination on all the external final surfaces of the entire length of the new pipe nipple. Liquid penetrant (PT) examination results acceptable.
4) Cut and removed the existing vent connection with valves RHR-V-606 and RHR-V-631.
5) Prepped the existing sockolet surfaces.
6) Performed liquid penetrant (PT) examination on the sockolet prepped surfaces. Liquid penetrant (PT) examination results acceptable.
7) Installed new piping material such as fabricated pipe nipple, coupling and plug.
8) Made required socket welds.
9) Performed visual examination on the final socket welds. Visual examination results acceptable.
10) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

NOTES -

1) The existing ASME Code Stamped piping system in which the existing vent connection with valves RHR-V-606 and RHR-V-631 was replaced (fabricated and installed modified vent connection) is Residual Heat Removal (RHR) piping system RHR(1)-4B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

PLAN No 2-1556

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/19/98 — Date 6/19/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1557

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-2D	Crosby	N63790-00-0124	N/A	N/A	1981	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced bolting material for the existing relief valve MS-RV-2D. The existing relief valve MS-RV-2D was removed and reinstalled at the same location. The replacement work was performed as follows:

1) Removed existing relief valve Serial No N63790-00-0124.
2) Performed VT-3 visual examination on the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable except for one (1) stud for which VT-3 visual examination results were unacceptable. The unacceptable stud was subsequently evaluated and was found to be acceptable.
3) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
5) Performed VT-1 visual examination on six (6) new nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
6) Reinstalled existing relief valve with Serial No N63790-00-0124.
7) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
8) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
9) Installed VT-1 visually examined new nuts for the relief valve inlet joint
10) Installed three (3) new bolts for the relief valve outlet joint.
11) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0124 was installed is Main Steam (MS) piping system B22-G001D-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The existing relief valve Serial No N63790-00-0124 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

PLAN No 2-1557

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) **Signed By** Kuldip Singh - Program Lead Engineer (PLE)

Date 6/6/98 **Date** 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5/5/98 *to* 6/10/98 *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** 7486W/7486 NB/IS IS

National Board, State, and Endorsements

Date 6/10/98

PLAN No 2-1558

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/05/98
Sheet: 1 of 1
Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-3A	Crosby	N63790-00-0056	N/A	N/A	1980	Replacement	Yes, Code Class 1

7. **Description Of Work Performed:** Replaced bolting material for the existing relief valve MS-RV-3A. The existing relief valve MS-RV-2A was removed and reinstalled at the same location. The replacement work was performed as follows:
   1) Removed existing relief valve Serial No N63790-00-0056.
   2) Performed VT-3 visual examination on the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable except for two (2) stud for which VT-3 visual examination results were unacceptable. The unacceptable studs were subsequently evaluated and were found to be acceptable.
   3) Performed VT-3 visual examination on the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
   4) Performed VT-3 visual examination on the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   5) Performed VT-1 visual examination on two (2) new studs for the relief valve inlet joint. VT-1 visual examination results acceptable.
   6) Reinstalled existing relief valve with Serial No N63790-00-0056.
   7) Reinstalled VT-3 visually examined existing nuts for the relief valve inlet joint.
   8) Reinstalled VT-3 visually examined existing bolts for the relief valve outlet joint.
   9) Installed VT-1 visually examined new stud for the relief valve inlet joint
   10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

NOTES -

1) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-00-0056 was installed is Main Steam (MS) piping system B22-G001A-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
2) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.
3) The existing relief valve Serial No N63790-00-0056 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

PLAN No 2-1558

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: 1024 Psig **Test Temperature:** 240° F

Component Design Pressure: 1250 Psig **Temperature:** 575° F

9. Remarks: * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh - Program Lead Engineer (PLE) *Signed By* Kuldip Singh - Program Lead Engineer (PLE)

Date 6/6/98 *Date* 6/6/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5/5/98 *to* 6/10/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature *Commissions* 7486 W/7486 WISB II

National Board, State, and Endorsements

Date 6/10/98

PLAN No 2-1559

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:** 05/20/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment Vacuum Breaker (CVB) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

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

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

1) Removed existing front snubber Serial No 30885 from the valve.
2) Installed new replacement front snubber Serial No 30905 for the valve.

