# INSERVICE INSPECTION SUMMARY REPORT
# FOR
# REFUELING OUTAGE RF12



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: | DD Ramey<br>ISI Engineer | 8 SEPT 97<br>Date |
| | Rudolph Simpson<br>Repair/Replacement Engineer | 9/9/97<br>Date |
| Reviewed & Concurred By: | DD Ramey for TM ERWIN<br>Supervisor, Materials and Welding | 9SEPT97<br>Date |
| | [illegible]<br>NDE Level III | 9/9/97<br>Date |
| | Ronald D. Madden FOR A.S. Barber<br>Supervisor, Quality Services | 9/9/97<br>Date |
| Concurrence: | H. M. [illegible]<br>Authorized Nuclear Inservice Inspector | 9/11/97<br>Date |

# Table of Contents


| | |
|---|---|
| Cover Page and Approvals | Page 1 |
| Table of Contents | Page 2 |
| Examination Results | Page 3 |

Appendices

A. NIS-1 Owner's Report for Inservice Inspection.

B. NIS-2 Owner's Report for Repairs and Replacements

## SUMMARY

WNP-2 has completed ASME Section XI examinations for the third refueling outage of the second inspection interval (twelfth refuel cycle, RF12). The following augmented examinations were also completed during this outage: feedwater nozzle inner radius, Generic Letter 88-01, and examinations of high energy line break welds outside of ASME Section XI scope. WNP-2 is on schedule with its Generic Letter 88-01 commitments.

## EXAMINATION RESULTS

This report summarizes the results of inservice inspection (ISI) of ASME Section III, Code Class 1, 2 and 3 components and their supports performed at Washington Public Power Supply System (Supply System) Nuclear Plant No. 2 (WNP-2) between June 21, 1996 and July 9, 1997. Both General Electric (GE) and Supply System personnel performed the examinations. During this period, WNP-2 completed its twelfth scheduled refueling outage, RF12. This outage is the third 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 File (DIC 1100).

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

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

## ASME SECTION XI EXAMINATIONS

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

The items examined for ASME Section XI requirements are listed on the NIS-1 Owner's Data Report for Inservice Inspection. A copy is included as Appendix A. Approximately 23% of the ISI items requiring examination for the second inspection interval have been examined.

Post refueling leakage test and visual examination per Examination Category B-P found fifteen (15) Control Rod Drive (CRD) housing flanges leaking at various rates, from one (1) drop per minute to approximatly one hundred twenty five (125) drops per minute. The leaks were acceptable based on the leakage decreasing over time. Relief Requests 2ISI-06 and 2ISI-07 were implemented during this test. RHR-V-41A bonnet to body joint was found leaking. The gasket was replaced and the joint was retested with acceptable results.

During examinations of the removed CRD cap screws (Category B-G-2, Item number B7.80), localized pitting corrosion was found in the shank area of some of the examined cap screws. This degradation has been noticed at prior inspections. As with prior inspections the worst case localized pitting was metallurgically analyzed and determined not to exceed Section XI acceptance standards.

It was discovered during this outage that several welds in the Category C-G pump casings were not correctly classified during the first inspection interval. Corrective action was taken to perform examinations of these welds during this outage. The accessible welds on one residual heat removal (RHR) pump, high pressure core spray (HPCS) pump and low pressure core spray (LPCS) pump were magnetic particle examined. No recordable indications were observed.

AUGMENTED EXAMINATIONS

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

Ultrasonic examinations were performed on one (1) category B weld and one (1) category C weld. The welds examined are 12RFW(1)BD-11 (category C) and 4RRC(4)A-11 (category B). No unacceptable indications were found.

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

Six (6) welds were examined per the high energy line break commitment with no unacceptable indications. The following welds were examined:

| Identification No. | Description | Diagram No. | Pg. | Method |
|---|---|---|---|---|
| 26MS(1)D-19/3V-20 | DRAIN CONN | MS-204 | 01 | SUR |
| 2MS(20)D-1 | SOL TO PIPE | MS-204 | 05 | SUR |
| 2MS(20)D-2 | PIPE TO ELL | MS-204 | 05 | SUR |
| 2MS(20)D-3 | ELL TO PIPE | MS-204 | 05 | SUR |
| 2MS(20)D-4 | PIPE TO TEE | MS-204 | 05 | SUR |
| 6RWCU(2)-2 | ELL TO PIPE | RWCU-303 | 03 | 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.

*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 394 safety-related snubbers. These snubbers were randomly selected by computer sub-routine which is part of the ISI System data base. The selected snubbers were then reviewed to determine if the sample was representative, as required by 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. RHR-20, with paint on the outer tube was replaced. MS-114, MS-145, RRC-1549-62, and SLC-4475-21 tested satisfactorily, but indicated degradation and were replaced. 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) interior visual examinations were performed on jet pump riser elbow welds, 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, a crack was found in jet pump 18 sensing line. The crack was reexamined during RF12. There was no noticeable change from RF9 data. The other nineteen (19) sensing lines were examined as part of the sensing line clamp installation program. No indications were found in these lines.

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

All 80 of the jet pump adjusting screw tack welds were visually examined. Two of the tack welds on two different screws were found to be cracked at RF10. Reinspection during RF12 showed no change. A reinspection of the jet pump adjusting screws was performed to document any gaps between the set screw and inlet mixer. Four pumps had adjusting screws with gaps. The jet pump beams were detensioned and the inlet mixer section was repositioned for two of the jet pumps. The other two jet pumps with gaps had wedges installed to correct the gaps.

With guidance from General Electric SIL 605, the jet pump inlet thermal sleeve to riser elbow weld for all 10 jet pump assemblies were examined per recommendations of the SIL. No recordable indications were detected.

REPAIRS AND REPLACEMENTS

Six (6) significant ASME Section XI repair or replacement activities were performed during the RF97 (R12) 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 June 21, 1996 and July 9, 1997 are provided in Appendix B.

1) Main Steam Relief Valves (MSRV)

Refurbished nine (9) main steam relief valves. Eight (8) of these main steam relief valves were refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The refurbishment work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs. The ninth MSRV was refurbished by the Supply System. Replaced nine (9) main steam relief valves with refurbished valves.

2) Control Rod Drive (CRD)

Replaced eighteen (18) Control Rod Drives (CRD's).

3) Service Water (SW) System

Replaced 18" Service Water (SW) Loop B return pipe between SW-FE-1B and valve SW-PCV-38B due to localized pitting (wall thinning).

4) Relief Valves

Replaced miscellaneous relief valves such as RCC-RV-34A, RCC-RV-34B, SLC-RV-29A, SLC-RV-29B, FPC-RV-117A, FPC-RV-117B, etc.

5) Valves

Replaced miscellaneous valves such as RRC-V-19, PSR-V-X77A/2, PSR-V-X77A/3, PSR-V-X77A/4, SW-V-47, SLC-V-16, etc.

6) Snubbers

Replaced twenty three (23) snubbers.

# 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 |
| RHR-HX-1A | Delta Southern Co. | 35009-74-1 | 29911-84W | 3489 |
| RHR-P-2B | Ingersoll-Rand Co. | 0473111 | NA | 47 |
| HPCS-P-1 | Ingersoll-Rand Co. | 0473126 | NA | 28 |
| LPCS-P-1 | Ingersoll-Rand Co. | 0573277 | NA | 39 |
| Large Bore Pipe | Bechtel - the piping examined is listed on pages 3-11 of this data report | NA | NA | NA |
| RHR-V-41A | Velan Engineering Co | 0064 | NA | NA |
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| | | | | |

# FORM NIS-1 (back)

8. Examination Dates 6/22/96 to 7/9/97

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-E

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 23% of the examinations required for this interval have been completed. See pages 3-11 of this data report for a listing of examinations and tests completed during this refueling outage. Continued on page 3.

14. Abstract of Results of Examinations and Tests. All examinations and tests were acceptable except the following:
1) Fifteen CRD flanges were found leaking during the post outage Class 1 leakage test; 2) RHR-V-41A bonnet to body joint leaked during the post outage Class 1 leakage test. All snubber functional tests were acceptable.

15. Abstract of Corrective Measures:
1) Relief Request 2ISI-06 was implemented for the leaking CRD flanges. The flange leaks were evaluated for corrective action. They were either repaired or accepted based on the leakage decreasing over time. 2) The bonnet to body gasket of valve RHR-V-41A was replaced. Subsequent pressure test resulted in no leakage.

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 July 17 1997 Signed Washington Public Power Supply System By Carl M Berg
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 4-14-97 to 7/10/97, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

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

Inspector's Signature

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

Date 7/18/ 1997

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

13. Abstract of Examinations and Tests (continued):

Snubber Functional Testing - IWF-5000

| Snubber Mark No. | Position | Description | Serial No. | Test Date |
|---|---|---|---|---|
| DE-23 | UA | PSA-3 SNUBBER | 2381 | 4/24/97 |
| DE-2839-14B | UA | PSA-1/4 SNUBBER | 399 | 4/21/97 |
| DE-3 | W | PSA-3 SNUBBER | 3925 | 4/24/97 |
| FPC-908N | W | PSA-1 SNUBBER | 22348 | 4/22/97 |
| MD-1285-14A | UA | PSA-1/2 SNUBBER | 2473 | 4/24/97 |
| MS-114 | S | PSA-10 SNUBBER | 285 | 4/24/97 |
| MS-145 | UA | PSA-10 SNUBBER | 14556 | 4/24/97 |
| MS-147 | S | PSA-35 SNUBBER | 4970 | 4/25/97 |
| MS-162 | BM | PSA-10 SNUBBER | 315 | 4/24/97 |
| MS-2619-11 | UA | PSA-1/4 SNUBBER | 398 | 4/25/97 |
| MS-SC-1 | UA | PSA-100 SNUBBER | 605 | 4/29/97 |
| MSRV-3B-3 | UA | PSA-10 SNUBBER | 13050 | 4/29/97 |
| MSRV-4D-2 | UA | PSA-10 SNUBBER | 9933 | 4/28/97 |
| RCIC-26 | UA | PSA-3 SNUBBER | 4415 | 4/21/97 |
| RCIC-943N | UA | PSA-10 SNUBBER | 577 | 4/24/97 |
| RFW-171 | UA | PSA-10 SNUBBER | 579 | 4/28/97 |
| RFW-180 | UA | PSA-1 SNUBBER | 22345 | 4/28/97 |
| RHR-1002N | TP | PSA-3 SNUBBER | 4418 | 4/23/97 |
| RHR-137 | E | PSA-10 SNUBBER | 14554 | 4/22/97 |
| RHR-150 | NW | PSA-3 SNUBBER | 504 | 4/21/97 |
| RHR-20 | UA | PSA-1/2 SNUBBER | 413 | 4/23/97 |
| RHR-373 | UA | PSA-1 SNUBBER | 228 | 4/21/97 |
| RHR-383 | UA | PSA-35 SNUBBER | 10568 | 4/30/97 |
| RHR-401 | BM | PSA-1/2 SNUBBER | 4006 | 4/22/97 |
| RHR-485 | UA | PSA-10 SNUBBER | 11856 | 4/28/97 |
| RHR-502 | UA | PSA-35 SNUBBER | 6178 | 4/28/97 |
| RHR-903N | UA | PSA-3 SNUBBER | 3926 | 4/22/97 |
| RHR-908N | TP | PSA-3 SNUBBER | 631 | 4/29/97 |
| RHR-914N | UA | PSA-10 SNUBBER | 103 | 4/22/97 |
| RHR-947N | BM | PSA-3 SNUBBER | 3882 | 4/21/97 |
| RRC-1549-62 | UA | PSA-1/4 SNUBBER | 28437 | 4/30/97 |
| RRC-SB-7 | UA | PSA-35 SNUBBER | 4191 | 4/30/97 |
| RWCU-1C-5 | UA | PSA-3 SNUBBER | 4439 | 4/30/97 |
| RWCU-1C-6 | UA | PSA-3 SNUBBER | 2569 | 4/29/97 |
| RWCU-927N | UA | PSA-3 SNUBBER | 3968 | 4/23/97 |
| SGT-23 | BM | PSA-3 SNUBBER | 4482 | 4/22/97 |
| SLC-4475-21 | UA | PSA-1 SNUBBER | 366 | 4/29/97 |

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 May 23,1997.

Notes are on page 11

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

13. Abstract of Examinations and Tests (continued):

| Identification No. | Description | Diagram No. | Pg. | Method | Report No. | Date | Results(1) |
|---|---|---|---|---|---|---|---|
| Examination Category: B-D | | | | | | | |
| Item Number: B3.100 | | | | | | | |
| N4-210-IR | FW NZ-IR @ 210 | RPV-101 | | VOL | 2RPU-003 | 5/01/97 | A |
| Examination Category: B-F | | | | | | | |
| Item Number: B5.10 | | | | | | | |
| 12RFW(1)BD-11 | SE TO N4 | RFW-102 | 03 | VOL | R-R12-008 | 5/02/97 | A |
| Item Number: B5.130 | | | | | | | |
| 4RRC(4)A-11 | SE TO VALVE | RRC-108 | | SUR | 2RRP-007 | 5/05/97 | A |
| | | | | VOL | R-R12-009 | 5/06/97 | A |
| Examination Category: B-G-2 | | | | | | | |
| Item Number: B7.50 | | | | | | | |
| 8MSR-3D-2BD | FLANGE BOLTING | MS-104 | 01 | VT-1 | 2MSV-066 | 4/24/97 | A |
| 8MSR-4D-2BD | FLANGE BOLTING | MS-104 | 01 | VT-1 | 2MSV-068 | 4/24/97 | A |
| 8MSR-5C-2BD | FLANGE BOLTING | MS-103 | 01 | VT-1 | 2MSV-070 | 4/24/97 | A |
| Item Number: B7.70 | | | | | | | |
| MS-RV-1B-BLT | VALVE BOLTING | MS-102 | 01 | VT-1 | 2MSV-077 | 5/12/97 | A |
| | | | | VT-1 | 2MSV-083 | 5/13/97 | A |
| MS-RV-1D-BLT | VALVE BOLTING | MS-104 | 01 | VT-1 | 2MSV-082 | 5/12/97 | A |
| | | | | VT-1 | 2MSV-085 | 5/13/97 | A |
| MS-RV-2A-BLT | VALVE BOLTING | MS-101 | 01 | VT-1 | 2MSV-073 | 5/07/97 | A |
| MS-RV-2B-BLT | VALVE BOLTING | MS-102 | 01 | VT-1 | 2MSV-078 | 5/12/97 | A |
| | | | | VT-1 | 2MSV-084 | 5/13/97 | A |
| MS-RV-2D-BLT | VALVE BOLTING | MS-104 | 01 | VT-1 | 2MSV-081 | 5/12/97 | A |
| | | | | VT-1 | 2MSV-086 | 5/13/97 | A |
| MS-RV-3A-BLT | VALVE BOLTING | MS-101 | 01 | VT-1 | 2MSV-074 | 5/07/97 | A |
| | | | | VT-1 | 2MSV-076 | 5/10/97 | A |
| MS-RV-3D-BLT | VALVE BOLTING | MS-104 | 01 | VT-1 | 2MSV-067 | 4/25/97 | A |
| MS-RV-4A-BLT | VALVE BOLTING | MS-101 | 01 | VT-1 | 2MSV-075 | 5/07/97 | A |
| MS-RV-4C-BLT | VALVE BOLTING | MS-103 | 01 | VT-1 | 2MSV-079 | 5/12/97 | A |
| | | | | VT-1 | 2MSV-087 | 5/13/97 | A |
| MS-RV-4D-BLT | VALVE BOLTING | MS-104 | 01 | VT-1 | 2MSV-069 | 4/25/97 | A |
| MS-RV-5C-BLT | VALVE BOLTING | MS-103 | 01 | VT-1 | 2MSV-071 | 4/25/97 | A |
| | | | | VT-1 | 2MSV-080 | 5/12/97 | A |
| | | | | VT-1 | 2MSV-088 | 5/13/97 | A |
| MS-V-22D-BLT | VALVE BOLTING | MS-104 | 02 | VT-1 | 2MSV-072 | 4/29/97 | A |
| MS-V-28D-BLT | VALVE BOLTING | MS-104 | 02 | VT-1 | 2MSV-065 | 4/22/97 | A |
| RHR-V-41A-BLT | VALVE BOLTING | RHR-101 | | VT-1 | 2RHV-010 | 6/15/97 | A |
| RHR-V-42B-BLT | VALVE BOLTING | RHR-102 | | VT-1 | 2RHV-007 | 4/29/97 | A |
| RHR-V-53B-BLT | VALVE BOLTING | RHR-106 | | VT-1 | 2RHV-008 | 5/05/97 | A |

Notes are on page 11

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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) |
|---|---|---|---|---|---|---|---|
| Item Number: B7.80 | | | | | | | |
| CRD HOUSING 06-27 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| CRD HOUSING 06-35 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-006 | 5/21/97 | A |
| CRD HOUSING 14-31 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| CRD HOUSING 18-55 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| CRD HOUSING 38-31 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| CRD HOUSING 38-35 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| CRD HOUSING 38-47 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-006 | 5/21/97 | A |
| CRD HOUSING 38-59 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| CRD HOUSING 42-07 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-006 | 5/21/97 | A |
| CRD HOUSING 50-19 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-006 | 5/12/97 | A |
| CRD HOUSING 50-47 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-006 | 5/21/97 | A |
| CRD HOUSING 54-19 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-006 | 5/21/97 | A |
| CRD HOUSING 54-23 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-006 | 5/21/97 | A |
| CRD HOUSING 54-27 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| CRD HOUSING 54-43 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| CRD HOUSING 54-47 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-006 | 5/21/97 | A |
| CRD HOUSING 58-27 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| CRD HOUSING 58-31 BLT | CRD HOUSING BLT | RPV-102 | | VT-1 | 2RPV-004 | 4/18/97 | A(2) |
| | | | | VT-1 | 2RPV-007 | 5/22/97 | A |
| Examination Category: B-J<br>Item Number: B9.11 | | | | | | | |
| 12HPCS(1)-16 | VLV TO PIPE | HPCS-101 | 02 | SUR | 2HPM-004 | 5/07/97 | A |
| | | | | VOL | R-R12-010 | 5/07/97 | A |
| 12HPCS(1)-17 | PIPE TO VLV | HPCS-101 | 02 | SUR | 2HPM-005 | 5/07/97 | A |
| | | | | VOL | R-R12-011 | 5/07/97 | A |
| 12HPCS(1)-18 | VLV TO PIPE | HPCS-101 | 02 | SUR | 2HPM-006 | 5/07/97 | A |
| | | | | VOL | R-R12-012 | 5/07/97 | A |
| 26MS(1)C-17 | VALVE TO PENE | MS-103 | 02 | VOL | R-R12-007 | 4/29/97 | A |
| 26MS(1)C-18 | PENE TO VALVE | MS-103 | 02 | SUR | 2MSM-024 | 4/23/97 | A |
| | | | | VOL | R-R12-006 | 4/28/97 | A |
| 4RCIC(13)-1 | TEE TO PIPE | RCIC-101 | 02 | VOL | R-R12-005 | 4/24/97 | A |
| 4RCIC(13)-2 | PIPE TO ELL | RCIC-101 | 02 | VOL | R-R12-003 | 4/24/97 | A |
| 4RCIC(13)-3 | ELL TO PIPE | RCIC-101 | 02 | VOL | R-R12-004 | 4/24/97 | A |