NOTES -

1) ASME Section III, Code Class 2 for valve CVB-V-1QR, Serial No VB 7898.
2) ASME Section III, Code Class NF(1) for snubber Serial No 30905. ASME Section III, Code Class NF(1) snubber for ASME Section III, Code Class NF(2) application.

PLAN No 2-1559

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 5/20/98 **Date** 5/20/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 5/15/98 *to* 5/25/98 *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** 7486W/7486 NB18 IV — National Board, State, and Endorsements

Date 5/25/98

PLAN No 2-1560

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:** 06/03/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment 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: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced existing tubing material for CIA supply to valve MS-V-22A. The replacement work was performed as follows:

1) Removed existing tubing material such as tubing, union, tee, connector.
2) Installed new tubing material such as tubing, union, tee, connector.
3) Reinstalled existing valve CIA-V-22A, Serial No PB 1249.

PLAN No 2-1560

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/3/98 — Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1561

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Date: 06/03/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment 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: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

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

7. **Description Of Work Performed:** Replaced existing tubing material for CIA supply to valve MS-V-22B. The replacement work was performed as follows:
   1) Removed existing tubing material such as tubing, union, tee, connector.
   2) Installed new tubing material such as tubing, union, tee, connector.
   3) Reinstalled existing valve CIA-V-22B, Serial No PB 1250.

PLAN No 2-1561

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

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

Date 6/3/98 — Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

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

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

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

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1562

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:** 06/03/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment 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: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced existing tubing material for CIA supply to valve MS-V-22C. The replacement work was performed as follows:

1) Removed existing tubing material such as tubing, union, tee, connector.
2) Installed new tubing material such as tubing, union, tee, connector.
3) Reinstalled existing valve CIA-V-22C, Serial No PB 1245.

PLAN No 2-1562

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1563

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 06/03/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Containment 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: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CIA(3)-2	WPPSS	CIA(3)-2-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2

7. **Description Of Work Performed:** Replaced existing tubing material for CIA supply to valve MS-V-22D. The replacement work was performed as follows:
   1) Removed existing tubing material such as tubing, union, tee, connector.
   2) Installed new tubing material such as tubing, union, tee, connector.
   3) Reinstalled existing valve CIA-V-22D, Serial No PB 1251.

PLAN No 2-1563

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98 — Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1564

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 06/08/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Control Air System (CAS)
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CAS(5)-1	WPPSS	CAS(5)-1-P1	N/A	N/A	1984	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing tubing material for CAS supply to valve MS-V-28A. The replacement work was performed as follows:
   1) Removed existing tubing material such as tubing, tee, connector.
   2) Installed new tubing material such as tubing, tee, connector.
   3) Reinstalled existing valve CAS-V-326A, Serial No PB 1244.

PLAN No 2-1564

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/9/98 — Date 6/9/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1565

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 06/08/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Air System (CAS)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CAS(5)-1	WPPSS	CAS(5)-1-P1	N/A	N/A	1984	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing tubing material for CAS supply to valve MS-V-28B. The replacement work was performed as follows:
   1) Removed existing tubing material such as tubing, tee, connector.
   2) Installed new tubing material such as tubing, tee, connector.
   3) Reinstalled existing valve CAS-V-326B, Serial No PB 1246.

PLAN No 2-1565

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: °F
Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 6/9/98

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 6/9/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Replacement 1" NPS And Smaller
Inspector's Signature

Commissions _____
National Board, State, and Endorsements

Date _____

PLAN No 2-1566

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 06/08/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Control Air System (CAS)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CAS(5)-1	WPPSS	CAS(5)-1-P1	N/A	N/A	1984	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing tubing material for CAS supply to valve MS-V-28C. The replacement work was performed as follows:
   1) Removed existing tubing material such as tubing, tee, connector.
   2) Installed new tubing material such as tubing, tee, connector.
   3) Reinstalled existing valve CAS-V-326C, Serial No PB 1248.

PLAN No 2-1566

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/9/98 — Date 6/9/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1567

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 06/08/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Control Air System (CAS)
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CAS(5)-1	WPPSS	CAS(5)-1-P1	N/A	N/A	1984	Replacement	Yes, Code Class 3

7. **Description Of Work Performed:** Replaced existing tubing material for CAS supply to valve MS-V-28D. The replacement work was performed as follows:
   1) Removed existing tubing material such as tubing, tee, connector.
   2) Installed new tubing material such as tubing, tee, connector.
   3) Reinstalled existing valve CAS-V-326D, Serial No PB 1247.

PLAN No 2-1567

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/9/98 — Date 6/9/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of _____ and employed by _____ have inspected the components described in this Owner's Report during the period _____ to _____ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Not Required - Replacement 1" NPS And Smaller — Inspector's Signature

Commissions _____ — National Board, State, and Endorsements

Date _____

PLAN No 2-1569

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:** 06/18/98
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 **Sheet:** 1 of 1
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Containment (Penetration X-58)
5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1992 Edition with 1992 Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment (Penetration X-58)	PDM	12764	790	N/A	1976	Repaired	Yes, Code Class MC

7. Description Of Work Performed: Removed temporary attachment (nut) welded between the sleeve and the pipe for Containment Penetration X-58. The repair work was performed as follows:

1) Cut and removed the nut to pipe weld and nut to the sleeve weld.
2) Uniformly blended the areas into the surrounding base metal surfaces.
3) Performed liquid penetrant (PT) examination on the final prepped surfaces. Liquid penetrant (PT) examination results acceptable.
4) Performed ultrasonic (UT) examination to measure the remaining wall thickness of the prepped surfaces. Ultrasonic (UT) examination results acceptable.
5) Performed VT-3 visual examination on the final prepped surfaces to satisfy ISI (PSI) requirements. VT-3 visual examination results acceptable.

PLAN No 2-1569

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: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: * Pressure Test - The repair work performed in accordance with this ASME Section XI Plan No 2-1569 is considered as minor repair, therefore the Title 10, Part 50, Appendix J, Paragraph IV.A leakage test on the minor repair has been deferred until the next scheduled leakage test as permitted by IWE-5000 of ASME Section XI 1992 Edition with 1992 Addenda.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/18/98 — Date 6/18/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/2/98 to 6/18/98 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 7486W/7486 NI58 ZS — National Board, State, and Endorsements

Date 6/18/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-400 Snubber	Pacific	4012	N/A	PSA-1/2	N/A	Replaced	No, Code Class NF(2)
RHR-400 Snubber	Pacific	369	N/A	PSA-1/2	N/A	Replacement	No, Code Class NF(1)

7. **Description Of Work Performed:** Replaced existing snubber for support RHR-400. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 4012.
   2) Installed replacement snubber with Serial No 369.
   3) Performed operability test on the replacement snubber. Operability test acceptable.
   4) Performed limited (pin to pin) VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

NOTES -

1) The existing snubber Serial No 4012, ASME Section III, Code Class NF(2) or better.
2) The replacement snubber Serial No 369, ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application. This snubber was previously removed from support FPC-228.
3) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 369 for support RHR-400 was installed is Reactor Core Isolation Cooling (RCIC) piping system RCIC(2)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/20/98 to 6/8/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7486 W/7486 NBSB IS