Notes are on page 11

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

13. Abstract of Examinations and Tests (continued):

| Identification No. | Description | Diagram No. | Pg. | Method | Report No. | Date | Results(1) |
|---|---|---|---|---|---|---|---|
| Item Number: B9.32 | | | | | | | |
| MS-V-28C/2MS(9)-4 | DRAIN CONN | MS-103 | 02 | SUR | 2MSM-022 | 4/23/97 | A |
| Examination Category: B-K-1 | | | | | | | |
| Item Number: B10.10 | | | | | | | |
| HPCS-66(W) | 4 WELDED LUGS | HPCS-101 | 01 | SUR | 2HPM-003 | 5/07/97 | A |
| | | | | SUR | 2HPP-001 | 5/07/97 | A |
| LPCS-57(W) | 4 WELDED LUGS | LPCS-101 | 02 | SUR | 2LPM-002 | 5/07/97 | A |
| MS-HC-3(W) | 4 WELDED LUGS | MS-103 | 02 | SUR | 2MSM-025 | 4/24/97 | A |
| RCIC-1C-6(W) | 8 WELDED LUGS | RCIC-101 | 02 | SUR | 2RIM-007 | 4/24/97 | A |
| RFW-146(W) | 6 WELDED LUGS | RFW-101 | 01 | SUR | 2FWM-015 | 4/28/97 | A |
| RFW-156(W) | 6 WELDED LUGS | RFW-101 | 05 | SUR | 2FWM-014 | 4/28/97 | A |
| RHR-524(W) | 8 WELDED LUGS | RHR-103 | | SUR | 2RHM-032 | 5/09/97 | A |
| Examination Category: B-M-2 | | | | | | | |
| Item Number: B12.50 | | | | | | | |
| RHR-V-41A-BDY | VALVE BODY | RHR-101 | | VT-3 | 2RHV-009 | 6/15/97 | A |
| Examination Category: B-N-1 | | | | | | | |
| Item Number: B13.10 | | | | | | | |
| JET PUMP RISER EL WLDS | JP RISER EL WLDS | RPV-101 | | VT-1 | 2RPV-005 | 5/29/97 | A(6) |
| Examination Category: B-P | | | | | | | |
| Item Number: B15.10 | | | | | | | |
| RPV-PB-101(L) | LK PRES BNDRY | RPV-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RPV-PB-102(L) | LK PRES BNDRY | RPV-102 | | VT-2 | 2VT2-97 | 6/14/97 | A(3,4) |
| Item Number: B15.50 | | | | | | | |
| HPCS-PB-101(L) | LK PRES BNDRY | HPCS-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| LPCS-PB-101(L) | LK PRES BNDRY | LPCS-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| MS-PB-101(L) | LK PRES BNDRY | MS-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| MS-PB-102(L) | LK PRES BNDRY | MS-102 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| MS-PB-103(L) | LK PRES BNDRY | MS-103 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| MS-PB-104(L) | LK PRES BNDRY | MS-104 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| MS-PB-105(L) | LK PRES BNDRY | MS-105 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| MS-PB-106(L) | LK PRES BNDRY | MS-106 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RCIC-PB-101(L) | LK PRES BNDRY | RCIC-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RCIC-PB-102(L) | LK PRES BNDRY | RCIC-102 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RFW-PB-101(L) | LK PRES BNDRY | RFW-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RFW-PB-103(L) | LK PRES BNDRY | RFW-103 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RHR-PB-101(L) | LK PRES BNDRY | RHR-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RHR-PB-102(L) | LK PRES BNDRY | RHR-102 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RHR-PB-103(L) | LK PRES BNDRY | RHR-103 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RHR-PB-104(L) | LK PRES BNDRY | RHR-104 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RHR-PB-105(L) | LK PRES BNDRY | RHR-105 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RHR-PB-106(L) | LK PRES BNDRY | RHR-106 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RRC-PB-101(L) | LK PRES BNDRY | RRC-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RRC-PB-102(L) | LK PRES BNDRY | RRC-102 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RRC-PB-104(L) | LK PRES BNDRY | RRC-104 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RRC-PB-105(L) | LK PRES BNDRY | RRC-105 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |

Notes are on page 11

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

13. Abstract of Examinations and Tests (continued):

| Identification No. | Description | Diagram No. | Pg. | Method | Report No. | Date | Results(1) |
|---|---|---|---|---|---|---|---|
| RRC-PB-106(L) | LK PRES BNDRY | RRC-106 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RRC-PB-107(L) | LK PRES BNDRY | RRC-107 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RRC-PB-108(L) | LK PRES BNDRY | RRC-108 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RRC-PB-109(L) | LK PRES BNDRY | RRC-109 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RRC-PB-110(L) | LK PRES BNDRY | RRC-110 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RRC-PB-111(L) | LK PRES BNDRY | RRC-111 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| RWCU-PB-101(L) | LK PRES BNDRY | RWCU-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| SLC-PB-101(L) | LK PRES BNDRY | SLC-101 | | VT-2 | 2VT2-97 | 6/14/97 | A(3) |
| Item Number: B15.60 | | | | | | | |
| RRC-P-1A-BDY(L) | LK PRES BNDRY | RRC-103 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RRC-P-1B-BDY(L) | LK PRES BNDRY | RRC-103 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| Item Number: B15.70 | | | | | | | |
| HPCS-V-4-BDY(L) | LK PRES TEST | HPCS-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| HPCS-V-5-BDY(L) | LK PRES TEST | HPCS-101 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| HPCS-V-51-BDY(L) | LK PRES TEST | HPCS-101 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| LPCS-V-5-BDY(L) | LK PRES TEST | LPCS-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| LPCS-V-51-BDY(L) | LK PRES TEST | LPCS-101 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| LPCS-V-6-BDY(L) | LK PRES TEST | LPCS-101 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-1A-BDY(L) | LK PRES TEST | MS-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-1B-BDY(L) | LK PRES TEST | MS-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-1C-BDY(L) | LK PRES TEST | MS-103 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-1D-BDY(L) | LK PRES TEST | MS-104 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-2A-BDY(L) | LK PRES TEST | MS-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-2B-BDY(L) | LK PRES TEST | MS-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-2C-BDY(L) | LK PRES TEST | MS-103 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-2D-BDY(L) | LK PRES TEST | MS-104 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-3A-BDY(L) | LK PRES TEST | MS-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-3B-BDY(L) | LK PRES TEST | MS-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-3C-BDY(L) | LK PRES TEST | MS-103 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-3D-BDY(L) | LK PRES TEST | MS-104 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-4A-BDY(L) | LK PRES TEST | MS-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-4B-BDY(L) | LK PRES TEST | MS-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-4C-BDY(L) | LK PRES TEST | MS-103 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-4D-BDY(L) | LK PRES TEST | MS-104 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-5B-BDY(L) | LK PRES TEST | MS-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-RV-5C-BDY(L) | LK PRES TEST | MS-103 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-V-22A-BDY(L) | LK PRES TEST | MS-101 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-V-22B-BDY(L) | LK PRES TEST | MS-102 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-V-22C-BDY(L) | LK PRES TEST | MS-103 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-V-22D-BDY(L) | LK PRES TEST | MS-104 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-V-28A-BDY(L) | LK PRES TEST | MS-101 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-V-28B-BDY(L) | LK PRES TEST | MS-102 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-V-28C-BDY(L) | LK PRES TEST | MS-103 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| MS-V-28D-BDY(L) | LK PRES TEST | MS-104 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RCIC-V-13-BDY(L) | LK PRES TEST | RCIC-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RCIC-V-63-BDY(L) | LK PRES TEST | RCIC-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RCIC-V-64-BDY(L) | LK PRES TEST | RCIC-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RCIC-V-65-BDY(L) | LK PRES TEST | RCIC-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RCIC-V-66-BDY(L) | LK PRES TEST | RCIC-102 | 03 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RFW-V-10A-BDY(L) | LK PRES TEST | RFW-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RFW-V-10B-BDY(L) | LK PRES TEST | RFW-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RFW-V-11A-BDY(L) | LK PRES TEST | RFW-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |

Notes are on page 11

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

13. Abstract of Examinations and Tests (continued):

| Identification No. | Description | Diagram No. | Pg. | Method | Report No. | Date | Results(1) |
|---|---|---|---|---|---|---|---|
| RFW-V-11B-BDY(L) | LK PRES TEST | RFW-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RFW-V-32A-BDY(L) | LK PRES TEST | RFW-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RFW-V-32B-BDY(L) | LK PRES TEST | RFW-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RFW-V-65A-BDY(L) | LK PRES TEST | RFW-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RFW-V-65B-BDY(L) | LK PRES TEST | RFW-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-111A-BDY(L) | LK PRES TEST | RHR-101 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-111B-BDY(L) | LK PRES TEST | RHR-102 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-111C-BDY(L) | LK PRES TEST | RHR-103 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-112A-BDY(L) | LK PRES TEST | RHR-105 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-112B-BDY(L) | LK PRES TEST | RHR-106 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-113-BDY(L) | LK PRES TEST | RHR-104 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-19-BDY(L) | LK PRES TEST | RCIC-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-23-BDY(L) | LK PRES TEST | RCIC-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-41A-BDY(L) | LK PRES TEST | RHR-101 | | VT-2 | 2VT2-97 | 6/14/97 | R(5) |
| RHR-V-41B-BDY(L) | LK PRES TEST | RHR-102 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-41C-BDY(L) | LK PRES TEST | RHR-103 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-42A-BDY(L) | LK PRES TEST | RHR-101 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-42B-BDY(L) | LK PRES TEST | RHR-102 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-42C-BDY(L) | LK PRES TEST | RHR-103 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-50A-BDY(L) | LK PRES TEST | RHR-105 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-50B-BDY(L) | LK PRES TEST | RHR-106 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-53A-BDY(L) | LK PRES TEST | RHR-105 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-53B-BDY(L) | LK PRES TEST | RHR-106 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-8-BDY(L) | LK PRES TEST | RHR-104 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RHR-V-9-BDY(L) | LK PRES TEST | RHR-104 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| RRC-V-23A-BDY(L) | LK PRES TEST | RRC-101 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RRC-V-23B-BDY(L) | LK PRES TEST | RRC-102 | 01 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RRC-V-60A-BDY(L) | LK PRES TEST | RRC-101 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RRC-V-60B-BDY(L) | LK PRES TEST | RRC-102 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RRC-V-67A-BDY(L) | LK PRES TEST | RRC-101 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RRC-V-67B-BDY(L) | LK PRES TEST | RRC-102 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RWCU-V-1-BDY(L) | LK PRES TEST | RWCU-101 | 04 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RWCU-V-102-BDY(L) | LK PRES TEST | RWCU-101 | 02 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RWCU-V-4-BDY(L) | LK PRES TEST | RWCU-101 | 05 | VT-2 | 2VT2-97 | 6/14/97 | A |
| RWCU-V-40-BDY(L) | LK PRES TEST | RFW-103 | | VT-2 | 2VT2-97 | 6/14/97 | A |
| Examination Category: C-A<br>Item Number: C1.10 | | | | | | | |
| AC-1 | FLG/SHEL CIRWLD | RHR-214 | | VOL | 2RHU-011 | 4/09/97 | A |
| Examination Category: C-B<br>Item Number: C2.21 | | | | | | | |
| AN-3 | INLET NZ/TOPHD | RHR-214 | | SUR | 2RHM-029 | 4/08/97 | A |
| | | | | VOL | 2RHU-012 | 4/08/97 | A |
| Examination Category: C-C<br>Item Number: C3.10 | | | | | | | |
| AS-1 | HEATXCHG SUP WD | RHR-214 | | SUR | 2RHM-028 | 4/08/97 | A |

Notes are on page 11

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

13. Abstract of Examinations and Tests (continued):

| Identification No. | Description | Diagram No. | Pg. | Method | Report No. | Date | Results(1) |
|---|---|---|---|---|---|---|---|
| Examination Category: C-F-2 | | | | | | | |
| Item Number: C5.51 | | | | | | | |
| 18RHR(1)A-39 | PIPE TO ELL | RHR-201 | 06 | SUR | 2RHM-031 | 4/11/97 | A |
| | | | | VOL | R-R12-001 | 4/15/97 | A |
| 18RHR(1)A-40 | ELL TO PIPE | RHR-201 | 06 | SUR | 2RHM-030 | 4/11/97 | A |
| | | | | VOL | R-R12-002 | 5/15/97 | A |
| Examination Category: C-G | | | | | | | |
| Item Number: C6.10 | | | | | | | |
| HPCS-P-1C-4 | PMP CAS/CIR WLD | HPCS-206 | 01 | SUR | 2HPM-007 | 5/21/97 | A |
| HPCS-P-1C-5 | PMP CAS/CIR WLD | HPCS-206 | 01 | SUR | 2HPM-007 | 5/21/97 | A |
| HPCS-P-1C-6 | PMP CAS/CIR WLD | HPCS-206 | 01 | SUR | 2HPM-007 | 5/21/97 | A |
| HPCS-P-1N-3 | PMP NOZZLE WELD | HPCS-206 | 01 | SUR | 2HPM-007 | 5/21/97 | A |
| LPCS-P-1C-4 | PMP CAS/CIR WLD | LPCS-208 | 01 | SUR | 2LPM-003 | 5/29/97 | A |
| LPCS-P-1C-5 | PMP CAS/CIR WLD | LPCS-208 | 01 | SUR | 2LPM-003 | 5/29/97 | A |
| LPCS-P-1N-3 | PMP NOZZLE WELD | LPCS-208 | 01 | SUR | 2LPM-003 | 5/29/97 | A |
| RHR-P-2BC-4 | PMP CAS/CIR WLD | RHR-213 | | SUR | 2RHM-034 | 5/16/97 | A |
| RHR-P-2BC-5 | PMP CAS/CIR WLD | RHR-213 | | SUR | 2RHM-033 | 5/15/97 | A |
| RHR-P-2BN-1 | PMP NOZZLE WELD | RHR-213 | | SUR | 2RHM-034 | 5/16/97 | A |
| | | | | SUR | 2RHM-035 | 5/16/97 | A |
| RHR-P-2BN-3 | PMP NOZZLE WELD | RHR-213 | | SUR | 2RHM-033 | 5/15/97 | A |
| Examination Category: D-B | | | | | | | |
| Item Number: D2.20 | | | | | | | |
| SW-174(W) | WELDED ATTACH | SW-301 | 01 | VT-3 | 2SWV-002 | 4/21/97 | A |
| SW-273(W) | WELDED ATTACH | SW-310 | | VT-3 | 2SWV-004 | 4/21/97 | A |
| SW-449(W) | WELDED ATTACH | SW-310 | | VT-3 | 2SWV-005 | 4/21/97 | A |
| SW-7(W) | WELDED ATTACH | SW-307 | 04 | VT-3 | 2SWV-003 | 4/21/97 | A |
| SW-91(W) | WELDED ATTACH | SW-307 | 03 | VT-3 | 2SWV-006 | 5/12/97 | A |
| Examination Category: F-A | | | | | | | |
| Item Number: F1.10A | | | | | | | |
| LPCS-57 | BOX | LPCS-101 | 02 | VT-3 | 2HV-090 | 5/02/97 | A |
| MS-2619-312 | STRUT | MS-106 | 03 | VT-3 | 2HV-100 | 5/17/97 | A |
| MS-SC-3 | RIGID STRUT | MS-103 | 02 | VT-3 | 2HV-083 | 4/24/97 | A |
| Item Number: F1.10B | | | | | | | |
| HPCS-66 | SPRING | HPCS-101 | 01 | VT-3 | 2HV-089 | 5/02/97 | A |
| RHR-524 | SPRING | RHR-103 | | VT-3 | 2HV-091 | 5/09/97 | A |
| Item Number: F1.10C | | | | | | | |
| MS-HC-3 | SPRING | MS-103 | 02 | VT-3 | 2HV-088 | 4/24/97 | A |
| RFW-156 | SPRING | RFW-101 | 05 | VT-3 | 2HV-084 | 4/28/97 | A |

Notes are on page 11

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

13. Abstract of Examinations and Tests (continued):

| Identification No. | Description | Diagram No. | Pg. | Method | Report No. | Date | Results(1) |
|---|---|---|---|---|---|---|---|
| Item Number: F1.10D | | | | | | | |
| MS-1368-12 | PSA-1/2 SNUBBER | MS-105 | 02 | VT-3 | 2HV-113 | 5/08/97 | A |
| MS-2619-11 | PSA-1/4 SNUBBER | MS-106 | 01 | VT-3 | 2HV-087 | 4/25/97 | A |
| RFW-146 | PSA-10 SNUBBER | RFW-101 | 01 | VT-3 | 2HV-085 | 4/28/97 | A |
| RFW-180 | PSA-1 SNUBBER | RFW-103 | | VT-3 | 2HV-094 | 5/08/97 | A |
| RHR-282 | PSA-35 SNUBBER | RHR-103 | | VT-3 | 2HV-093 | 5/09/97 | A |
| RHR-287 | PSA-35 SNUBBER | RHR-103 | | VT-3 | 2HV-092 | 5/09/97 | A |
| SLC-4475-21 | PSA-1 SNUBBER | SLC-101 | 05 | VT-3 | 2HV-112 | 5/08/97 | A |
| Item Number: F1.20A | | | | | | | |
| RCIC-14 | BOX | RCIC-205 | 04 | VT-3 | 2HV-097 | 5/12/97 | A |
| RHR-68 | STRUT | RHR-205 | 01 | VT-3 | 2HV-095 | 5/12/97 | A |
| RHR-918N | STRUT | RHR-207 | 01 | VT-3 | 2HV-096 | 5/12/97 | A |
| Item Number: F1.20C | | | | | | | |
| MS-28 | SPRING | MS-203 | 03 | VT-3 | 2HV-105 | 5/04/97 | A |
| Item Number: F1.20D | | | | | | | |
| MS-1002N | PSA-10 SNUBBER | MS-203 | 02 | VT-3 | 2HV-111 | 5/07/97 | A |
| MS-114 | PSA-10 SNUBBER | MS-201 | 02 | VT-3 | 2HV-115 | 5/05/97 | A |
| MS-145 | PSA-10 SNUBBER | MS-202 | 04 | VT-3 | 2HV-116 | 4/25/97 | A |
| MS-148 | PSA-10 SNUBBER | MS-202 | 03 | VT-3 | 2HV-110 | 5/07/97 | A |
| MS-162 | PSA-10 SNUBBER | MS-202 | 02 | VT-3 | 2HV-104 | 5/05/97 | A |
| MS-167 | PSA-10 SNUBBER | MS-202 | 02 | VT-3 | 2HV-107 | 5/06/97 | A |
| MS-177 | PSA-3 SNUBBER | MS-202 | 03 | VT-3 | 2HV-103 | 5/02/97 | A |
| MS-27 | PSA-10 SNUBBER | MS-203 | 03 | VT-3 | 2HV-106 | 5/06/97 | A |
| MS-96 | PSA-10 SNUBBER | MS-201 | 03 | VT-3 | 2HV-109 | 5/07/97 | A |
| MS-996N | PSA-10 SNUBBER | MS-202 | 02 | VT-3 | 2HV-108 | 5/06/97 | A |
| MS-998N | PSA-10 SNUBBER | MS-202 | 02 | VT-3 | 2HV-114 | 5/08/97 | A |
| RHR-67 | PSA-3 SNUBBER | RHR-205 | 01 | VT-3 | 2HV-099 | 5/12/97 | A |
| Item Number: F1.30A | | | | | | | |
| SW-174 | BOX | SW-301 | 01 | VT-3 | 2HV-079 | 4/21/97 | A |
| SW-273 | BOX | SW-310 | | VT-3 | 2HV-081 | 4/21/97 | A |
| SW-449 | RIGID | SW-310 | | VT-3 | 2HV-082 | 4/21/97 | A |
| SW-7 | BOX | SW-307 | 04 | VT-3 | 2HV-080 | 4/21/97 | A |
| SW-91 | STRUT | SW-307 | 03 | VT-3 | 2HV-098 | 5/12/97 | A |
| Item Number: F1.30C | | | | | | | |
| MS-304 | SPRING | MS-313 | 01 | VT-3 | 2HV-086 | 4/28/97 | A |

Notes are on page 11

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

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

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

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) 15 CRD flanges found leaking at various rates
(5) Body to bonnet flange found leaking
(6) Examined thermal sleeve to riser elbow weld.

- END OF REPORT-

Notes are on page 11

# APPENDIX B

## NIS-2 OWNER'S REPORTS

This appendix summarizes ASME Section XI repair or replacement work performed between June 21, 1996 and July 9, 1997. The status of the NIS-2 Owner's Report is stated for each repair and replacement work performed.

APPENDIX B

# ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR WNP-2 REFUELING OUTAGE RF97

| PLAN NO | WO NO | COMPONENT NUMBER AND WORK DESCRIPTION | CODE COMP | R&R REPORTED IN |
|---|---|---|---|---|
| 2-0994 * | TT 6501 | Installed conversion rings for connection "A" and connection "B" for spare stuffing box removed from existing pump RRC-P-1A | Pump | RF96 Summary Report ** |
| 2-1150 | SD 3501 | Replaced bolting material for piping to valve SW-V-165B flanged joint | Piping | RF97 Summary Report |
| 2-1153 | RU 5801 | Replaced pipe for DO-TK-3B | Piping | RF97 Summary Report |
| 2-1197 | UH 5902 | Refurbished relief valve S/N N63790-00-0047 | Relief Valve | RF97 Summary Report |
| 2-1231 * | TG 9807 | Fabricated closure plates (plugs) for Penetrations X-76 and X-77 | Penetration | RF96 Summary Report ** |
| 2-1232 * | TG 9803 | Installed closure plates (plugs) for Penetrations X-76b, 76c, 76e and 76f | Penetration | RF96 Summary Report ** |
| 2-1233 * | TG 9806 | Installed closure plates (plugs) for Penetrations X-77b, 77c, 77e and 77f | Penetration | RF96 Summary Report ** |
| 2-1271 | ZS 6503 | Replaced relief valve RCC-RV-34B | Piping | RF97 Summary Report |
| 2-1279 | WD 6601 | Replaced spring steps for spare relief valve S/N N63032-00-0059 | Relief Valve | RF97 Summary Report |
| 2-1280 | WD 6602 | Replaced spring steps for spare relief valve S/N N63032-00-0060 | Relief Valve | RF97 Summary Report |
| 2-1281 | TD 7302 | Replaced relief valve CCH-RV-2A | Piping | RF97 Summary Report |
| 2-1282 | UH 5908 | Installed Helical - Coil Insert for spare relief valve S/N N63790-00-0047 | Relief Valve | RF97 Summary Report |
| 2-1289 * | YT 6102 | Modified test connection with valve CSP-V-800/13 and valve CSP-V-800/14 | Piping | RF96 Summary Report ** |
| 2-1289 * | YT 6102 | Modified test connection with valve CSP-V-800/15 and Valve CSP-V-800/16 | Piping | RF96 Summary Report ** |
| 2-1290 * | YT 6002 | Modified test connection with valve CSP-V-800/21 and valve CSP-V-800/22 | Piping | RF96 Summary Report ** |
| 2-1290 * | YT 6002 | Installed new test connection with valve CSP-V-800/25 and valve CSP-V-800/26 | Piping | RF96 Summary Report ** |
| 2-1291 * | WW 7702 | Modified Instrument piping for valve CSP-V-5 | Piping | RF96 Summary Report ** |
| 2-1293 * | YT 6102 | Modified Instrument piping for valve CSP-V-9 | Piping | RF96 Summary Report ** |
| 2-1297 * | YV 2601 | Replaced valve RCIC-V-752B and valve RCIC-V-752D | Piping | RF96 Summary Report ** |
| 2-1303 * | WT 5001 | Replaced wedge for valve CRD-V-101/2623 | Valve | RF96 Summary Report ** |
| 2-1304 * | YH 1001 | Replaced wedge for valve CRD-V-101/5027 | Valve | RF96 Summary Report ** |
| 2-1305 | YG 2203 | Fabricated orifice plate for RCIC-RO-9 | Piping | RF97 Summary Report |
| 2-1306 | YG 2204 | Replaced orifice plate for RCIC-RO-9 | Piping | RF97 Summary Report |
| 2-1311 * | YT 6002 | Modified Instrument piping for valve CSP-V-6 | Piping | RF96 Summary Report ** |
| 2-1319 * | WB 9001 | Replaced section of pipe associated with valve SW-V-821A | Piping | RF96 Summary Report ** |
| 2-1332 * | BKD 001 | Replaced tubing associated with valve CAS-V-100/51 | Tubing | RF96 Summary Report ** |
| 2-1340 * | BJM 701 | Replaced valve RFW-V-120 | Piping | RF96 Summary Report ** |
| 2-1341 * | BLL 201 | Replaced block clamp for tubing for D-220-031.0-IR-63, Bulk Head No 10 | Tubing | RF96 Summary Report ** |
| 2-1342 | BHL 702 | Prefabricate 18" Service Water (SW) pipe piece near valve SW-PCV-38B - See Plan No 2-1353 | Piping | RF97 Summary Report |
| 2-1344 * | BJM 603 | Replaced valve PSR-V-X77A/3 | Piping | RF96 Summary Report ** |
| 2-1347 * | BLH 905 | Replaced valve PSR-V-X77A/4 | Piping | RF96 Summary Report ** |
| 2-1352 * | BLZ 801 | Replaced valve PI-V-X268 | Piping | RF96 Summary Report ** |
| 2-1353 | BLX 101 | Replaced 18" Service Water (SW) pipe piece near valve SW-PCV-38B - See Plan No 2-1342 | Piping | RF97 Summary Report |
| 2-1355 | BLZ 302 | Removed pads associated with support SW-6 near valve SW-PCV-38B | Piping | RF97 Summary Report |
| 2-1363 * | BZX 901 | Installed U bolt for valve IR-V-IR84/V10 (RPS-V-IR84/2A) | Support | RF97 Summary Report |
| 2-1366 | BTH 901 | Installed U bolt for support B-220-1033-16 for PI(1)-4S-X86b | Support | RF97 Summary Report |
| 2-1367 | BTH 902 | Installed U bolt for support B-220-1027-36 for PI(1)-4S-X87b | Support | RF97 Summary Report |
| 2-1368 | C 875 WE | Refurbished relief valve S/N N 56790-00-0049 | Relief Valve | RF97 Summary Report |
| 2-1369 | C 875 WE | Refurbished relief valve S/N N 56790-00-0053 | Relief Valve | RF97 Summary Report |
| 2-1370 | C 875 WE | Refurbished relief valve S/N N 56790-00-0056 | Relief Valve | RF97 Summary Report |
| 2-1371 | C 875 WE | Refurbished relief valve S/N N 56790-00-0060 | Relief Valve | RF97 Summary Report |
| 2-1372 | C 875 WE | Refurbished relief valve S/N N 56790-00-0124 | Relief Valve | RF97 Summary Report |
| 2-1373 | C 875 WE | Refurbished relief valve S/N N 56790-00-0136 | Relief Valve | RF97 Summary Report |
| 2-1374 | C 875 WE | Refurbished relief valve S/N N 56790-00-0137 | Relief Valve | RF97 Summary Report |
| 2-1375 | C 875 WE | Refurbished relief valve S/N N 56790-00-0139 | Relief Valve | RF97 Summary Report |
| 2-1377 | BKD 201. | Replaced valve SW-V-47 | Piping | RF97 Summary Report |
| 2-1380 * | VC 9601 | Replaced valve CSP-V-67 | Piping | RF97 Summary Report |
| 2-1382 | DBM 406 | Removed valve MS-V-5 | Piping | RF97 Summary Report |
| 2-1383 * | CFK 201 | Installed external bypass for pressure locking for valve RHR-V-42B | Valve | RF97 Summary Report |

# ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR WNP-2
## REFUELING OUTAGE RF97

| PLAN NO | WO NO | COMPONENT NUMBER AND WORK DESCRIPTION | CODE COMP | R&R REPORTED IN |
|---|---|---|---|---|
| 2-1384 * | CFT 401 | Installed external bypass for pressure locking for valve RCIC-V-13 | Valve | RF97 Summary Report |
| 2-1388 | FNW 301 | Prefabricated flush connection for valve FDR-V-3 and valve FDR-V-4 - See Plan No 2-1437 | Piping | RF97 Summary Report |
| 2-1390 * | DGV 002 | Prefabricated drain line for Service Water Loop A with valve SW-V-694A | Piping | RF97 Summary Report |
| 2-1390 * | DGV 005 | Non outage - Installed drain line for Service Water Loop A with valve SW-V-694A | Piping | RF97 Summary Report |
| 2-1390 * | DL 5001 | Outage - Installed drain line for Service Water Loop A with valve SW-V-694A | Piping | RF97 Summary Report |
| 2-1391 * | DGV 202 | Prefabricated drain line for Service Water Loop B with valve SW-V-694B | Piping | RF97 Summary Report |
| 2-1391 * | DGV 205 | Non outage - Installed drain line for Service Water Loop B with valve SW-V-694B | Piping | RF97 Summary Report |
| 2-1391 * | DL 5201 | Outage - Installed drain line for Service Water Loop B with valve SW-V-694B | Piping | RF97 Summary Report |
| 2-1397 | DDD 501 | Replaced valve SLC-V-16 | Piping | RF97 Summary Report |
| 2-1398 * | DGW 901 | Replaced valve PI-V-X269 - First Replacement | Piping | RF97 Summary Report |
| 2-1399 * | BTP 701 | Prefabricated Service Water (SW) piping for seal cooler RHR-HX-2B | Piping | RF97 Summary Report |
| 2-1399 * | BTP 702 | Replaced Service Water (SW) piping for seal cooler RHR-HX-2B | Piping | RF97 Summary Report |
| 2-1400 | CBK 502 | Replaced relief valve MS-RV-2A with spare S/N N63790-00-0053 | Piping | RF97 Summary Report |
| 2-1401 | CBK 602 | Replaced relief valve MS-RV-3A with spare S/N N63790-00-0056 | Piping | RF97 Summary Report |
| 2-1402 | CBK 702 | Replaced relief valve MS-RV-4A with spare S/N N63790-00-0136 | Piping | RF97 Summary Report |
| 2-1403 | CBK 802 | Replaced relief valve MS-RV-1B with spare S/N N63790-00-0139 | Piping | RF97 Summary Report |
| 2-1404 | CBK 404 | Replaced relief valve MS-RV-2B with spare S/N N63790-00-0047 | Piping | RF97 Summary Report |
| 2-1405 | CBK 204 | Replaced relief valve MS-RV-4C with spare S/N N63790-00-0137 | Piping | RF97 Summary Report |
| 2-1406 | CBK 904 | Replaced relief valve MS-RV-5C with spare S/N N63790-00-0060 | Piping | RF97 Summary Report |
| 2-1407 | CBL 002 | Replaced relief valve MS-RV-1D with spare S/N N63790-00-0049 | Piping | RF97 Summary Report |
| 2-1408 | CBL 102 | Replaced relief valve MS-RV-2D with spare S/N N63790-00-0124 | Piping | RF97 Summary Report |
| 2-1410 * | DDR 709 | Prefabricated assembly with valves RWCU-V-607 and RWCU-V-608 | Piping | RF97 Summary Report |
| 2-1410 * | DDR 701 | Installed assembly with valves RWCU-V-607 and RWCU-V-608 | Piping | RF97 Summary Report |
| 2-1414 | FGP 701 | Modified outlet flange for relief valve RHR-RV-25B | Relief Valve | RF97 Summary Report |
| 2-1415 | DLP 002 | Replaced relief valve RHR-RV-25B | Piping | RF97 Summary Report |
| 2-1416 | FGP 801 | Modified outlet flange for relief valve RHR-RV-25C | Relief Valve | RF97 Summary Report |
| 2-1418 | DKJ 901 | Replaced mechanical seal (gland plate) for pump FPC-P-1A | Pump | RF97 Summary Report |
| 2-1419 * | DDF 601 | Modified bonnet vent line for valve RRC-V-67A | Piping | RF97 Summary Report |
| 2-1420 * | DWK 101 | Modified seal staging line for pump RRC-P-1B | Piping | RF97 Summary Report |
| 2-1421 | DNK 702 | Replaced relief valve SLC-RV-29A | Piping | RF97 Summary Report |
| 2-1422 | DNK 802 | Replaced relief valve SLC-RV-29B | Piping | RF97 Summary Report |
| 2-1423 | FCG 201 | Installed vent/test connection for tank MS-TK-1A | Piping | RF97 Summary Report |
| 2-1424 | FCG 202 | Installed vent/test connection for tank MS-TK-1B | Piping | RF97 Summary Report |
| 2-1425 | FCG 203 | Installed vent/test connection for tank MS-TK-1C | Piping | RF97 Summary Report |
| 2-1426 | FCG 204 | Installed vent/test connection for tank MS-TK-1D | Piping | RF97 Summary Report |
| 2-1427 | FCG 205 | Installed vent/test connection for tank MS-TK-2A | Piping | RF97 Summary Report |
| 2-1428 | FCG 206 | Installed vent/test connection for tank MS-TK-2B | Piping | RF97 Summary Report |
| 2-1429 | FCG 207 | Installed vent/test connection for tank MS-TK-2C | Piping | RF97 Summary Report |
| 2-1430 | FCG 208 | Installed vent/test connection for tank MS-TK-2D | Piping | RF97 Summary Report |
| 2-1432 * | DBL 208 | Replaced bonnet for valve RCIC-V-76 | Valve | RF97 Summary Report |
| 2-1433 * | DGR 901 | Replaced valve RRC-V-19 | Piping | RF97 Summary Report |
| 2-1434 * | DGR 801 | Replaced valve PSR-V-X77A/3 | Piping | RF97 Summary Report |
| 2-1435 * | DFG 101 | Replaced valve PSR-V-X77A/4 | Piping | RF97 Summary Report |
| 2-1436 * | DFG 106 | Modified support for valve PSR-V-X77A/4 | Piping | RF97 Summary Report |
| 2-1437 | DBT 703 | Installed flush connection for valve FDR-V-3 and valve FDR-V-4 - See Plan No 2-1388 | Piping | RF97 Summary Report |
| 2-1438 | FZK 102 | Replaced parts for valve SLC-V-4A | Valve | RF97 Summary Report |
| 2-1439 | DDS 202 | Replaced pipe plug for cooling coil DMA-CC-21 - Upper and lower | Cooling Coil | RF97 Summary Report |
| 2-1440 | DDS 302 | Replaced pipe plug for cooling coil DMA-CC-22 | Cooling Coil | RF97 Summary Report |
| 2-1441 | DVG 704 | Replaced pipe plug for cooling coil DMA-CC-31 - Upper | Cooling Coil | RF97 Summary Report |
| 2-1442 | DDS 702 | Replaced pipe plug for cooling coil WMA-CC-52B/1 | Cooling Coil | RF97 Summary Report |

APPENDIX B

ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR WNP-2
REFUELING OUTAGE RF97

| PLAN NO | WO NO | COMPONENT NUMBER AND WORK DESCRIPTION | CODE COMP | R&R REPORTED IN |
|---|---|---|---|---|
| 2-1443 | DDS 803 | Replaced pipe plug for cooling coil WMA-CC-53B/1 - Lower | Cooling Coil | RF97 Summary Report |
| 2-1446 | DVG 601 | Replaced pipe plug for cooling coil RRA-CC-3 | Cooling Coil | RF97 Summary Report |
| 2-1447 * | DDT 201 | Removed instrument line for valve RCIC-V-66 | Tubing | RF97 Summary Report |
| 2-1448 | DVH 901 | Installed restriction orifice SW-RO-13A | Piping | RF97 Summary Report |
| 2-1449 | DVJ 101 | Installed restriction orifice SW-RO-13B | Piping | RF97 Summary Report |
| 2-1453 | FXW 501 | Cut and rewelded welds associated with SW-FI-8A | Piping | RF97 Summary Report |
| 2-1454 | GGJ 401 | Made body to bonnet seal weld for valve CIA-V-20 | Valve | RF97 Summary Report |
| 2-1455 | DGR 812 | Cut and rewelded valve RRC-V-14B | Piping | RF97 Summary Report |
| 2-1456 | DDG 160 | Replaced bolting material for piping flange joints associated with heat exchanger EDR-HX-1 | Piping | RF97 Summary Report |
| 2-1457 | DKK 101 | Replaced pipe clamp for support RFW-180 | Support | RF97 Summary Report |
| 2-1458 | DLH 202 | Replaced relief valve RHR-RV-25C | Piping | RF97 Summary Report |
| 2-1459 | GHF 303 | Replaced relief valve RCC-RV-34A | Piping | RF97 Summary Report |
| 2-1460 | FVL 702 | Replaced relief valve FPC-RV-117A | Piping | RF97 Summary Report |
| 2-1461 | GJB 502 | Replaced relief valve FPC-RV-117B | Piping | RF97 Summary Report |
| 2-1463 * | GJZ 501 | Replaced valve CIA-V-23 | Piping | RF97 Summary Report |
| 2-1466 | GHF 401 | Machined surface defects on disc seating surface for valve CSP-V-800/1 | Valve | RF97 Summary Report |
| 2-1467 * | GHP 201 | Replaced valve PSR-V-X77A/2 | Piping | RF97 Summary Report |
| 2-1468 * | GHP 205 | Modified support for valve PSR-V-X77A/2 | Piping | RF97 Summary Report |
| 2-1470 | CBK 502 | Replaced studs and nuts for flanged joint for flex hose CIA-FLX-1A | Piping | RF97 Summary Report |
| 2-1471 | DLH 210 | Replaced disc and nozzle for relief valve RHR-RV-25C | Relief Valve | RF97 Summary Report |
| 2-1472 | GKJ 901 | Installed weir plate (dam) for valve CSP-V-2 | Piping | RF97 Summary Report |
| 2-1473 | CBL 207 | Replaced U bolt for support CIA-4132-14 | Support | RF97 Summary Report |
| 2-1474 | DVG 707 | Replaced pipe plug for cooling coil DMA-CC-31 - Lower | Cooling Coil | RF97 Summary Report |
| 2-1478 * | GNX 901 | Installed pipe nipple and flange for relief valve REA-RV-1 | Piping | RF97 Summary Report |
| 2-1479 * | CG 001 | Installed studs and nuts for relief valve RWCU-RV-1 (RWCU-HX-1C) inlet joint | Heat Exchanger | RF97 Summary Report |
| 2-1480 * | GVC 001 | Replaced valve PI-V-X269 - Second Replacement | Piping | RF97 Summary Report |
| N/A | TG 9806 * | Deleted Hydraulic (HY) process piping | Piping | RF96 Summary Report ** |
| N/A | DBM 405 | Deleted snubber for support MS-2619-13 | Support | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubber for support RHR-20 | Support | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubber for support MS-145 | Support | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubber for support SLC-4475-21 | Support | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubber for support RRC-1549-62 | Support | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubber for support MS-1368-12 | Support | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubbers for supports MS-96(Top), MS-96(Bottom) and MS-114(South) | Supports | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubbers for supports MS-27(Top), MS-27(Bottom), MS-38(Top), | Supports | RF97 Summary Report |
| N/A | DKK 101 | MS-1002N(North) and MS-1002N(South) | Supports | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubbers for supports MS-162(Top), MS-148, MS-177(South), MS-177(North) | Supports | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubbers for supports MS-996(Top) and MS-996N(Bottom) | Supports | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubbers for supports MS-167(Top) and MS-167(Bottom) | Supports | RF97 Summary Report |
| N/A | DKK 101 | Replaced snubbers for supports MS-998(North) and MS-998N(South) | Supports | RF97 Summary Report |
| N/A | DDG 111 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 50-19 *** | CRD | RF97 Summary Report |
| N/A | DDG 112 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 54-47 *** | CRD | RF97 Summary Report |
| N/A | DDG 113 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 06-35 *** | CRD | RF97 Summary Report |
| N/A | DDG 114 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 14-31 *** | CRD | RF97 Summary Report |
| N/A | DDG 115 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 38-47 *** | CRD | RF97 Summary Report |
| N/A | DDG 116 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 42-07 *** | CRD | RF97 Summary Report |
| N/A | DDG 117 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 50-47 *** | CRD | RF97 Summary Report |
| N/A | DDG 118 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 54-19 *** | CRD | RF97 Summary Report |
| N/A | DDG 119 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 54-23 *** | CRD | RF97 Summary Report |
| N/A | DDG 120 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 54-27 *** | CRD | RF97 Summary Report |
| N/A | DDG 121 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 58-31 *** | CRD | RF97 Summary Report |
| N/A | DDG 122 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 06-27 *** | CRD | RF97 Summary Report |

## ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR WNP-2 REFUELING OUTAGE RF97

| PLAN NO | WO NO | COMPONENT NUMBER AND WORK DESCRIPTION | CODE COMP | R&R REPORTED IN |
|---|---|---|---|---|
| N/A | DDG 123 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 58-27 *** | CRD | RF97 Summary Report |
| N/A | DDG 124 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 18-55 *** | CRD | RF97 Summary Report |
| N/A | DDG 125 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 38-59 *** | CRD | RF97 Summary Report |
| N/A | DDG 126 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 54-43 *** | CRD | RF97 Summary Report |
| N/A | DDG 127 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 38-31 *** | CRD | RF97 Summary Report |
| N/A | DDG 128 | Replaced one (1) Control Rod Drive (CRD) at Core Location No 38-35 *** | CRD | RF97 Summary Report |

NOTES -

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

** Revised NIS-2 forms for these ASME Section XI work plans.

*** Replaced cap screws for each Control Rod Drive (CRD) bolted flanged connection. Eight (8) cap screws for each core location.