National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. Owner: Washington Public Power Supply System (WPPSS)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Residual Heat Removal (RHR) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-442 Snubber	Pacific	2088	N/A	PSA-1/2	N/A	Replaced	No, Code Class NF(2)
RHR-442 Snubber	Pacific	4005	N/A	PSA-1/2	N/A	Replacement	No, Code Class NF(1)

7. Description Of Work Performed: Replaced existing snubber for support RHR-442. The replacement work was performed as follows:

1) Removed existing snubber with Serial No 2088.
2) Installed replacement snubber with Serial No 4005.
3) Performed operability test on the replacement snubber. Operability test acceptable.
4) Performed limited (pin to pin) VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

NOTES -

1) The existing snubber Serial No 2088, ASME Section III, Code Class NF(2) or better.
2) The replacement snubber Serial No 4005, ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application. This snubber was previously removed from support MS-2619-46.
3) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 4055 for support RHR-442 was installed is Residual Heat Removal (RHR) piping system RHR(1)-2B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98 — Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/20/98 to 6/8/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature — Commissions 7486 N / 7486 N ISD IS — National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. Owner: Washington Public Power Supply System (WPPSS)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable
4. Identification Of System: Main Steam (MS) System
5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-91 Snubber-E	Pacific	2583	N/A	PSA-3	N/A	Replaced	No, Code Class NF(1)
MS-91 Snubber-E	Pacific	294	N/A	PSA-3	N/A	Replacement	No, Code Class NF(1)
MS-91 Snubber-W	Pacific	2793	N/A	PSA-3	N/A	Replaced	No, Code Class NF(1)
MS-91 Snubber-W	Pacific	3927	N/A	PSA-3	N/A	Replacement	No, Code Class NF(1)

7. Description Of Work Performed: Replaced existing snubbers for supports MS-91-E and MS-91-W. The replacement work was performed as follows:

1) Removed existing snubber with Serial No 2583 from support MS-91-E.
2) Installed replacement snubber with Serial No 294 for support MS-91-E.
3) Removed existing snubber with Serial No 2793 from support MS-91-W.
4) Installed replacement snubber with Serial No 3927 for support MS-91-W.
5) Performed operability test on both the replacement snubbers. Operability test acceptable.
6) Performed limited (pin to pin) VT-3 visual examination on both the installed replacement snubbers. VT-3 visual examination results acceptable.

NOTES -

1) The replacement snubber Serial No 294, ASME Section III, Code Class NF(1) was previously removed from support MS-57.
2) The replacement snubber Serial No 3927, ASME Section III, Code Class NF(1) was previously removed from support RHR-362.
3) The existing ASME Code Stamped piping system in which the replacement snubber Serial No's 294 and 3927 for supports MS-91-E and MS-91-W were installed is Main Steam (MS) piping system MS(1)-4A-P2. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
4) E - East
5) W - West

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98 — Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/20/98 to 6/8/98 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 7486W/7486 WIS B-II

National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-114 Snubber-N	Pacific	275	N/A	PSA-10	N/A	Replaced	No, Code Class NF(1)
MS-114 Snubber-N	Pacific	313	N/A	PSA-10	N/A	Replacement	No, Code Class NF(1)

7. **Description Of Work Performed:** Replaced existing snubber for support MS-114-N. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 275.
   2) Installed replacement snubber with Serial No 313.
   3) Performed operability test on the replacement snubber. Operability test acceptable.
   4) Performed limited (pin to pin) VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

NOTES -

1) The replacement snubber Serial No 313, ASME Section III, Code Class NF(1) was previously removed from support MSRV-3C-5.
2) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 313 for support MS-114-N was installed is Main Steam (MS) piping system MS(1)-4A-P2. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
3) N - North

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig **Test Temperature:** °F

Component Design Pressure: Psig **Temperature:** °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement *conforms to the rules of the ASME Code, Section XI.*

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98 **Date** 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/20/98 *to* 6/8/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7486 IN/7486 NB B31

National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MSRV-1A-3	BPC	N/A	N/A	N/A	N/A	Replacement	No, Code Class NF(3)

7. **Description Of Work Performed:** Replaced existing pin for support MSRV-1A-3. The replacement work was performed as follows:
   1) Removed existing pin.
   2) Installed replacement pin.