PLAN No 2-0994
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/17/96
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Recirculation Cooling (RRC) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 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-P-1A | Bingham* | B 2 1034 | 134 | N/A | 1974 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Installed conversion rings for connections "A" and "B" on the spare stuffing box. The spare stuffing box was previously removed from pump RRC-P-1A. The replacement work was performed as follows:

1) Installed new conversion ring for connection "A"
2) Tack welded the new conversion ring to connection "A"
3) Performed visual examination on the final tack welds. Visual examination results acceptable
4) Installed new conversion ring for connection "B"
5) Tack welded the new conversion ring to connection "B"
6) Performed visual examination on the final tack welds. Visual examination results acceptable

**NOTES -**

1) * Bingham-Willamette Company

**REVISION -**

1) ** Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-0994
REVISED

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

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

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 7/3/97 Date 7/15/97

### 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 Commissions _____
Inspector's Signature National Board, State, and Endorsements
Date _____

PLAN No 2-1150

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 11/23/96
**Sheet:** 1 of 1
**Unit:** WNP-2

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

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| SW(22)-2 | BF Shaw | SW(22)-2-9 | N/A | N/A | 1979 | Replacement | Yes, Code Class 3 |

**7. Description Of Work Performed:** Replaced bolting material for pipe to valve SW-V-165B flanged joints. The replacement work was performed as follows:

1) Removed existing studs and nuts for pipe to valve SW-V-165B inlet flanged joint.
2) Installed twenty four (24) new studs and twenty four (24) new nuts for pipe to valve SW-V-165B inlet flanged joint.
3) Removed existing studs and nuts for pipe to valve SW-V-165B outlet flanged joint.
4) Installed twenty four (24) new studs and twenty four (24) new nuts for pipe to valve SW-V-165B outlet flanged joint.

PLAN No 2-1150

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 11/25/96 — Date 11/25/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10/1/95 to 12/2/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486 7486W WB'ZS FS — National Board, State, and Endorsements

Date 12/2/96

PLAN No 2-1153

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:** 6/18/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Diesel Oil (DO) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   **(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| DO(1)-1B | WPPSS | DO(1)-1B-P1 | N/A | N/A | 1983 | Repaired | Yes, Code Class 3 |

7. **Description Of Work Performed:** Repaired leaking threaded joint at tank DO-TK-3B. The repair work was performed as follows:
   1) Cut/ground existing pipe to tee socket weld.
   2) Removed the existing pipe piece.
   3) Reinstalled the existing pipe piece.
   4) Made required socket weld.
   5) Performed magnetic particle (MT) examination on the final socket weld. Magnetic particle (MT) examination results acceptable..
   6) 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 magnetic particle (MT) examination on the final socket weld was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.
2) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.

PLAN No 2-1153

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: 13.5 Psig — Test Temperature: 68° F

Component Design Pressure: 100 Psig — Temperature: 120° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 10-1-95 to 6-23-97 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.

[signature] — Inspector's Signature

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

Date 6/23/97

PLAN No 2-1197

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:** 11/23/96
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Main Steam (MS) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| Spare Valve | Crosby | N63790-00-0047 | N/A | N/A | 1981 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Refurbished spare main steam relief valve, Serial No N63790-00-0047. The refurbishment work was performed as follows:

1) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
2) Replaced one (1) stud for the relief valve inlet joint.
3) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable.
5) Performed VT-3 visual examination on the exposed surfaces of the existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
6) Performed VT-3 visual examination on the exposed surfaces of the existing bolts for the relief valve outlet joint. VT-3 visual examination results acceptable.
7) 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 the pressure test. The relief valve body to bonnet joint was retested by performing VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the second pressure test.

PLAN No 2-1197

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:** 7.1 Psig **Test Temperature:** 75° F

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

**9. Remarks:** Pneumatic pressure test on the relief valve body to bonnet joint

### CERTIFICATE OF COMPLIANCE

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

**Type Code Symbol Stamp:** Not Applicable

**Certificate Of Authorization No.:** Not Applicable

**Expiration Date:** Not Applicable

**Prepared By** Kuldip Singh **Signed By** [signature]

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

**Date** 11/28/96 **Date** 11/25/96

### CERTIFICATE OF INSERVICE INSPECTION

*I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of* Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 10-1-95 *to* 12/2/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] **Commissions** 7486W 7486 NISP-IS

Inspector's Signature National Board, State, and Endorsements

**Date** 12/2/96

PLAN No 2-1231
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Containment Vessel Penetrations For Hydraulic (HY) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 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 |
|---|---|---|---|---|---|---|---|
| Containment Vessel | PDM | 12764 | 790 | N/A | 1976 | Replacement | Yes, Code Class MC |

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

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

**REVISION -**
1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1231
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/3/97 — Date 7/15/97

### 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 2-1232
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Containment Vessel Penetrations For Hydraulic (HY) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989* Edition with no Addenda, Code Case: N-236-1
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

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

**7. Description Of Work Performed:** Installed cover plates (plugs) for the existing Containment Vessel Penetrations X76b, X76c, X76e and X76f. The replacement work was performed as follows:

1) Installed cover plates (plugs) for each of the existing Containment Vessel Penetrations
2) Made required welds
3) Performed visual examination on the final welds. Visual examination results acceptable
4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable
5) Performed VT-2 visual examination in conjunction with Local Leak Rate Test (LLRT) to confirm pressure boundary integrity of the welded joints. No evidence of leakage during the pressure test

**NOTES -**

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

**REVISION -**

1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1232
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: See Below
Component Design Pressure: 45 Psig

Test Temperature: See Below
Temperature: 340° F

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

### CERTIFICATE OF COMPLIANCE

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

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

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

Signed By
Supervisor, Materials And Welding

Date 7/3/97

Date 7/15/97

### 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 2-1233
REVISED

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Containment Vessel Penetrations For Hydraulic (HY) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989* Edition with no Addenda, Code Case: N-236-1
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

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

**7. Description Of Work Performed:** Installed cover plates (plugs) for the existing Containment Vessel Penetrations X77b, X77c, X77e and X77f. The replacement work was performed as follows:

1) Installed cover plates (plugs) for each of the existing Containment Vessel Penetrations
2) Made required welds
3) Performed visual examination on the final welds. Visual examination results acceptable
4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable
5) Performed VT-2 visual examination in conjunction with Local Leak Rate Test (LLRT) to confirm pressure boundary integrity of the welded joints. No evidence of leakage during the pressure test

**NOTES -**

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

**REVISION -**

1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1233
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

### CERTIFICATE OF COMPLIANCE

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

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

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

Signed By
Supervisor, Materials And Welding

Date 7/3/97 Date 7/15/97

### 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 2-1271

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 3/31/97
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Building Closed Cooling (RCC) 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 |
|---|---|---|---|---|---|---|---|
| RCC(5)-2 | WPPSS | RCC(5)-2-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| RCC-RV-34B | Lonergan | 307469-1-2 | N/A | N/A | 1975 | Replaced | Yes, Code Class 3 |
| RCC-RV-34B | Lonergan | 137916-2-2 | N/A | N/A | 1994 | Replacement | Yes, Code Class 3 |

**7. Description Of Work Performed:** Replaced existing relief valve RCC-RV-34B. The replacement work was performed as follows:
1) Removed existing relief valve RCC-RV-34B, Serial No 307469-1-2.
2) Installed new replacement relief valve RCC-RV-34B, Serial No 137916-2-2.

**NOTES -**
1) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Reactor Building Closed Cooling (RCC) piping system.
2) ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda for the new replacement relief valve RCC-RV-34B, Serial No 137916-2-2.

PLAN No 2-1271

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 new replacement relief valve RCC-RV-34B, Serial No 137916-2-2.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By Carl M Zeng — Supervisor, Materials And Welding

Date 3/31/97 — Date 3/31/97

### 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 2/28/97 to 4/30/97 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 7486W/7486 WBJIS

National Board, State, and Endorsements

Date 4/30/97

PLAN NO. 2-1271

# FORM NV-1 CERTIFICATE HOLDER'S 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)

Rudolph Engr's 3/30/92

2. Manufactured for Washington Public Power Supply System, Accts. Pay. MD 055, P.O. Box 968, Richland, WA 99352-0968 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHSE Complex, Whse. #1, North Power Plant Loop, Richland, WA 99352 (name and address)

4. Valve NJL14J-D21-DG0265 (model no., series no.) Orifice size 0.312 (in.) Nom. inlet size 3/4" (in.) Outlet size 1" (in.)

5. ASME Code, Section III, Division 1: 1971 (edition) Winter 1971 (addenda date) 3 (class) N/A (Code Case no.)

6. Type Spring (spring, pilot or power operated) 265 (set pressure, psig) N/A (blowdown, psi) 100° F (rated temp.) 397 (hydro. test, psig, inlet) at 33 °F

7. Identification 137916-2-1 through 137916-2-2 (Cert. Holder's serial no.) N/A (CRN) A930298 Rev. 1 (drawing no.) N/A (Nat'l. Bd. no.) 1994 (year built)

8. Control ring settings N/A

RCC-RV-34B, S/N 137916-2-2

9. Pressure retaining items:

| | Serial No. or Identification | Mat'l. Spec., Including Type or Grade | Tensile Strength |
|---|---|---|---|
| ~~XXXX~~Compression Screw | 34601 | SA-479 TY 316 | 75 ksi |
| Bonnet ~~XXXXXX~~ (Assy.) | A6139-C472, -C473 / | SA-216 WCB | 70 ksi |
| ~~XXXXXXXXXX~~ | 701093 / 841TNT | SA-479 TY 316 / SA-105 | 75 ksi / 70 ksi |
| ~~XXXXX~~ Guide Pin | 35486 | SA-479 TY 316 | 75 ksi |
| Disk | 9E6313 | SA-479 TY 316 | 75 ksi |
| Spring ~~XXXXXX~~Step | 30340 | SA-479 TY 316 | 75 ksi |
| ~~XXXXXXXXXXXXXX~~Base Assy | J1579-6, -16 / | SA-351 CF8M | 70 ksi |
| ~~XXXXXX~~ | 36560-6/38062 / 840TNF | SA-479 TY 316 / SA-105 | 75 ksi / 70 ksi |
| Spring | 8E6170 | A-313 TY 316 | * |
| ~~XXXX~~Gag Plug Screw | 39883 | SA-479 TY 316 | 75 ksi |
| ~~XXXXXXXX~~ Cap | 701632 | SA-479 TY 316 | 75 ksi |
| Stem | 9E6313 | SA-479 TY 316 | 75 ksi |

10. Relieving capacity 11,800 lb./hr. (23.6 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 ND-2000 but meets design requirements of ND-3595.

## 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 5-24-94 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.

137916-2-1 through

Certificate Holder's Serial No. 137916-2-2

## 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 MAY 25 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 5-24-94 Signed [signature] (Authorized Inspector) Commissions NB 7444 (NB/ID), Ind 84D (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

0126067000149

PLAN No 2-1279

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 8/29/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Controlled Chilled Water (CCH) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 3, 1977 Edition with Summer 1977 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 | N63032-00-0059 | N/A | N/A | 1995 | Replacement | Yes, Code Class 3 |

**7. Description Of Work Performed:** Replaced parts for spare relief valve Serial No N63032-00-0059. The replacement work was performed as follows:

1) Removed existing spring from the spare relief valve
2) Installed new spring in the spare relief valve
3) Removed existing spring washers from the spare relief valve
4) Installed new spring washers in the spare relief valve

**NOTES -**

1) ASME Section III, Code Class 3, 1977 Edition with Summer 1977 Addenda for the spare relief valve Serial No N63032-00-0059
2) The spare relief valve Serial No N63032-00-0059 will be used in the future as CCH-RV-2A or CCH-RV-2B

PLAN No.2-1279

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 N63032-00-0059

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/29/96 — Date 8/30/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 7-23-96 to 10-3-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486-7486a NJSE-IS — National Board, State, and Endorsements

Date 10/3/96

PLAN NO. 2-1279.

CROSBY

# CROSBY VALVE & GAGE COMPANY
## WRENTHAM, MA

PLAN No. 2-1279
Philip Sauer 2/27/50

Q.C.-44D-1A
SHEET 1 OF 2

*FORM NV-1, N CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES*
*As Required by the Provisions of the ASME Code, Section III, Division 1*

1. Manufactured by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address of N Certificate Holder)
Crosby Factory Order No. NV5000273 Customer Order No. 243528

2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY RICHLAND,WA 99352
(Name and Address of Purchaser or Owner)

3. Location of Installation NORTH POWER PLANT LOOP RICHLAND,WA 99352
(Name and Address)

4. -- (CRN) DS-C-B63032 REV.B (Drawing No.) – (Nat'l Brd. No.) 1995 (Year Built)

5. Valve JMB-WR (Model No., Series No.) Identifying Nos. N63032-00-0059 (N Certificate Holder's Serial No.)
Type RELIEF Valve I.D./Tag No. SPARE

Orifice Size 0.327 Inch Nominal Inlet Size 3/4 Inch Outlet Size 1 Inch

6. Set Pressure 150 105 F
Rated Relieving Temperature
Stamped Capacity 18 GPM WTR @70 DEG. @ 10 % Overpressure — Blowdown (psig) 10 % OF SP
Hydrostatic Test (psig) Inlet 225 Outlet 100
(Applicable to Valves for Closed Systems Only)

PRESSURE RETAINING PIECES SPARE VALVE FOR CCH-RV-2A OR CCH-RV-2B.

| | Serial No. Identification | Material Specification Including Type or Grade |
|---|---|---|
| a. Castings | | |
| Body | — | — |
| Bonnet | — | — |
| b. Bar Stock & Forgings | | |
| Nozzle | — | — |
| Disc | N93001-38-0180 | ASME SA479 T316 |
| Spring Washers | N91098-40-4503<br>N91098-40-4504 | ASME SA479 T410 |
| Adjusting Bolt | N92379-69-0621 | ASME SA193 GR.B6 |
| Spindle | N90221-47-0880 | ASME SA193 GR.B6 |
| c. Spring | NX2797-1001 | ASTM A229 CL.1 |
| d. Bolting | — | — |
| e. Other Pieces | | |
| BASE | N92799-40-0110 | ASME SA479 T316 |
| CYLINDER | N93004-35-0092 | ASME SA216 GR.WCB |

FC. 5/1

## 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 1977 (Date) Edition, Addenda SUMMER 1977 (Date), Code Case No.-_____.

Class 3

Date 2 May 95 Signed Crosby Valve & Gage Company (N Certificate Holder) by Lawrence [illegible]

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires 30 SEP 95 (Date).

## CERTIFICATE OF DESIGN

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

Design specifications certified by* VENKATACHALAN MANI
PE State WA Reg No. 15065
Stress Report Certified by* ---
PE State --- Reg No. ---

*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 * Arkwright Mutual Insurance Co. of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on May 2, 1995 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.

Factory Mutual Systems

Date 5/2, 1995.

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

*Factory Mutual System

PLAN No 2-1280

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/29/96
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Controlled Chilled Water (CCH) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 3, 1977 Edition with Summer 1977 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 | N63032-00-0060 | N/A | N/A | 1995 | Replacement | Yes, Code Class 3 |

**7. Description Of Work Performed:** Replaced parts for spare relief valve Serial No N63032-00-0060. The replacement work was performed as follows:

1) Removed existing spring from the spare relief valve
2) Installed new spring in the spare relief valve
3) Removed existing spring washers from the spare relief valve
4) Installed new spring washers in the spare relief valve

**NOTES**

1) ASME Section III, Code Class 3, 1977 Edition with Summer 1977 Addenda for the spare relief valve Serial No N63032-00-0060
2) The spare relief valve Serial No N63032-00-0060 will be used in the future as CCH-RV-2A or CCH-RV-2B

PLAN No 2-1280

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 N63032-00-0060

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By Carl M Kenny — Supervisor, Materials And Welding

Date 9/6/96 — Date 9/6/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 7-23-96 to 10-3-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions 7486, 7485AW, NB5B-FS

National Board, State, and Endorsements

Date 10/3/96

PLAN NO 2-1204

CROSBY

# CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

Philip Eng 8/29/96

Q.C.-44D-1A
SHEET 1 OF 2

## FORM NV-1, N CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES
*As Required by the Provisions of the ASME Code, Section III, Division 1*

1. Manufactured by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address of N Certificate Holder)
Crosby Factory Order No. NV5000273 Customer Order No. 243528

2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY RICHLAND,WA 99352
(Name and Address of Purchaser or Owner)

3. Location of Installation NORTH POWER PLANT LOOP RICHLAND,WA 99352
(Name and Address)

4. – (CRN) DS-C-B63032 REV.B (Drawing No.) – (Nat'l Brd. No.) 1995 (Year Built)

5. Valve JMB-WR (Model No., Series No.) Identifying Nos. N63032-00-0060 (N Certificate Holder's Serial No.)
Type RELIEF Valve I.D./Tag No. SPARE

Orifice Size 0.327 Inch Nominal Inlet Size 3/4 Inch Outlet Size 1 Inch

6. Set Pressure 150 105 F
Rated Relieving Temperature
Stamped Capacity 18 GPM WTR @70 DEG. @ 10 % Overpressure – Blowdown (psig) 10 % OF SP
Hydrostatic Test (psig) Inlet 225 Outlet 100
(Applicable to Valves for Closed Systems Only)

PRESSURE RETAINING PIECES SPARE VALVE FOR CCH-RV-2A OR CCH-RV-2B.

| | Serial No. Identification | Material Specification Including Type or Grade |
|---|---|---|
| a. Castings | | |
| Body | – | – |
| Bonnet | – | – |
| b. Bar Stock & Forgings | | |
| Nozzle | – | – |
| Disc | N93001-38-0178 | ASME SA479 T316 |
| | N91098-40-4505 | |
| Spring Washers | N91098-40-4506 | ASME SA479 T410 |
| Adjusting Bolt | N92379-70-0626 | ASME SA193 GR.B6 |
| Spindle | N90221-47-0885 | ASME SA193 GR.B6 |
| c. Spring | NX2797-0998 | ASTM A229 CL.1 |
| d. Bolting | – | – |
| e. Other Pieces | | |
| BASE | N92799-40-0111 | ASME SA479 T316 |
| CYLINDER | N93004-35-0091 | ASME SA216 GR.WCB |

P 5/19.

## 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 1977 Edition, (Date)
Addenda SUMMER 1977 (Date), Code Case No.-_____.

Class 3

Date 2 May 95 Signed Crosby Valve & Gage Company (N Certificate Holder) by [signature]

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires 30 SEP 95 (Date).

## CERTIFICATE OF DESIGN

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

Design specifications certified by* VENKATACHALAN MANI
PE State WA Reg No. 15065
Stress Report Certified by* —
PE State — Reg No. —

*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 * Arkwright Mutual Insurance Co. of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on May 2, 1995 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.

Factory Mutual Systems

Date 5/2, 1995.

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

*Factory Mutual System

PLAN No 2-1281

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:** 11/23/96
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** 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(1)-2 * | WPPSS | SW(1)-2-P1 * | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| CCH-RV-2A | Crosby | N63032-00-0046 | N/A | N/A | 1980 | Replaced | Yes, Code Class 3 |
| CCH-RV-2A | Crosby | N63032-00-0060 | N/A | N/A | 1995 | Replacement | Yes, Code Class 3 |

**7. Description Of Work Performed:** Replaced existing relief valve CCH-RV-2A. The replacement work was performed as follows:
1) Removed existing relief valve CCH-RV-2A, Serial No N63032-00-0046.
2) Installed new relief valve CCH-RV-2A, Serial No N63032-00-0060.

**NOTES -**
1) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system.
2) ASME Section III, Code Class 3, 1977 Edition with Summer 1977 Addenda for the new relief valve CCH-RV-2A, Serial No N63032-00-0060.
3) * Relief valve CCH-RV-2A is on line number CCH(54)-1. The piping for line number CCH(54)-1 was installed under piping line number SW(1)-2.

PLAN No 2-1281

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 new relief valve CCH-RV-2A, Serial No N63032-00-0060

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 11/28/96 Date 11/25/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 7-22-96 to 12/2/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486 W 7486 NIS B IS — National Board, State, and Endorsements

Date 12/2/96

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN NO. 2-1281
CCH-RV-2A

Q.C.-44D-1A
SHEET 1 OF 2

## FORM NV-1, N CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES
*As Required by the Provisions of the ASME Code, Section III, Division 1*

1. Manufactured by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093
(Name and Address of N Certificate Holder)
Crosby Factory Order No. NV5000273 Customer Order No. 243528

2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY RICHLAND,WA 99352
(Name and Address of Purchaser or Owner)

3. Location of Installation NORTH POWER PLANT LOOP RICHLAND,WA 99352
(Name and Address)

4. — (CRN) DS-C-B63032 REV.B (Drawing No.) — (Nat'l Brd. No.) 1995 (Year Built)

5. Valve JMB-WR (Model No., Series No.) Identifying Nos. N63032-00-0060 (N Certificate Holder's Serial No.)
Type RELIEF Valve I.D./Tag No. SPARE

Orifice Size 0.327 Inch Nominal Inlet Size 3/4 Inch Outlet Size 1 Inch

6. Set Pressure 150 105 F
Rated Relieving Temperature
Stamped Capacity 18 GPM WTR @70 DEG. @ 10 % Overpressure — Blowdown (psig) 10 % OF SP
Hydrostatic Test (psig) Inlet 225 Outlet 100
(Applicable to Valves for Closed Systems Only)

PRESSURE RETAINING PIECES

| | Serial No. Identification | Material Specification Including Type or Grade |
|---|---|---|
| a. Castings | | |
| Body | — | — |
| Bonnet | — | — |
| b. Bar Stock & Forgings | | |
| Nozzle | — | — |
| Disc | N93001-38-0178 | ASME SA479 T316 |
| | N91098-40-4505 | |
| Spring Washers | N91098-40-4506 | ASME SA479 T410 |
| Adjusting Bolt | N92379-70-0626 | ASME SA193 GR.B6 |
| Spindle | N90221-47-0885 | ASME SA193 GR.B6 |
| c. Spring | NX2797-0998 | ASTM A229 CL.1 |
| d. Bolting | — | — |
| e. Other Pieces | | |
| BASE | N92799-40-0111 | ASME SA479 T316 |
| CYLINDER | N93004-35-0091 | ASME SA216 GR.WCB |

P 5/1/95

## 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 1977 Edition, (Date) Addenda SUMMER 1977, Code Case No.-. (Date)

Class 3

Date 2 May 95 Signed Crosby Valve & Gage Company by [signature]
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires 30 SEP 95.
(Date)

## CERTIFICATE OF DESIGN

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

Design specifications certified by* VENKATACHALAN MANI
PE State WA Reg No. 15065
Stress Report Certified by* —
PE State — Reg No. —

*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 * Arkwright Mutual Insurance Co. of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on May 2, 1995 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.

Factory Mutual Systems

Date 5/2, 1995.

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

*Factory Mutual System

PLAN No 2-1282

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:** 5/28/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: N-496
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| Spare Valve | Crosby | N63790-00-0047 | N/A | N/A | 1981 | Repair/ Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Installed Helical-Coil threaded insert for the outlet (discharge) side of the valve body for the spare Main Steam Relief Valve (MSRV) Serial No N63790-00-0047. The repair/replacement work was performed as follows:
   1) Drilled out the damaged bolt hole.
   2) Tapped the bolt hole.
   3) Installed Helical-Coil threaded insert in the bolt hole.

PLAN No 2-1282

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/replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 5/28/97 — Date 5/28/97

### 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 1/28/97 to 5/30/97 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.

[signature] — Inspector's Signature

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

Date 5/30/97

PLAN No 2-1289
REVISED

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

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

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| CSP(1)-1B | WPPSS | CSP(1)-1B-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Modified existing test connection assemblies with valves CSP-V-800-13, CSP-V-800-14 and CSP-V-800-15, CSP-V-800-16. The work was performed as follows:

A) Modified test connection assembly with valves CSP-V-800-13 and CSP-V-800-14
   1) Removed existing test connection assembly
   2) Installed new piping material
   3) Reinstalled the test connection assembly
   4) Made required socket welds
   5) Performed visual examination on the final socket welds. Visual examination results acceptable
   6) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Modified test connection assembly with valves CSP-V-800-15 and CSP-V-800-16
   1) Removed existing test connection assembly
   2) Installed new piping material
   3) Reinstalled the test connection assembly
   4) Made required socket welds
   5) Performed visual examination on the final socket welds. Visual examination results acceptable
   6) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

**REVISION -**

1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1289
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/3/97 — Date 7/15/97

### 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 2-1290
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

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

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| CSP(1)-1B | WPPSS | CSP(1)-1B-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| CSP-V-800-25 | Borg Warner | 16912 | N/A | N/A | 1977 | Replacement | Yes, Code Class 2 |
| CSP-V-800-26 | Borg Warner | 16891 | N/A | N/A | 1977 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Modified existing test connection assembly with valves CSP-V-800-21, CSP-V-800-22 and installed new test connection assembly with valves CSP-V-800-25, CSP-V-800-26. The work was performed as follows:

A) Modified test connection assembly with valves CSP-V-800-21 and CSP-V-800-22
   1) Removed existing test connection assembly
   2) Installed new piping material
   3) Reinstalled the test connection assembly
   4) Made required socket welds
   5) Performed visual examination on the final socket welds. Visual examination results acceptable
   6) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Installed new test connection assembly with valves CSP-V-800-25 and CSP-V-800-26
   1) Installed new piping material
   2) Installed new valves CSP-V-800-25, Serial No 16912 and CSP-V-800-26, Serial No 16891
   3) Made required socket welds
   4) Performed visual examination on the final socket welds. Visual examination results acceptable
   5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

**REVISION -**
1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1290
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

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

| EPN No | Serial No |
|---|---|
| CSP-V-800-25 | 16912 |
| CSP-V-800-26 | 16891 |

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/3/97 — Date 7/15/97

### 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 2-1291
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** C30893
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** 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(1)-ST-(IR-64)-3B | JCI | PI(1)-ST-(IR-64)-3B | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced (modified) existing air supply line to valve CSP-V-5. The work was performed as follows:

A) Installation of piping material
   1) Installed new piping material
   2) Made required socket welds
   3) Performed visual examination on the final socket welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Installation of shear lugs
   1) Installed new shear lugs
   2) Made required shear lugs to pipe welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable

C) Installation of support Serial No 9301572C-005
   1) Installed new support material
   2) Made required welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable
   5) Installed new "U" bolt and associated jam nuts

D) Installation of support Serial No 9301572C-006
   1) Installed new support material
   2) Made required welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable
   5) Installed new "U" bolt and associated jam nuts

**NOTES -**
1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class NF(2), 1974 Edition with Winter 1975 Addenda for the supports

**REVISION -**
1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1291
REVISED

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

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

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 7/3/97 Date 7/15/97

### 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 Commissions _____
Inspector's Signature National Board, State, and Endorsements
Date _____

PLAN No 2-1293
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** C30893
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** 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(1)-ST-(IR-64)-1B | JCI | PI(1)-ST-(IR-64)-1B | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced (modified) existing air supply line to valve CSP-V-9. The work was performed as follows:

A) Installation of piping material
   1) Installed new piping material
   2) Made required socket welds
   3) Performed visual examination on the final socket welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Installation of shear lugs
   1) Installed new shear lugs
   2) Made required shear lugs to pipe welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable

C) Installation of support Serial No 9301572C-003
   1) Installed new support material
   2) Made required welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable
   5) Installed new "U" bolt and associated jam nuts

**NOTES -**
1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class NF(2), 1974 Edition with Winter 1975 Addenda for the supports

**REVISION -**
1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1293
REVISED

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

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

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh Signed By
Kuldip Singh - Program Lead Engineer (PLE) Supervisor, Materials And Welding
Date 7/3/97 Date 7/15/97

### 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 Commissions _____
Inspector's Signature National Board, State, and Endorsements
Date _____

PLAN No 2-1297
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/16/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** C30893
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** 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 |
| RCIC-V-752B | Borg Warner | 54236 | N/A | N/A | 1979 | Replaced | Yes, Code Class 1 |
| RCIC-V-752B | Borg Warner | 80123 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| RCIC-V-752D | Borg Warner | 28760 | N/A | N/A | 1978 | Replaced | Yes, Code Class 1 |
| RCIC-V-752D | Borg Warner | 80116 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced existing valves RCIC-V-752B and RCIC-V-752D. The replacement work was performed as follows:
   1) Removed existing valve RCIC-V-752B, Serial No 54236
   2) Removed existing valve RCIC-V-752D, Serial No 28760
   3) Installed new piping material
   4) Installed new replacement valve RCIC-V-752B, Serial No 80123
   5) Installed new replacement valve RCIC-V-752D, Serial No 80116
   6) Made required socket welds
   7) Performed visual examination on the final socket welds. Visual examination results acceptable
   8) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

**NOTES -**

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the piping system
2) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the new replacement valve RCIC-V-752B, Serial No 80123
3) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the new replacement valve RCIC-V-752D, Serial No 80116
4) ASME Section III, Code Class 1 valves for ASME Section III, Code Class 2 application

**REVISION -**

1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1297
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

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

| EPN No | Serial No |
|---|---|
| RCIC-V-752B | 80123 |
| RCIC-V-752D | 80116 |

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/3/97 — Date 7/05/97

### 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 2-1303
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** C30893
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 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-101/2623 | Vogt | 306-181441 | N/A | N/A | 1974 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced wedge (gate) for valve CRD-V-101/2623. The replacement work was performed as follows:
   1) Performed liquid penetrant (PT) examination on all external surfaces of the new replacement wedge (gate). Liquid penetrant (PT) examination results acceptable
   2) Removed existing wedge (gate) from the valve
   3) Installed new replacement wedge (gate) in the valve

**REVISION -**
1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1303
REVISED

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 [illegible] — Supervisor, Materials And Welding

Date 7/3/97 — Date 7/15/97

### 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 2-1304
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** C30893
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Control Rod Drive (CRD) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1980* Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| CRD-V-101/5027 | Vogt | 393-181441 | N/A | N/A | 1974 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced wedge (gate) for valve CRD-V-101/5027. The replacement work was performed as follows:
   1) Performed liquid penetrant (PT) examination on all external surfaces of the new replacement wedge (gate). Liquid penetrant (PT) examination results acceptable
   2) Removed existing wedge (gate) from the valve
   3) Installed new replacement wedge (gate) in the valve

**REVISION -**

1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1304
REVISED

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 7/3/97

Signed By
Supervisor, Materials And Welding
Date 7/15/97

### 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 2-1305

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:** 7/05/97
**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(1)-4CL2 | WPPSS | RCIC(1)-4CL2-P1 | N/A | N/A | 1984 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Fabricated new replacement orifice plate for RCIC-RO-9. The work was performed as follows:
   1) Cut the plate material to the required dimensions.
   2) Fabricated/machined the orifice plate to the final dimensions.
   3) Fabricated/machined the handle (paddle) to the final dimensions.
   4) Welded the handle (paddle) to the orifice plate.
   5) Performed visual examination on the final weld. Visual examination results acceptable.
   6) Final finished the orifice plate surfaces.

**NOTES -**

1) The fabricated orifice plate for RCIC-RO-9 was installed in accordance with ASME Section XI Plan No 2-1306.

PLAN No 2-1305:

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: * Pressure test on the RCIC-RO-9 bolted flanged joint was performed in accordance with ASME Section XI Plan No 2-1306.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/5/97 — Date 7/15/97

### 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 4-17-96 to 7-16-97 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.

[signature] — Inspector's Signature

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

Date 7-16-97

PLAN No 2-1306

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:** 7/05/97
**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(1)-4CL2 | WPPSS | RCIC(1)-4CL2-P1 | N/A | N/A | 1984 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Installed new replacement orifice plate for RCIC-RO-9. The replacement work was performed as follows:
   1) Installed new replacement orifice plate.
   2) Installed new replacement studs for the orifice plate bolted joint.
   3) Installed new replacement nuts for the orifice plate bolted joint.
   4) 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 orifice plate for RCIC-RO-9 was previously fabricated in accordance with ASME Section XI Plan No 2-1305.

PLAN No 2-1306

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: 1200 Psig — Test Temperature: 82° F

Component Design Pressure: 1500 Psig — Temperature: 150° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/8/97 — Date 7/15/97

### 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 4-17-96 to 7-16-97 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.

[signature] — Inspector's Signature

Commissions 7486W/7486 WI18 II — National Board, State, and Endorsements

Date 7-16-97

PLAN No 2-1311
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** C30893
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** 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(1)-ST-(IR-63)-1B | JCI | PI(1)-ST-(IR-63)-1B | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced (modified) existing air supply line to valve CSP-V-6. The work was performed as follows:

A) Installation of piping material
   1) Installed new piping material
   2) Made required socket welds
   3) Performed visual examination on the final socket welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

B) Installation of shear lugs
   1) Installed new shear lugs
   2) Made required shear lugs to pipe welds
   3) Performed visual examination on the final welds. Visual examination results acceptable
   4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable

C) Installation of support Serial No 9301572C-001
   1) Installed new support material
   2) Installed new "U" bolt and associated jam nuts

D) Installation of support Serial No 9301572C-002
   1) Installed new support material
   2) Installed new "U" bolt and associated jam nuts

E) Installation of support Serial No 100-7-021
   1) Installed new support material
   2) Installed new "U" bolt and associated jam nuts

**NOTES -**
1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class NF(2), 1974 Edition with Winter 1975 Addenda for the supports

**REVISION -**
1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1311
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/3/97 — Date 7/15/97

### 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 2-1319
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

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

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

7. **Description Of Work Performed:** Replaced pipe piece associated with valve SW-V-821A. The replacement work was performed as follows:
   1) Removed existing pipe piece associated with valve SW-V-821A
   2) Installed new replacement pipe piece associated with valve SW-V-821A
   3) Made required socket welds
   4) Performed visual examination on the final socket welds. Visual examination results acceptable

**REVISION -**

1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1319
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/3/97 — Date 7/15/97

### 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 2-1332
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/16/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** C30893
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Control Air System (CAS)
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Winter 1975 Addenda, Code Case: None
   **(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 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 |
|---|---|---|---|---|---|---|---|
| D-220-3500-09.0-RCIC-PCV-15 | JCI | D-220-3500-09.0-RCIC-PCV-15 | N/A | N/A | 1982 | Replacement | Yes, Code Class 3 |

7. **Description Of Work Performed:** Replaced existing tubing associated with valve CAS-V-100/51. The replacement work was performed as follows:
   1) Removed existing tubing
   2) Installed new tubing
   3) Made required socket welds
   4) Performed visual examination on the final socket welds. Visual examination results acceptable

**REVISION -**

1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1332
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By _____ — Supervisor, Materials And Welding

Date 7/3/97 — Date 7/15/97

### 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 2-1340
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Feed Water (RFW) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989* Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| RFW(1)-4A | WPPSS | RFW(1)-4A-P2 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| RFW-V-120 | Borg Warner | 28770 | N/A | N/A | 1978 | Replaced | Yes, Code Class 1 |
| RFW-V-120 | Borg Warner | 13905 | N/A | N/A | 1977 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced existing valve RFW-V-120. The replacement work was performed as follows:
1) Removed existing valve RFW-V-120, Serial No 28770
2) Installed new replacement valve RFW-V-120, Serial No 13905
3) Made required socket weld
4) Performed visual examination on the final socket weld. Visual examination results acceptable
5) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

**NOTES -**
1) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the Reactor Feed Water (RFW) piping system
2) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the new replacement valve RFW-V-120, Serial No 13905

**REVISION -**
1) * Revised on 7/03/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1340
REVISED

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 RFW-V-120, Serial No 13905

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/3/97 — Date 7/15/97

### 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 2-1341
REVISED

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

**Date:** 8/16/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Raytheon Engineers & Constructors, PO Box 460, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** C30893
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** 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(1)-ST-IR-63-10 | JCI | PI(1)-ST-IR-63-10 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced existing tubing block clamp for support Serial No 9301571B-010 between valves CSP-V-901 and PI-EFC-X67. The replacement work was performed as follows:
   1) Removed existing tubing block clamp
   2) Installed new tubing block clamp
   3) Installed new cap screws for the tubing block clamp

**NOTES -**

1) ASME Section III, Code Class NF(2), 1974 Edition with Winter 1975 Addenda for the tubing block clamp

**REVISION -**

1) * Revised on 7/05/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1341
REVISED

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 7/5/97

Signed By
Supervisor, Materials And Welding
Date 7/15/97

### 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 2-1342

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/22/96
**Sheet:** 1 of 1
**Unit:** WNP-2