NOTES -

1) The existing ASME Code Stamped piping system in which the replacement pin for support MSRV-1A-3 was installed is Main Steam (MS) piping system MS(18)-2-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [ ] **Nominal Operating Pressure** [ ] **Other** [X] **None**

Test Pressure: Psig **Test Temperature:** ° F

Component Design Pressure: Psig **Temperature:** ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement *conforms to the rules of the ASME Code, Section XI.*

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh **Signed By** Kuldip Singh

Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98 **Date** 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/20/98 *to* 6/8/98 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Commissions 7486/7486 WI SB IS

Inspector's Signature National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MSRV-4B-3 Snubber	Pacific	11863	N/A	PSA-10	N/A	Replaced	No, Code Class NF(3)
MSRV-4B-3 Snubber	Pacific	9932	N/A	PSA-10	N/A	Replacement	No, Code Class NF(1)

7. **Description Of Work Performed:** Replaced existing snubber for support MSRV-4B-3. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 11863.
   2) Installed replacement snubber with Serial No 9932.
   3) Performed operability test on the replacement snubber. Operability test acceptable.
   4) Performed limited (pin to pin) VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

NOTES -

1) The existing snubber Serial No 4012, ASME Section III, Code Class NF(3) or better.
2) The replacement snubber Serial No 9932, ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(3) application. This snubber was previously removed from support MSRV-4C-3.
3) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 9932 for support MSRV-4B-3 was installed is Main Steam (RCIC) piping system MS(18)-2-13-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98 — Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/20/98 to 6/8/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature — Commissions 7486 w/ 7486 NB IS

National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Reactor Water Cleanup (RWCU) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RWCU-1C-3 Snubber-E	Pacific	3946	N/A	PSA-3	N/A	Replace	No, Code Class NF(1)
RWCU-1C-3-. Snubber-E	Pacific	284	N/A	PSA-3	N/A	Replacement	No, Code Class NF(1)

7. **Description Of Work Performed:** Replaced existing snubber for support RWCU-1C-3-E. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 3946.
   2) Installed replacement snubber with Serial No 284E.
   3) Performed operability test on the replacement snubber. Operability test acceptable.
   4) Performed limited (pin to pin) VT-3 visual examination on the installed replacement snubbers. VT-3 visual examination results acceptable.

NOTES -

1) The replacement snubber Serial No 284, ASME Section III, Code Class NF(1) was previously removed from support MS-57.
2) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 284 for RWCU-1C-3-E was installed is Reactor Water Cleanup (RWCU) piping system RWCU(3)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.
3) E - East

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/20/98 to 6/8/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7486 W/7486 NIS8 25

National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-4448-413 Snubber	Pacific	318	N/A	PSA-1/4	N/A	Replaced	No, Code Class NF(1)
MS-4448-413 Snubber	Pacific	280	N/A	PSA-1/4	N/A	Replacement	No, Code Class NF(1)

7. **Description Of Work Performed:** Replaced existing snubber and forward bracket for support MS-4448-413. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 318.
   2) Removed existing forward bracket.
   3) Installed replacement snubber with Serial No 280.
   4) Installed replacement forward bracket.
   5) Performed operability test on the replacement snubber. Operability test acceptable.
   6) Performed limited (pin to pin) VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

NOTES -

1) The replacement snubber Serial No 280, ASME Section III, Code Class NF(1) was previously removed from support MS-2619-318.
2) the replacement forward bracket, ASME Section III, Code Class NF(1) and was previously removed from support MS-2619-318
3) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 280 for support MS-4448-413 was installed is Main Steam (MS) piping system MS(9)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] **Pneumatic** [ ] **Nominal Operating Pressure** [ ] **Other** [X] **None**