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

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

7. **Description Of Work Performed:** Prefabricated spool piece to be installed in the future in place of the existing spool piece with localized pitting (wall thinning). The prefabricated spool piece is for 18" Service Water (SW) Loop B return piping between SW-FE-1B and valve SW-PCV-38B. The prefabrication work was performed as follows:
   1) Cut new replacement 18" pipe to the required length or longer
   2) Beveled one (1) cut pipe end to the required configuration
   3) Drilled hole in the 18" pipe for installation of new replacement 1 1/2" and 2" sockolets
   4) Installed new replacement 1 1/2" and 2" sockolets
   5) Made required welds
   6) Performed visual examination on the final welds. Visual examination results acceptable

**NOTES-**

1) The prefabricated spool piece will be installed in accordance with ASME Section XI Plan No 2-1353

PLAN No 2-1342

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/24/96 — Date 8/26/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/20/96 to 10-2-96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486, 7486 N NIB-IS — National Board, State, and Endorsements

Date 10/3/96

PLAN No 2-1344
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/16/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Process Instrumentation (PI) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
   **(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 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-X-77Ad | JCI | PI(1)-4S-X-77Ad | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| PSR-V-X77A/3 | Target Rock | 3 | N/A | N/A | 1982 | Replaced | Yes, Code Class 1. |
| PSR-V-X77A/3 | Target Rock | 3 | N/A | N/A | 1986 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced existing valve PSR-V-X77A/3. The replacement work was performed as follows:
   1) Removed existing valve PSR-V-X77A/3, Model No 82M-001, Serial No 3
   2) Installed new replacement valve PSR-V-X77A/3, Model No 86Q-001, Serial No 3
   3) Made required socket welds
   4) Performed visual examination on the final socket welds. Visual examination results acceptable
   5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

**NOTES -**

1) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) System
2) ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda for the new replacement valve PSR-V-X77A/3, Model No 86Q-001, Serial No 3

**REVISION -**

1) * Revised on 7/05/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1344
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve PSR-V-X77A/3, Model No 86Q-001, Serial No 3

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/5/97 — Date 7/15/97

### 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 2-1347
REVISED

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Instrumentation (PI) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 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-X-77Ad | JCI | PI(1)-4S-X-77Ad | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| PSR-V-X77A/4 | Target Rock | 2 | N/A | N/A | 1982 | Replaced | Yes, Code Class 1 |
| PSR-V-X77A/4 | Target Rock | 4 | N/A | N/A | 1986 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced existing valve PSR-V-X77A/4: The replacement work was performed as follows:
1) Removed existing valve PSR-V-X77A/4, Serial No 2, Model No 82M-001
2) Installed spare replacement valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001
3) Made required socket weld
4) Cut the socket weld to correct the orientation of the newly installed valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001
5) Prepped valve socket end - One (1) valve socket end
6) Performed liquid penetrant (PT) examination on the prepped valve socket end. Liquid penetrant (PT) examination results acceptable
7) Reinstalled spare replacement valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001
8) Made required socket weld
9) Performed visual examination on the final socket weld. Visual examination results acceptable
10) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable

**NOTES -**
1) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda for the spare replacement valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001
3) The spare replacement valve PSR-V-X77A/4, Serial No 4, Model No 79TT-001 was previously refurbished in accordance with ASME Section XI Plan No 2-1346

**REVISION -**
1) * Revised on 7/05/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1347
REVISED

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 spare replacement valve PSR-V-X77A/4, Serial No 16, Model No 79TT-001

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/5/97 — Date 7/15/97

### 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 2-1352
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 8/17/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Instrumentation (PI) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989* Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| PI(1)-4S-X-73d | JCI | PI(1)-4S-X-73d | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| PI-VX-268 | Target Rock | 13 | N/A | N/A | 1980 | Replaced | Yes, Code Class 2 |
| PI-VX-268 | Target Rock | 16 | N/A | N/A | 1991 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Replaced existing valve PI-VX-268. The replacement work was performed as follows:
1) Removed existing valve PI-VX-268, Serial No 13
2) Installed new replacement valve PI-VX-268, Serial No 16
3) Made required socket welds
4) Performed visual examination on the final socket welds. Visual examination results acceptable
5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable

**NOTES -**
1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) piping system
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the new replacement valve PI-VX-268, Serial No 16

**REVISION -**
1) * Revised on 7/05/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No.2-1352
REVISED

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-VX-268, Serial No 16

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/5/97 — Date 7/15/97

### 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 2-1353

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:** 9/4/97
**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:** Service Water (SW) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: N-416-1
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

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

**7. Description Of Work Performed:** Replaced existing spool piece with localized pitting (wall thinning) for 18" Service Water (SW) Loop B return piping between SW-FE-1B and valve SW-PCV-38B. The replacement work was performed as follows:

1) Removed existing section of 18" pipe with localized pitting (wall thinning).
2) Installed new section of 18" of pipe.
3) Completed the root pass on both the 18" circumferential butt welds.
4) Performed visual examination on the root pass on both the 18" circumferential butt welds. Visual examination results acceptable.
5) Performed magnetic particle (MT) examination on the root pass for both the welds. The magnetic particle (MT) examination results acceptable.
6) Completed both the 18" circumferential butt welds.
7) Performed visual examination on both the final 18" circumferential butt welds. Visual examination results acceptable
8) Performed magnetic particle (MT) examination on both the final 18" circumferential butt welds. Magnetic particle (MT) examination results acceptable.
9) Installed additional piping material associated with new section of 18" pipe.
10) Made required socket welds.
11) Installed new studs and nuts for the bolted flanged joint.
12) 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 new spool piece was previously prefabricated in accordance with ASME Section XI Plan No 2-1342.
2) The magnetic particle (MT) examination on the root pass for both the welds was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.
3) The magnetic particle (MT) examination on the final 18" circumferential butt welds was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.
4) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.

PLAN No 2-1353

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: 212 Psig — Test Temperature: 60° F

Component Design Pressure: 309 Psig — Temperature: 150° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By Tom Lin for CM King — Supervisor, Materials And Welding

Date 9/4/97 — Date 9/4/97

### 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 9/26/96 to 9-8-97 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 NF IS IJ — National Board, State, and Endorsements

Date 9/8/97

PLAN No 2-1355

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/22/96
**Sheet:** 1 of 1
**Unit:** WNP-2

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

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

7. **Description Of Work Performed:** Removed welded pads and Luberite plate for support SW-6 for 18" Service Water (SW) Loop B return piping between SW-FE-1B and valve SW-PCV-38B. The work was performed as follows:
   1) Cut existing pipe to pad welds
   2) Removed all three (3) pads
   3) Blended the areas on the pipe from where the pads were removed uniformly into the surrounding pipe base material
   4) Cut existing pipe to Luberite plate channel weld
   5) Removed the Luberite plate
   6) Blended the areas on the pipe from where the Luberite plate was removed uniformly into the surrounding pipe base material

PLAN No 2-1355

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 [illegible] — Supervisor, Materials And Welding

Date 8/24/96 — Date 8/26/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 6/24/96 to 9/4/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] — Inspector's Signature

Commissions 7486, 7486W NZSB-II — National Board, State, and Endorsements

Date 9/4/96

PLAN No 2-1363
REVISED

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 1/16/97
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Instrumentation (PI) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 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-IR-84 | JCI | PI(1)-ST-IR-84 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |

**7. Description Of Work Performed:** Installed new U bolts and associated nuts for valve IR-84-V-2A.

**NOTES -**
1) ASME Section III, Code Class NF(3), 1974 Edition with Winter 1975 Addenda for the support material.

**REVISION -**
1) * Revised on 7/05/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

PLAN No 2-1363
REVISED

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 7/5/97

Signed By
Supervisor, Materials And Welding
Date 7/15/97

### 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 2-1366

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 11/23/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable.
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Instrumentation (PI) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| PI(1)-4S-X-86b | JCI | PI(1)-4S-X-86b | N/A | N/A | 1982 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Installed new U bolt for support B-220-1033-16. The installation work was performed as follows:
1) Installed new U bolt for the support.
2) Installed new nuts associated with the new U bolt for the support.

**NOTES -**
1) ASME Section III, Code Class NF(2) for the support material.

PLAN No 2-1366

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 11/25/96 — Date 11/25/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 8/12/96 to 12/2/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

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

Date 12/2/96

PLAN No 2-1367

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 11/23/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Instrumentation (PI) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| PI(1)-4S-X-87b | JCI | PI(1)-4S-X-87b | N/A | N/A | 1982 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Installed new U bolt for support B-220-1027-16. The installation work was performed as follows:
1) Installed new U bolt for the support.
2) Installed new nuts associated with the new U bolt for the support.

**NOTES -**
1) ASME Section III, Code Class NF(2) for the support material.

PLAN No 2-1367

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 11/25/96 — Date 11/25/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 8/12/96 to 12/2/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486 7486.W NB18-IS — National Board, State, and Endorsements

Date 12/2/96

PLAN No 2-1368

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/22/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   (b) **Repair Organization P.O. No, Job No, etc.:** C875WE
   (c) **Type Code Symbol Stamp:** VR And NR
   (d) **Certificate Of Authorization No.:** VR No 590 And NR No 78
   (e) **Expiration Date:** VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| Spare Valve | Crosby | N63790-00-0049 | N/A | N/A | 1980 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0049 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Reassembled the relief valve
   3) Tested the relief valve at set pressure of 1175 PSIG. Test results acceptable

**NOTES -**

1) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-136

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

**9. Remarks:** 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0049, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0049

### CERTIFICATE OF COMPLIANCE

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

**Type Code Symbol Stamp:** Not Applicable

**Certificate Of Authorization No.:** Not Applicable

**Expiration Date:** Not Applicable

**Prepared By** Kuldip Singh **Signed By** [signature]

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

**Date** 8/24/96 **Date** 8/26/96

### CERTIFICATE OF INSERVICE INSPECTION

*I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of* Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/15/96 *to* 9/4/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] **Commissions** 7486, 7486 W NB-18-II

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

**Date** 9/4/96

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

PLAN No. 2-1368

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.) 8/23/96
200 S. Highland Springs Ave., Banning, CA 92220 (address)

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0049 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1175 psig Blowdown (if applicable) n/a Set pressure and blowdown adjustment made at Western Repair Center (location) using steam (test medium)

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96. Signed Westinghouse Electric Corp. Western Repair Center (repair organization) [signature] (authorized representative) NSD. SR. R A ENG. (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7-19, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-19, 19 96. Signed [signature] (Inspector) Commissions CA 1521, NB 9635 B (Nat. Board No. (including endorsements) state or province and number)

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

NB-166 Rev. 2

~~MS-RV-2B~~

PLAN NO. 2-1368
Philip Sapp
8/23/96

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

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

Q.C.-44D

DATA REPORT
Safety and Safety Relief Valves

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

Model No. HR-65-BF-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. N63790-00-0049 Drawing No. DS-A-63790 Rev. C

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

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

Stamped Capacity 884.314 x 3 Overpressure — Blowdown (psig) 2% to 11%

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

Pressure Retaining Pieces

| | Serial No. Identification | Material Specification Including Type or Grade |
|---|---|---|
| a. ~~XXXXXXXX~~ Bar Stock & Forgings | | |
| Body | N93183-35-0068 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-35-0031 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| b. ~~XXXXXXXXXXXXXXXX~~ | | |
| ~~XXXXXXXXXX~~ Disc Insert | N93185-34-0081 | ASME SA637 Gr. 7 |
| Nozzle | N93184-33-0053 | ASME SA182 Gr. F5 |
| Disc Holder *K55484-35-0095 | *N89714-34-0127 | AMS 5662B |
| Spring Washers K62858-35-0031 | K62856-35-0087<br>K62857-35-0052 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Adjusting Bolt | N93410-33-0056 | ASME SA193 Gr. B6 |
| Spindle Point K62873-35-0049 | *N89720-34-0092 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| c. Spring K62858-35-0031 | *N89722-0005 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | |
| e. ~~XXXXXXXXXX~~ Spindle Ball K62873-35-0049 | N93213-0049 | Stellite #6 |
| Thrust Bearing Adapter | N93409-32-0051 | ASME SA193 Gr. B6 |
| Bonnet Stud (BW5, I17) | N93207-0585 thru 0596 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Bonnet Stud Nut (J87) | N93210-0805 thru 0816 | ASME SA194 Gr. 2H |
| Inlet Stud (BW6) | N93216-0587 thru 0598 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW8) | N93218-0591 thru 0602 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button K63618-33-0037 | N93411-33-0057 | ASME SA193 Gr. B6 |

MAB 1-2-96

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FOR INFORMATION ONLY

ZX00380986

S/N N6 3790-00

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. A. Cummings
(N Certificate Holder)

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

## CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

## CERTIFICATE OF SHOP INSPECTION

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

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

Date 12/5 1980

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

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

MAB 1-20-81

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7 8 9
11

ZX00380987

PLAN No 2-1369

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS) **Date:** 12/4/96
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
**(b) Repair Organization P.O. No, Job No, etc.:** C875WE
**(c) Type Code Symbol Stamp:** VR And NR
**(d) Certificate Of Authorization No.:** VR No 590 And NR No 78
**(e) Expiration Date:** VR - January 11, 1998 And NR - April 12, 1998
**4. Identification Of System:** Main Steam (MS) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

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

**7. Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0053 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.
2) Reassembled the relief valve.
3) * Installed five (5) new replacement studs for the relief valve inlet joint.
4) Tested the relief valve at set pressure of 1185 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.
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable.
3) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
4) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable.
5) * The NVR-1 Code Data Report prepared by Westinghouse Electric Corporation for main steam relief valve Serial No N63790-00-0053 documents that one (1) new replacement stud for the relief valve inlet joint was installed. Visual examinations performed by John Williams (System Engineer) and Gerry Foster (ANI) on the relief valve inlet joint revealed that total of five (5) new replacement studs were installed. All five (5) new replacement studs have Heat Code K4K stamped on their ends. The NVR-1 Code Data Report prepared by Westinghouse Electric Corporation for main steam relief valve Serial No N63790-00-0053 can not be amended to reflect that five (5) new replacement studs were installed in lieu of one (1) new replacement stud because Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA facility has been permanently closed.

PLAN No 2-1369

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

**9. Remarks:** 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0053, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0053.

### 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** 12/4/96

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

**Date** 12/4/96 **Date** 12/4/96

### CERTIFICATE OF INSERVICE INSPECTION

*I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of* Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/15/96 *to* 12/4/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

Inspector's Signature **Commissions** 7486W 7486 NISB IS.

National Board, State, and Endorsements

**Date** 12/4/96

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

PLAN No. 2-1369

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WF 8/23/ (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address)

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0053 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1185 psig Blowdown (if applicable) n/a Set pressure and blowdown adjustm made at Western Repair Center (location) using steam (test medium)

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced 1 inlet stud (MC 54400514)

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96. Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) NDB SR. QA Engr (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7-10, 19 96 and state that to the bes of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warran expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall b liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-10, 19 96. Signed (Inspector) Commissions CA 1526 NB 6435 B (Nat. Board No. (including endorsements) state or province and numb

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

NB-
Rev.

AAS-RV-3B

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1369

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

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 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%
975 psig (Assembled Valve)

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

Pressure Retaining Pieces

| | Serial No. Identification | Material Specification Including Type or Grade |
|---|---|---|
| a. Bar Stock & Forgings | | |
| Body | N93183-35-0072 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-35-0035 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| b. 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<br>K62857-35-0056 | ASTM A105-71 Gr. II<br>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<br>ASME SA564 Type 630 |
| c. Spring K62858-35-0035 | *N89722-0011 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | ZX00380127 |
| e. 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<br>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<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW8) | N93218-0639 thru 0650 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button K63618-33-0062 | N93411-33-0062 | ASME SA193 Gr. B6 |

Valve originally built against Crosby Order No. N105600, Assembly No. R56000. Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

N63790-00-0053

## CERTIFICATE OF COMPLIANCE

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

Class 1

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

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 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 11/21 1980.

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

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

ZX00380128

PLAN No 2-1370

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/23/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   (b) **Repair Organization P.O. No, Job No, etc.:** C875WE
   (c) **Type Code Symbol Stamp:** VR And NR
   (d) **Certificate Of Authorization No.:** VR No 590 And NR No 78
   (e) **Expiration Date:** VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| Spare Valve | Crosby | N63790-00-0056 | N/A | N/A | 1980 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0056 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Removed existing disc insert Serial No N93185-45-0149 from the relief valve
   3) Installed new replacement disc insert Serial No N93185-56-0248 in the relief valve
   4) Reassembled the relief valve
   5) Installed three (3) new replacement studs for the relief valve inlet joint
   6) 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
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
4) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-13

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0056, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0056

### CERTIFICATE OF COMPLIANCE

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

*Type Code Symbol Stamp:* Not Applicable

*Certificate Of Authorization No.:* Not Applicable

*Expiration Date:* Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/24/96 — Date 8/26/96

### CERTIFICATE OF INSERVICE INSPECTION

*I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of* Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/15/96 *to* 9/4/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] — Inspector's Signature

Commissions 7484, 7486W NIS B-TS — National Board, State, and Endorsements

Date 9/4/96

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

PLAN No. 2-1370

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) Rudolph Lamb 8/23/96

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0056 (mfr's. serial no.) n/a (Natl. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1195 psig Blowdown(if applicable) n/a Set pressure and blowdown adjustme made at Western Repair Center (location) using steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced disc (N93185-56-0248). Replaced 3 inlet studs (MC 54400514).

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96. Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) NSB. SR QA EN (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7.19, 19 96 and state that to the bes of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Boarc rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warrant expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall bc liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7.19, 19 96. Signed (Inspector) Commissions CA-1526 NB 9435 B (Natl. Board No.(including endorsements)state or province and numbe

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

NB-1 Rev

~~MS-RV-3D~~

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS.

PLAN NO. 2-1370

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

Philip Sumpb 8/23/96

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0056 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 | N93183-35-0075 | ASTM A105 -71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-35-0038 | ASTM A105 -71 Gr. II<br>ASME SA105 Gr. II |
| b. | | |
| Disc Insert | N93185-34-0088 | ASME SA637 Gr. 718 |
| Nozzle | N93184-33-0060 | ASME SA182 Gr. F316 |
| Disc Holder*K55484-35-0096 | *N89714-34-0107 | AMS 5662B |
| Spring Washers K62858-35-0038 | K62856-35-0094<br>K62857-35-0059 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Adjusting Bolt | N93410-33-0063 | ASME SA193 Gr. B6 |
| Spindle Point K62873-35-0056 | *N89720-34-0069 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| c. Spring K62858-35-0038 | *N89722-0014 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | ZX00380146 |
| e. Spindle Ball K62873-35-0056 | N93213-0056 | Stellite #6 |
| Thrust Bearing Adapter | N93409-32-0058 | ASME SA193 Gr. B6 |
| Bonnet Stud (I17) | N93207-0669 thru 0680 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Bonnet Stud Nut (J87) | N93210-0889 thru 0900 | ASME SA194 Gr. 2H |
| Inlet Stud (BW6) | N93216-0671 thru 0682 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW8) | N93218-0675 thru 0686 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button K63618-33-0065 | N93411-33-0065 | ASME SA193 Gr. B6 |

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

N103790-00-0056

## CERTIFICATE OF COMPLIANCE

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

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.G. 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 11/18, 1980 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 11/18 1980.
Signed John [illegible] (Inspector) Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.)

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

ZX00380147

PLAN No 2-1371.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/23/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   (b) **Repair Organization P.O. No, Job No, etc.:** C875WE
   (c) **Type Code Symbol Stamp:** VR And NR
   (d) **Certificate Of Authorization No.:** VR No 590 And NR No 78
   (e) **Expiration Date:** VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| Spare Valve | Crosby | N63790-00-0060 | N/A | N/A | 1980 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0060 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Removed existing nozzle from the relief valve
   3) Installed new replacement nozzle Serial No N93164-33-0070 in the relief valve
   4) Reassembled the relief valve
   5) Tested the relief valve at set pressure of 1205 PSIG. Test results acceptable

**NOTES -**

1) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-137

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0060, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0060

### CERTIFICATE OF COMPLIANCE

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

*Type Code Symbol Stamp:* Not Applicable

*Certificate Of Authorization No.:* Not Applicable

*Expiration Date:* Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/24/96 — Date 8/26/96

### CERTIFICATE OF INSERVICE INSPECTION

*I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of* Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/15/96 *to* 9/4/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] — Inspector's Signature

Commissions 7486, 7486 W NB B&P — National Board, State, and Endorsements

Date 9/4/96

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

PLAN NO. 2-1371

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C975WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address)

2. Work performed for Washington Public Power Supply System, WNP-2, 3000 Geo. Washington Way Richland, WA 99352 (name and address) 8/23/96

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0060 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1205 psig Blowdown (if applicable) n/a Set pressure and blowdown adjustm made at Western Repair Center (location) using steam (test medium)

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced nozzle (N93184-33-0070).

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) NDE SR. PA Eng (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7.19, 19 96 and state that to the be of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Boa rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warra expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7.19, 19 96 Signed (Inspector) Commissions CA 15216 NB 9425.B (Nat. Board No. (including endorsements) state or province and num

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

S/N N63790-00-0060

~~AIS-RV-4D~~ KSwob 5/14/87

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1371

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

Q.C.-44D

Rudolph Swob 8/23/96

DATA REPORT
Safety and Safety Relief Valves

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0060 Drawing No. DS-A-63790 Rev. C

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

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

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

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 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 | N93183-35-0079 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-35-0042 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| b. | | |
| Disc Insert | N93185-34-0092 | ASME SA637 Gr. 718 |
| Nozzle | N93184-33-0064 | ASME SA182 Gr. F316 |
| Disc Holder K55484-45-0185 | N89714-37-0224 | AMS 5662B |
| Spring Washers K62858-35-0042 | K62856-35-0098<br>K62857-35-0063 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Adjusting Bolt | N93410-33-0067 | ASME SA193 Gr. B6 |
| Spindle Point K62873-35-0060 | *N89720-34-0071 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| c. Spring K62858-35-0042 | *N89722-0018 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | 7X00380153 |
| e. Spindle Ball K62873-35-0060 | N93213-0060 | Stellite #6 |
| Thrust Bearing Adapter | N93409-32-0062 | ASME SA193 Gr. B6 |
| Bonnet Stud (BW5) | N93207-0717 thru 0728 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Bonnet Stud Nut (J87) | N93210-0937 thru 0948 | ASME SA194 Gr. 2H |
| Inlet Stud (BW6, BW18) | N93216-0721 thru 0730, 1709 & 1710 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW8) | N93218-0723 thru 0734 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button | N93411-33-0069 | ASME SA193 Gr. B6 |

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

N1-3790-00-0060

## CERTIFICATE OF COMPLIANCE

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

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

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

## CERTIFICATION OF DESIGN

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

[1]Signature not required - list name only.

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

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

ZX00380154

PLAN No 2-1372

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/23/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   (b) **Repair Organization P.O. No, Job No, etc.:** C875WE
   (c) **Type Code Symbol Stamp:** VR And NR
   (d) **Certificate Of Authorization No.:** VR No 590 And NR No 78
   (e) **Expiration Date:** VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| Spare Valve | Crosby | N63790-00-0124 | N/A | N/A | 1981 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0124 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Reassembled the relief valve
   3) Tested the relief valve at set pressure of 1185 PSIG. Test results acceptable

**NOTES -**

1) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
2) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
3) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-137

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0124, 2) See attached NV-1 Code Data Report for MSRV Serial No N63790-00-0124

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/24/96 — Date 8/26/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 9/15/96 to 9/14/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486, 7486 W NIS-2-IS — National Board, State, and Endorsements

Date 9/14/96

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

PCAN NO. 2-1372

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WF (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address)

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0124 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1185 psig Blowdown (if applicable) n/a Set pressure and blowdown adjustmer made at Western Repair Center (location) using steam (test medium)

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing.

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19 19 96. Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) USS Sr. QA Eng (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7.19, 19 96 and state that to the bes of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Boar rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warran expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall b liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7.19, 19 96 Signed Linda F. Reyes (Inspector) Commissions CA 1526 NB 4435 B (Nat. Board No. (including endorsements) state or province and num

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

NB
Re

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1372

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

Philip Eves
8/23/96

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

Model No. HB-65-BP-FN Order No. N94281 Contract Date 4/24/79 National Board No. N/A

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0124 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. ~~Castings~~ Bar Stock & Forgings | | |
| Body | N93183-36-0087 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-36-0098 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| b. ~~Machining~~ | | |
| ~~Nozzle~~ Disc Insert | N93185-37-0156 | ASME SA637 Gr. 718 |
| Nozzle | N93184-33-0072 | ASME SA182 Gr. F316 |
| Disc Holder K55484-31-0005 | N89714-31-0008 | AMS 5662B |
| Spring Washers K62858-36-0081 | K62856-36-0116<br>K62857-36-0130 | ASME SA105 Gr. II |
| Adjusting Bolt | N93410-33-0072 | ASME SA193 Gr. B6 |
| Spindle Point K62873-37-0136 | N89720-43-0157 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| c. Spring K62858-36-0081 | NX2689-0126 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | |
| e. ~~Machining~~ Spindle Ball K62873-37-0136 | N93213-0203 | Stoody #6 |
| Thrust Bearing Adapter | N93409-32-0065 | ASME SA193 Gr. B6 |
| Bonnet Stud (BW19) | N93207-1522 thru 1533 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Bonnet Stud Nut (J87) | N93210-1033 thru 1044 | ASME SA194 Gr. 2H |
| Inlet Stud (BW21) | N93216-1455 thru 1466 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW22) | N93218-1389 thru 1400 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button K63618-33-0094 | N93411-33-0094 | ASME SA193 Gr. B6 |

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

N63790-00-0124

## CERTIFICATE OF COMPLIANCE

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

Date 11-5-80 Signed Crosby Valve & Gage Co. (N Certificate Holder) by R.G. 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 1/13, 19 81 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 1/13 19 81.

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

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

PLAN No 2-1373

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/23/96
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
**(b) Repair Organization P.O. No, Job No, etc.:** C875WE
**(c) Type Code Symbol Stamp:** VR And NR
**(d) Certificate Of Authorization No.:** VR No 590 And NR No 78
**(e) Expiration Date:** VR - January 11, 1998 And NR - April 12, 1998
**4. Identification Of System:** Main Steam (MS) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with 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 | N63790-00-0136 (N56000-02-0043) | N/A | N/A | 1973 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0136 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work
2) Removed existing disc insert from the relief valve
3) Installed new replacement disc insert Serial No N93185-56-0242 in the relief valve
4) Reassembled the relief valve
5) Tested the relief valve at set pressure of 1205 PSIG. Test results acceptable

**NOTES -**

1) "Bailly" Main Steam Relief Valve (MSRV), Serial No N56000-02-0043 was modified (upgraded) to Serial No N63790-00-0136 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 Serial No N56000-02-0043
3) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
4) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
5) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-13

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

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

**9. Remarks:** 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0136, 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, 3) See attached NV-1 (Pre - Modification) Code Data Report for MSRV, Serial No N56000-02-0043

### CERTIFICATE OF COMPLIANCE

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

*Type Code Symbol Stamp:* Not Applicable

*Certificate Of Authorization No.:* Not Applicable

*Expiration Date:* Not Applicable

*Prepared By* Kuldip Singh *Signed By* [signature]

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

*Date* 8/24/96 *Date* 8/26/96

### CERTIFICATE OF INSERVICE INSPECTION

*I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of* Washington *and employed by* Arkwright Mutual Insurance Company of Waltham, Massachusetts *have inspected the components described in this Owner's Report during the period* 4/15/96 *to* 9/4/96 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] *Commissions* 7486, 7486 N ISP-II

Inspector's Signature National Board, State, and Endorsements

*Date* 9/4/96

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

PUBN No. 2-1373

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address)

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address) 9/23/96

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0136 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1205 psig Blowdown(if applicable) n/a Set pressure and blowdown adjustmer made at Western Repair Center (location) using steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced disc (N93185-56-0242).

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) NSD. SR. QA Eng (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7.19, 19 96 and state that to the bes of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warran expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall b liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7.19, 19 96 Signed [signature] (Inspector) Commissions CA-1526 NB 9435 D (Nat. Board No.(including endorsements) state or province and num

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

NB-2

CROSBY

# CROSBY VALVE & GAGE COMPANY
## WRENTHAM, MA

PLAN NO. ~~2-1005~~ 1373

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

Rudolf Gugel 3/10/94 8/23/96

## 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. N63790-00-0136 – – ----- 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

7. 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 N56000-02-0043 WAS MODIFIED TO N63790-00-0136
(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 | N93183-42-0125 |
| BONNET | N89717 | N93407-43-0054 |
| SPINDLE ASSY | K55465 | K62873-33-0006 |
| SPR.WASHER | N89724 | K62856-43-0202 |
| SPR.WASHER | N89723 | K62857-43-0202 |
| SPRING ASSY | K55466 | K62858-31-0005 |
| PART | PART NO. | REPLACED WITH |
| NOZZLE | N89713 | N93184-51-0153 |
| DISC INSERT | N89715 | N93185-52-0203 |
| SPRING | NX2689 | NX2689-0135 |
| THR.BRG.ADAPT. | N89725 | N93409-34-0009 |
| ADJ.BOLT | N89726 | N93410-31-0003 |
| ADJ.BOLT BUTT. | COMMERCIAL | N93411-33-0010 |
| ADJ.BOLT ASSY | COMMERCIAL | K63618-31-0003 |
| INLET STUD | N89727 | N93216/NAD QTY 10 |

2/23/94

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

Certificate Holder's Serial No. N63790.00.0136

## 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. Pierce 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]
(Inspector)

Commissions MA 1455
(Nat'l. Bd., State, Prov. and No.)

PLAN NO. 2-1373

Ruidup Gupta
8/23/86

| 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-~~[illegible]~~ 1373
Rudolph Ewoh
3/10/94
8/23/96

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

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

Q.C.-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. N56000-02-0043 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) 1205 575° F
Rated Temperature

Stamped Capacity 906250 Lbs. Hr. Sat. Steam 3 % Overpressure - Blowdown ~~XXXX~~ 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

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

Class 1 ~~XXXX~~ 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 | N89711-32-0025 | ASTM A-105-71 Gr. II<br>ASME SA-105 Gr. II |
| Bonnet ~~XXXXXX~~ | N89717-32-0019 | ASTM A-105-71 Gr. II<br>ASME SA-105 Gr. II |
| b. Bar Stock and Forgings | | |
| ~~XXXXXXXX~~ Disc Insert | N89715-31-0029 | ASTM A-461-65 Type 630 |
| Nozzle | N89713-32-0027 | ASTM A-182-71 F316<br>ASME SA-182 F316 |
| Disc Holder | N89714-32-0043 | AMS 5662 B |
| Spring Washers Top | N89724-32-0046 | ASTM A-105-71 Gr. II |
| Spring Washers Bottom | N89723-32-0002 | ASME SA-105 Gr. II |
| Adjusting ~~XXXXX~~ Bolt | N89726-34-0047 | ASTM A-193-71 Gr. B6<br>ASME SA-193 Gr. B6 |
| Spindle Point | N89720-32-0035 | ASTM A-564-72 Type 630 |

BWRPD-QC
E.H.B.
3-3-75

| | Serial No. or Identification | Material Specification Including Type or Grade |
|---|---|---|
| c. Spring | NX2689-0048 | ASTM A-304-66 Gr. 4161H |
| d. Bolting | | |
| e. | | |
| Inlet Stud | N89727-0505 thru 0516 | ASTM A-193-71 Gr. B7<br>ASME SA-193 Gr. B7 |
| Inlet Stud Nut | N89728-0509 thru 0520 | ASTM A-194-71 Cl. 2H<br>ASME SA-194 Cl. 2H |
| Bonnet Stud | N89718-0509 thru 0520 | ASTM A-193-71 Gr. B7<br>ASME SA-193 Gr. B7 |
| Bonnet Stud Nut | N89719-0511 thru 0522 | ASTM A-194-71 Cl. 2H<br>ASME SA-194 Cl. 2H |
| OTHER PARTS | | |
| Spindle Ball | N89721-0035 | Stellite 6 |
| BARS & FORGINGS | | |
| Thrust Bearing Adapter | N89725-32-0032 | ASTM A-193-71 Gr. B6<br>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 19 73 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 1973

[signature] Commissions N.B. 6065 Mass. 1090
(Inspector) National Board, State, Province and No.

BWRPD
E.H.B.
3-3-75

PLAN No 2-1374

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/23/96
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
   **(b) Repair Organization P.O. No, Job No, etc.:** C875WE
   **(c) Type Code Symbol Stamp:** VR And NR
   **(d) Certificate Of Authorization No.:** VR No 590 And NR No 78
   **(e) Expiration Date:** VR - January 11, 1998 And NR - April 12, 1998
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with 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 | N63790-00-0137 (N56000-02-0042) | N/A | N/A | 1973 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0137 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:
   1) Disassembled the relief valve to perform the required work
   2) Removed existing disc insert from the relief valve
   3) Installed new replacement disc insert Serial No N93185-56-0243 in the relief valve
   4) Reassembled the relief valve
   5) Tested the relief valve at set pressure of 1195 PSIG. Test results acceptable

**NOTES -**

1) "Bailly" Main Steam Relief Valve (MSRV), Serial No N56000-02-0042 was modified (upgraded) to Serial No N63790-00-0137 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 Serial No N56000-02-0042
3) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
4) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
5) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-137

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0137, 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, 3) See attached NV-1 (Pre - Modification) Code Data Report for MSRV, Serial No N56000-02-0042

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/24/96 — Date 8/26/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/15/96 to 9/4/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486, 7486 W NB-23

National Board, State, and Endorsements

Date 9/4/96

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

PLAN No. 2-1374

1. Work performed by Westinghouse Electric Corp.; Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address)

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

Rudolph Swift 8/23/96

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0137 (mfr's. serial no.) n/a (Natl. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

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

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced disc (N93185-56-0243).

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96. Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) NSS SR. QA EVG (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7.19, 19 96 and state that to the bes of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warrant expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7.19, 19 96. Signed (Inspector) Commissions CA-1526 NB 9435.B (Natl. Board No. (including endorsements) state or province and numb

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

NB-
Rev

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN NO. 2-1374

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

Vulcan Swob 8/23/96

# 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. N63790-00-0137 – – ----- 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 N56000-02-0042 WAS MODIFIED TO N63790-00-0137
(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 | N93183-41-0124 |
| BONNET | N89717 | N93407-44-0055 |
| SPINDLE ASSY | K55465 | K62873-44-0058 |
| SPR.WASHER | N89724 | K62856-44-0203 |
| SPR.WASHER | N89723 | K62857-44-0203 |
| SPRING ASSY | K55466 | K62858-31-0001 |
| PART | PART NO. | REPLACED WITH |
| NOZZLE | N89713 | N93184-51-0157 |
| DISC INSERT | N89715 | N93185-54-0231 |
| THRUST.BRG.ADAPT | N89725 | N93409-33-0007 |
| ADJ.BOLT | N89726 | N93410-32-0006 |
| ADJ.BOLT BUTT. | COMMERCIAL | N93411-34-0013 |
| ADJ.BOLT ASSY | COMMERCIAL | K63618-32-0006 |

L. [illegible]

Certificate Holder's Serial No. N63790-00-0137

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 A Pierce QA Eng Manager 25 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 [illegible]
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN NO. 2-1374

Philip Burgess
8/23/96

| 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. 2-1374

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Q.C. 8/23/86

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 [illegible]/28/71

2. Manufactured For General Electric Company San Jose, California Order No. [illegible]
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. N56000-02-0042 Drawing No. H-[illegible]00 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[illegible] F (Rated Temperature)

Stamped Capacity 898800 Sat. Steam Lbs. Hr. 3 % Overpressure -- Blowdown ~~[illegible]~~ 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve [illegible]325

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

Class 1 ~~XXXX~~ Edition 1971 Addenda Date Summer 1972

Pressure Containing or Pressure Retaining Components

| | Serial No. Identification | Material Specification Including Type or Grade |
|---|---|---|
| a. ~~XXXXXXX~~ Forgings | | |
| Body | N89711-32-0024 | ASTM A-105-[illegible] Gr. II<br>ASME SA-105 [illegible], II |
| Bonnet ~~XXXXXX~~ | N89717-32-0018 | ASTM A-105-[illegible] Gr. II<br>ASME SA-105 [illegible], II |
| b. Bar Stock and Forgings | | |
| ~~XXXXXXXXX~~ Disc Insert | N89715-31-0034 | ASTM A-461-[illegible] Type 630 |
| Nozzle | N89713-32-0031 | ASTM A-182-[illegible] F316<br>ASME SA-182 [illegible] |
| Disc Holder | N89714-32-0042 | AMS 5662 B |
| Spring Washers Top | N89724-32-0042 | ASTM A-105-[illegible] Gr. II |
| Spring Washers Bottom | N89723-32-0003 | ASME SA-105 [illegible], II |
| Adjusting ~~XXXX~~ Bolt | N89726-32-0012 | ASTM A-193-[illegible] Gr. B6<br>ASME SA-193 [illegible], B6 |
| Spindle Point | N89720-32-0034 | ASTM A-564-[illegible] Type 630 |

BWRPD-QC
EHB
[illegible]

| | Serial No. or Identification | Material Specification Including Type or Grade |
|---|---|---|
| c. Spring | NX2689-0047 | ASTM A-304-66 Gr. 4161H |
| d. Bolting | | |
| e. ~~Other Pressure Retaining Components~~ | | |
| Inlet Stud | N89727-0493 thru 0504 | ASTM A-193-71 Gr. B7<br>ASME SA-193 Gr. B7 |
| Inlet Stud Nut | N89728-0497 thru 0508 | ASTM A-194-71 Cl. 2H<br>ASME SA-194 Cl. 2H |
| Bonnet Stud | N89718-0497 thru 0508 | ASTM A-193-71 Gr. B7<br>ASME SA-139 Gr. B7 |
| Bonnet Stud Nut | N89719-0499 thru 0510 | ASTM A-194-71 Cl. 2H<br>ASME SA-194 Cl. 2H |
| OTHER PARTS | | |
| Spindle Ball | N89721-0034 | Stellite 6 |
| BARS & FORGINGS | N89725-31-0009 | ASTM A-193-71 Gr. B6<br>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 4, 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 not his employer shall be 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. 6263 Mass. 1636
(Inspector) National Board, State, Province and No.