Test Pressure: Psig **Test Temperature:** ° F

Component Design Pressure: Psig **Temperature:** ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement ***conforms to the rules of the ASME Code, Section XI.***

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh ***Signed By*** Kuldip Singh

Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98 ***Date*** 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington ***and employed by*** Arkwright Mutual Insurance Company of Waltham, Massachusetts ***have inspected the components described in this Owner's Report during the period*** 4/26/98 ***to*** 6/8/98 ***and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.***

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Commissions 7486/7486 WI5825

Inspector's Signature National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
   (c) Type Code Symbol Stamp: Not Applicable
   (d) Certificate Of Authorization No.: Not Applicable
   (e) Expiration Date: Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-999N Snubber	Pacific	328	N/A	PSA-10	N/A	Replaced	No, Code Class NF(1)
MS-999N Snubber	Pacific	9917	N/A	PSA-10	N/A	Replacement	No, Code Class NF(1)

7. **Description Of Work Performed:** Replaced existing snubber for support MS-999N. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 328.
   2) Installed replacement snubber with Serial No 9917.
   3) Performed operability test on the replacement snubber. Operability test acceptable.
   4) Performed limited (pin to pin) VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

NOTES -

1) The replacement snubber Serial No 9917, ASME Section III, Code Class NF(1) was previously removed from support MSRV-2C-4.
2) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 9917 for support MS-999N was installed is Main Steam (MS) piping system MS(1)-4C-P2. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 6/3/98

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)
Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/20/98 to 6/8/98 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 7486W/7486 WTSB IS
National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MD-1285-14C Snubber	Pacific	19886	N/A	PSA-1/4	N/A	Replaced	No, Code Class NF(2)
MD-1285-14C Snubber	Pacific	6209	N/A	PSA-1/4	N/A	Replacement	No, Code Class NF(1)

7. **Description Of Work Performed:** Replaced existing snubber and forward bracket for support MD-1285-14C. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 19886.
   2) Removed existing forward bracket.
   3) Installed replacement snubber with Serial No 6209.
   4) Installed replacement forward bracket.
   5) Performed operability test on the replacement snubber. Operability test acceptable.
   6) Performed limited (pin to pin) VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

NOTES -

1) The existing snubber Serial No 19886, ASME Section III, Code Class NF(2) or better.
2) The replacement snubber Serial No 6209, ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application. This snubber was previously removed from support SLC-4453-68.
3) The replacement forward bracket, ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application. This forward bracket was previously removed from support SLC-4453-68.
4) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 6209 for support MD-1285-14C was installed is Main Steam (MS) piping system MS(1)-4D-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98 — Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/20/98 to 6/8/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

Inspector's Signature — Commissions 7486 NB/7486 WI SB-5

National Board, State, and Endorsements

Date 6/8/98

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 05/26/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MD-1290-11B Snubber	Pacific	378	N/A	PSA-1/4	N/A	Replaced	No, Code Class NF(2)
MD-1290-11B Snubber	Pacific	28428	N/A	PSA-1/4	N/A	Replacement	No, Code Class NF(1)

7. **Description Of Work Performed:** Replaced existing snubber for support MD-1290-11B. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 378.
   2) Installed replacement snubber with Serial No 28428.
   3) Performed operability test on the replacement snubber. Operability test acceptable.
   4) Performed limited (pin to pin) VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

NOTES -

1) The existing snubber Serial No 378, ASME Section III, Code Class NF(2) or better.
2) The replacement snubber Serial No 28428, ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application. This snubber was previously removed from support MS-2619-316.
3) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 28428 for support MD-1290-11B was installed is Main Steam (MS) piping system MS(1)-4D-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

WOT No HMH 101

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig
Component Design Pressure: Psig
Test Temperature: ° F
Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable

Prepared By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh
Kuldip Singh - Program Lead Engineer (PLE)

Date 6/3/98

Date 6/3/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/30/98 to 6/8/98 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.

Inspector's Signature

Commissions 7486 w/7486 NB18 IS
National Board, State, and Endorsements

Date 6/8/98

WOT No MCJ 601

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: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

Date: 06/24/98
Sheet: 1 of 1
Unit: WNP-2

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS)
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
(c) Type Code Symbol Stamp: Not Applicable
(d) Certificate Of Authorization No.: Not Applicable
(e) Expiration Date: Not Applicable

4. Identification Of System: Residual Heat Removal (RHR) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-42 Snubber	Pacific	3911	N/A	PSA-3	N/A	Replaced	No, Code Class NF(2)
RHR-42 Snubber	Pacific	258	N/A	PSA-3	N/A	Replacement	No, Code Class NF(1)

7. Description Of Work Performed: Replaced existing snubber for support RHR-42. The replacement work was performed as follows:

1) Removed existing snubber with Serial No 3911.
2) Installed replacement snubber with Serial No 258.
3) Performed operability test on the replacement snubber. Operability test acceptable.
4) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

NOTES -

1) The existing snubber Serial No 3911, ASME Section III, Code Class NF(2) or better.
2) The replacement snubber Serial No 258, ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application. This snubber was previously removed from support RHR-272.
3) The existing ASME Code Stamped piping system in which the replacement snubber Serial No 258 for support RHR-42 was installed is Residual Heat Removal (RHR) piping system RHR(3)-1C-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

WOT No MCJ 601

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/24/98 — Date 6/24/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/25/98 to 7/1/98 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.

[illegible] — Inspector's Signature

Commissions 7486 [illegible] / 7486 [illegible] — National Board, State, and Endorsements

Date 7/1/98

WOT No MCJ 601

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

Date: 06/24/98
Sheet: 1 of 1
Unit: WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS)
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Residual Heat Removal (RHR) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-39 Snubber - N	Pacific	2348	N/A	PSA-3	N/A	Replaced	No, Code Class NF(2)
RHR-39 Snubber - N	Pacific	4489	N/A	PSA-3	N/A	Replacement	No, Code Class NF(1)
RHR-39 Snubber - S	Pacific	2593	N/A	PSA-3	N/A	Replaced	No, Code Class NF(2)
RHR-39 Snubber - S	Pacific	4429	N/A	PSA-3	N/A	Replacement	No, Code Class NF(1)

7. **Description Of Work Performed:** Replaced existing snubbers for support RHR-39. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 2348 from support RHR-39 - N.
   2) Installed replacement snubber with Serial No 4489 for support RHR-39 - N.
   3) Removed existing snubber with Serial No 2593 from support RHR-39 - S.
   4) Installed replacement snubber with Serial No 4429 for support RHR-39 - N.
   5) Performed operability test on the replacement snubbers. Operability test acceptable.
   6) Performed VT-3 visual examination on the installed replacement snubbers. VT-3 visual examination results acceptable.

NOTES -

1) The existing snubber Serial No 2348, ASME Section III, Code Class NF(2) or better.
2) The existing snubber Serial No 2593, ASME Section III, Code Class NF(2) or better.
3) The replacement snubber Serial No 4489, ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application. This snubber was previously removed from support FDR-903N.
4) The replacement snubber Serial No 4429, ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application. This snubber was previously removed from support FDR-903N.
5) The existing ASME Code Stamped piping system in which the replacement snubbers Serial No 4489 and 4429 for support RHR-39 were installed is Residual Heat Removal (RHR) piping system RHR(3)-1C-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
6) N - North
7) S - South

WOT No MCJ 601

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [ ] Other [X] None

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Signed By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)

Date 6/24/98 — Date 6/24/98

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/25/98 to 7/1/98 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 7486W/7486 WTSS 25 — National Board, State, and Endorsements

Date 7/1/98