BWRPD-QC EHB 3-7-75

PLAN No 2-1375

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS) **Date:** 8/23/96
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Westinghouse Electric Corporation, 200 S Highland Spring Ave, Banning, CA, 92220
**(b) Repair Organization P.O. No, Job No, etc.:** C875WE
**(c) Type Code Symbol Stamp:** VR And NR
**(d) Certificate Of Authorization No.:** VR No 590 And NR No 78
**(e) Expiration Date:** VR - January 11, 1998 And NR - April 12, 1998
**4. Identification Of System:** Main Steam (MS) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with 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 | N63790-00-0139 (N56000-01-0100) | N/A | N/A | 1976 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Spare main steam relief valve Serial No N63790-00-0139 was refurbished by Westinghouse Electric Corporation, Western Repair Center, 200 S Highland Spring Ave, Banning, CA, 92220. The work was performed in accordance with Westinghouse Electric Corporation, Western Repair Center VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work
2) Reassembled the relief valve
3) Installed three (3) new replacement studs for the relief valve inlet joint
4) Tested the relief valve at set pressure of 1165 PSIG. Test results acceptable

**NOTES -**

1) "Bailly" Main Steam Relief Valve (MSRV), Serial No N56000-01-0100 was modified (upgraded) to Serial No N63790-00-0139 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 Serial No N56000-01-0100
3) 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
4) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable
5) Supply System performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable
6) Supply System performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable

PLAN No 2-137

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: 1) See attached NVR-1 Code Data Report "Report Of Repair, Modification And Replacement To Nuclear Pressure Relief Devices" for MSRV Serial No N63790-00-0139, 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, 3) See attached NV-1 (Pre - Modification) Code Data Report for MSRV, Serial No N56000-01-0100

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 8/24/96 — Date 8/26/96

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/15/96 to 9/4/96 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486, 7486N NB58-21 — National Board, State, and Endorsements

Date 9/4/96

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

PLAN No. 2-1375

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C975WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address)

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0139 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1165 psig Blowdown (if applicable) n/a Set pressure and blowdown adjustment made at Western Repair Center (location) using steam (test medium)

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. 3 inlet studs replaced (MC 54400514)

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19 19 96. Signed Westinghouse Electric Corp. Western Repair Center (repair organization) [signature] (authorized representative) NSD SR QA ENG. (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7-19, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-19, 19 96 Signed [signature] (Inspector) Commissions CA-1526 NB 9635 B (Nat. Board No. (including endorsements) state or province and number)

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

NB-166
Rev.2

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN NO. 2-1375

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

Philip Swift 8/23/96

# 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. N63790-00-0139 – – ----- 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 N56000-01-0100 WAS MODIFIED TO N63790-00-0139
(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 | N93183-45-0128 |
| BONNET | N89717 | N93407-46-0057 |
| SPINDLE ASSY | K55465 | K62873-42-0056 |
| SPR.WASHER | N89724 | K62856-46-0205 |
| SPR.WASHER | N89723 | K62857-46-0205 |
| SPRING ASSY | K55466 | K62858-31-0004 |
| PART | PART NO: | REPLACED WITH |
| NOZZLE | N89713 | N93184-51-0158 |
| DISC INSERT | N89715 | N93185-52-0200 |
| THR.BRG.ADAPT. | N89725 | N93409-34-0010 |
| ADJ.BOLT | N89726 | N93410-36-0139 |
| ADJ.BOLT BUTT. | COMMERCIAL | N93411-33-0009 |
| ADJ.BOLT ASSY | COMMERCIAL | K63618-31-0002 |

E 2/23/94

Certificate Holder's Serial No. N63790-00-0139

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. Pines (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 14455 (Nat'l. Bd., State, Prov. and No.)

PLAN NO. 2-1375

Gulaip · Gulp 8/23/96

| 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. 2-1375

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Philip Sup't
Q.C.-44C 8/23/96

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
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. N56000-01-0100 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 | N90118-35-0031 | ASTM A105-71<br>ASME SA105 |
| Bonnet | N89717-36-0086 | ASTM A105-71<br>ASME SA105 |
| b. Bar Stock and Forgings | | |
| ~~Stem~~ Disc Insert | N89715-36-0107 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| Nozzle | N89713-33-0051 | ASTM A182-71 Type 316<br>ASME SA182 Type 316 |
| Disc Holder K55484-39-0134 | N89714-35-0146 | AMS 5662B |
| Spring Washers K55466-36-0095 | N89724-36-0111<br>N89723-38-0129 | ASTM A105-71<br>ASME SA105 |
| Adjusting Bolt | N89726-40-0133 | ASTM A193-71 Gr. B6<br>ASME SA193 Gr. B6 |
| Spindle K55465-35-0104 | N89720-38-0126 | ASTM A564 Type 630<br>ASME SA564 Type 630 |
| Spindle Ball | N89721-0204 | Stoody No. 6 |
| Thrust Bearing Adapter | N89725-34-0104 | ASTM A193-71 Gr. 36<br>ASME SA193 Gr. B6 |

| | Serial No. or Identification | Material Specification Including Type or Grade |
|---|---|---|
| c. Spring | N89722-0069 | ASTM A304-66 |
| d. Bolting | | |
| e. Other Parts such as Pilot Components | | |
| Inlet Stud | N89727-1215 thru 1226 | ASME SA193 Gr. B7 |
| Inlet Nut | N89728-1209 thru 1220 | ASME SA194 Gr. 2H |
| Bonnet Stud | N89718-1234 thru 1245 | ASME SA193 Gr. B7 |
| Bonnet Nut | N89719-1228 thru 1239 | 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 Mass 1205 National Board, State, Province and No.

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

PLAN No 2-1377

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:** 6/23/97
   **Address:** 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:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Service Water (SW) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   **(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: N-416-1
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| SW(71)-1-HPCS | WPPSS | SW(71)-1-HPCS-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| SW-V-47 | Borg Warner | 13984 | N/A | N/A | 1976 | Replaced | Yes, Code Class 1 |
| SW-V-47 | Borg Warner | 13979 | N/A | N/A | 1976 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced existing valve SW-V-47. The replacement work was performed as follows:
   1) Removed existing valve SW-V-47, Serial No 13984:
   2) Installed new replacement valve SW-V-47, Serial No 13979.
   3) Made required socket welds.
   4) Performed visual examination on the final socket welds. Visual examination results acceptable.
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 3 application.
2) ) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Service Water (SW) piping system.
3) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the new replacement valve SW-V-47, Serial No 13979.
4) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.

PLAN No 2-1377

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: 54 Psig — Test Temperature: 69.2° F

Component Design Pressure: 150 Psig — Temperature: 150° F

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve SW-V-47, Serial No 13979.

### 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 6/25/97

Signed By [signature] — Supervisor, Materials And Welding

Date 6/25/97

### 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 1/23/97 to 6/26/97 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.

[signature] — Inspector's Signature

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

Date 6/26/97

0 1060

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

As Required by the Provisions of the ASME Code Rules PLAN NO. 2-1377

Buildup Supp 6/21/97

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Avenue, Van Nuys, Ca. Order No. 44713
(Name & Address of Manufacturer)

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 Order No. 215-3261
(Name and Address)

3. Owner WPPSS Hanford, #2 Job Site SW-V-47, S/N 13979

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification Nuclear Valve Div., P/N 76630, 2 Inch Y Type Globe Valve, CS

Serial Numbers 13971 thru 13995 ( 25 valves )
(Brief description of service for which equipment was designed)

6. (a) Drawing No. 76630 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No.

7. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

8. The material, design, construction, and workmanship complies with ASME Code Section III, Class 1

Edition 1971, Addenda Date Winter '73, Case No.

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| Disc - Code 1F17, 1H16, | Stellite #6 | Rex Precision | |
| Casting - 71238 | NMS 71043 | Metals Tech. | |
| Machined - 71239 | | NV Division | |
| (b) Forgings | | | |
| Body - 1K84, 1K85, 1J35 | SA - 105 | Compton Forge | |
| Forging - 71224 | | Pacific Forge | |
| Machined - 71226-11 | | NV Division | |
| Bonnet - Code 1H63, 1G86, 1G21 | SA -105 | | |
| Forged Stock | | Airco Viking | |
| Machined - 71279-11 | | NV Division | |

REVISED 12/10/81

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1, 2, 5a and 5b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

WBG 215 12187 2

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FORM NPV-1 (back) 0A1060

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (c) Bolting | | | |
| | | | REVIEWED NOV 0 1 1976 BECHTEL QUALITY CONTROL BY: |
| (d) Other Parts | | | |
| Stem - Code 1K35 | SA564TY630 | | |
| Bar Stock | | Jorgensen Steel | |
| Machined - 73444 | | NV Division | |

9. Hydrostatic test 3600-3650 psi.

## CERTIFICATION OF DESIGN

Design information on file at Nuclear Valve Div. of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca.
Stress analysis report on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, CA
Design specifications certified by David J. Murphy (1) Prof. Eng. State Wash. Reg. No. 12542
Stress analysis report certified by Byron Leonard Jr. (1) Prof. Eng. State CA Reg. No. E123
(1) Signature not required. List name only.

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

Date Oct. 8 19 76 Signed Nuclear Valve Div. of Borg Warner (Manufacturer) By [signature]

Certificate of Authorization No. N-1254 expires October 27, 1978

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of California and employed by Dept. of Bldg. & Safety of City of Los Angeles have inspected the equipment described in this Data Report on Oct. 8 19 76, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

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

Date October 8 19 76

[signature] (Inspector) Commissions Calif 1010 (National Board, State, Province and No.)

WBG 3A 215 12187



3

PLAN No 2-1380

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:** 6/30/97
**Sheet:** 1 of 1
**Unit:** WNP-2

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

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| PI(1)-ST-(IR-64)-1A | JCI | PI(1)-ST-(IR-64)-1A | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| CSP-V-67 | Vogt | 12-214798 | N/A | N/A | 1980 | Replaced | Yes, Code Class 2 |
| CSP-V-67 | Vogt | 1-217373 | N/A | N/A | 1997 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced existing valve CSP-V-67. The replacement work was performed as follows:
   1) Removed existing valve CSP-V-67, Serial No 12-214798.
   2) Installed new replacement valve CSP-V-67, Serial No 1-217373.
   3) Made required socket welds.
   4) Performed visual examination on the final socket welds. Visual examination results acceptable.
   5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

**NOTES -**

1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Containment Supply Purge (CSP) piping system.
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the new replacement valve CSP-V-67, Serial No 1-217373.

PLAN No 2-1380

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 CSP-V-67, Serial No 1-217373.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/30/97 — Date 6/30/97

### 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 _____

# 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 * 5/21/97 5/21/97

1. Manufactured by VOGT VALVE CO., LOUISVILLE, KY
(Name and Address of N Certificate Holder)
2. Manufactured for WASHINGTON PUBLIC POWER SYSTEM, RICHLAND, WASHINGTON
(Name and Address of Purchaser or Owner)
3. Location of Installation
(Name and Address)
4. Pump or Valve GATE VALVE Nominal Inlet Size 3/4" (inch) Outlet Size 3/4" (inch)

| | (a) Model No., Series No. or Type | (b) N Certificate Holder's Serial No. | (c) Canadian Registration No. | (d) Drawing No | (e) Class | (f) Nat'l. Bd. No. | (g) Year Built |
|---|---|---|---|---|---|---|---|
| (1) | GATE | 1-217373 | --- | B-48738, R5 | 2 | --- | 1997 |
| (2) | | | | | | | |
| (3) | | | | | | | |
| (4) | | | | | | | |
| (5) | | CSP-V-67, S/N 1-217373 | | | | | |
| (6) | | | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

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

6. Design Conditions (Pressure) psi (Temperature) °F or Valve Pressure Class * 600 (1)
7. Cold Working Pressure * 1440 psi at 100°F
8. Pressure Retaining Pieces 5/21/97 5/21/97 5/21/97 5/21/97

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| (b) Forgings | | | |
| BODY | | | |
| DA3 | SA105 | VOGT | |
| BONNET | | | |
| DB2 | SA105 | VOGT | |

(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 | | | |
| CAP SCREW | | | |
| B7 | SA193B7 | VOGT | |
| (d) Other Parts | | | |
| GAGE | | | |
| WAS | SA479 T410 (CHEM ONLY) | VOGT | |

9. Hydrostatic test 2225 psi. Disk Differential test pressure 1630 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 WINTER'75 (Date), Code Case No. ---, Date 5/15/97

Signed VOGT VALVE CO. (N Certificate Holder) by [signature]

Our ASME Certificate of Authorization No. 947 to use the N (N) symbol expires 1/6/99 (Date) 5/1/97

## CERTIFICATION OF DESIGN

Design information on file at VOGT VALVE CO.

Stress analysis report (Class 1 only) on file at

Design specifications certified by (1) JAMES F. HAGAN, JR.

PE State WA Reg. No. 13579

Stress analysis certified by (1)

PE State Reg. No.

(1) Signature not required. List name only.

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of KENTUCKY and employed by COMMERCIAL UNION INS C of BOSTON, MAS have inspected the pump, or valve, described in this Data Report on 5/14 19 97, 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 May 15 19 97.

[signature] (Inspector) Commissions Ky254 (Nat'l Bd., State, Prov. and No.)

PLAN No 2-1382

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:** 6/24/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Main Steam (MS) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: N-416-1
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| MS(1)-4A | WPPSS | MS(1)-4A-P3 | N/A | N/A | 1984 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced existing valve MS-V-5 with piping material. The replacement work was performed as follows:

1) Removed existing valve MS-V-5.
2) Prepped cut elbow socket end.
3) Performed liquid penetrant (PT) examination on the prepped cut elbow socket end. Performed liquid penetrant (PT) examination results acceptable.
4) Installed new piping material.
5) Made required socket welds.
6) Performed visual examination on the final socket welds. Visual examination results acceptable.
7) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.
8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**

1) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.

PLAN No 2-1382

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: 1020 Psig — Test Temperature: 245° F

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

9. Remarks: 3) * Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test 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 [signature] — Supervisor, Materials And Welding

Date 6/25/97 — Date 6/25/97

### 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 5/2/97 to 6/26/97 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.

[signature] — Inspector's Signature

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

Date 6/26/97

PLAN No 2-1383

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:** 6/26/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Residual Heat Removal (RHR) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 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:** Installed external bypass for valve RHR-V-42B. The replacement work was performed as follows:

1) Installed new piping material.
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.

PLAN No 2-1383

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/28/97 — Date 6/26/97

### 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 2-1384

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:** 6/26/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with 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(1)-4CL1 | WPPSS | RCIC(1)-4CL1-P1 | N/A | N/A | 1984 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Installed external bypass for valve RCIC-V-13. The replacement work was performed as follows:
1) Installed new piping material.
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.

PLAN No 2-1384

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 [illegible] — Supervisor, Materials And Welding

Date 6/26/97 — Date 6/26/97

### 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 2-1388

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:** 6/25/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Floor Drains Radioactive (FDR) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1976 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: N-416-1
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| Floor Drains Radioactive (FDR) | PDM | 16713 FDR | N/A | N/A | 1982 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Prefabricated flushing connection assembly for 3" FDR(48)-1. The prefabrication work was performed as follows:

1) Assembled new tees and weld neck flanges.
2) Made required circumferential butt welds.
3) Performed visual examination on the final circumferential butt welds. Visual examination results acceptable.
4) Performed radiographic (RT) examination on the final circumferential butt welds. Radiographic (RT) examination results acceptable.
5) Installed new spectacle flange.
6) Installed new studs and nuts for the spectacle flange joint.

**NOTES -**

1) The radiographic (RT) examination on the final circumferential butt welds was performed in accordance with the requirements of ASME Section III, Code Class 2, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.
2) The prefabricated flushing connection assembly was installed in the piping system in accordance with ASME Section XI Plan No 2-1437.

PLAN No 2-1388

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: Pressure test to satisfy ASME Section XI requirements was performed in accordance with ASME Section XI Plan No 2-1437.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/25/97 — Date 6/25/97

### 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 5/25/97 to 6/26/97 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.

[signature] — Inspector's Signature

Commissions 7486 WA/7486 NISB IS — National Board, State, and Endorsements

Date 6/26/97

PLAN No 2-1390

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:** 6/30/97
**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)-2UG | WPPSS | SW(21)-2UG-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| SW-V-694A | Borg Warner | 16926 | N/A | N/A | 1977 | Replacement | Yes, Code Class 3 |

7. **Description Of Work Performed:** Installed freeze protection drain line for Service Water (SW) Loop A. The replacement work was performed as follows:
   1) Installed new piping material such as elbows, reducing inserts, reducing tee and pipe.
   2) Installed new valve SW-V-694A, Serial No 16926.
   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.
   6) Installed new U bolt and associated jam nuts.

**NOTES -**

1) ASME Section III, Code Class 2 valve for ASME Section III, Code Class 3 application.
2) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Service Water (SW) piping system.
3) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the new valve SW-V-694A, Serial No 16926.

PLAN No 2-1390

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-694A, Serial No 16926.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/30/97 Date 6/30/97

### 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. 2-1390 0B267

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

As Required by the Provisions of the ASME Code Rules WBGBR 215 12185

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Avenue, Van Nuys, Ca. Order No. 47713
(Name & Address of Manufacturer)

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 Order No. 215-32610
(Name and Address)

3. Owner WPPSS Hanford #2 Job Site SW-V-694A, S/N 16926

4. Location of Plant Richland, Washington 99352 Dwldip Singh 6/30/97

5. Pump or Valve Identification Nuclear Valve Div., P/N 76700, 1 Inch Gate Valve, CS

Serial Numbers 16921 thru 16928, 16875 and 16877 thru 16880
(Brief description of service for which equipment was designed) (13 Valves)

(a) Drawing No. 76700 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No.

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

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

Edition 1971, Addenda Date Winter '73, Case No.

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| Gate - Code 1P14, 1P38 | SA487 CA6NM | | |
| Casting - 75347 | | Rex Precision | |
| Machined - 75346 | | NV Division | |
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| (b) Forgings | | | |
| Body - Code 1J60 | SA 105 | | |
| Forging - 70453 | | Pacific Forge | |
| Machined - 70476 | | NV Division | |
| Assembly - 75348 | | NV Division | |
| | | | |
| Bonnet - Code 1M28, 1M53 | SA 105 | | |
| Forged Stock | | Compton Forge | |
| Machined - 73973-11 | | NV Division | |
| Assembly - 73973 | | NV Division | |

REVIEWED
BECHTEL QUALITY CONTROL
BY:

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

| Material | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (c) Bolting | | | |
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| (d) Other Parts | | | |
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8. Hydrostatic test 5400 - 5450 psi.

## CERTIFICATION OF DESIGN

Design information on file at Nuclear Valve Div. of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca.

Stress analysis report on file at N/A

Design specifications certified by David J. Murphy (1) Prof. Eng. State Wash. Reg. No. 12542

Stress analysis report certified by N/A (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 March 10 19 77 Signed Nuclear Valve Div. of Borg Warner (Manufacturer) By Carol M. Parker

Certificate of Authorization No. 1254 expires October 27, 1978

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of California and employed by Dept. of Bldg. & Safety of City of Los Angeles have inspected the equipment described in this Data Report on March 10 19 77, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

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

Date March 10 19 77

M. Davis (Inspector) Commissions Calif 1010 (National Board, State, Province and No.)



12891031

PLAN No 2-1391

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/12/97
**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(22)-2UG | WPPSS | SW(22)-2UG-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| SW-V-694B | Borg Warner | 16868 | N/A | N/A | 1977 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Installed drain line for Service Water (SW) Loop B. The work was performed as follows:
   1) Installed new piping material such as elbows, reducing inserts, reducing tee and pipe.
   2) Installed new valve SW-V-694B, Serial No 16868.
   3) Made required socket welds.
   4) Performed visual examination on the final socket welds. Visual examination results acceptable.
   5) Installed new support material.

**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 2 valve for ASME Section III, Code Class 3 application.

PLAN No 2-1391

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 SW-V-694B, Serial No 16868.

### 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 Tom Lewis for CM King — Supervisor, Materials And Welding

Date 8/12/97 Date 8/12/97

### 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 _____

215 14929 *Modified NPV-1 See 8a Remarks. OB135

# 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. 2-1391

1. Manufactured by Nuclear Valve Div., Borg Warner, 7500 Tyrone Ave., Van Nuys, Calif. (Name and Address of N Certificate Holder)
2. Manufactured for Bovee & Crail/G.E.R.I., P.O. Box 1040, Richland, Washington 99352 (Name and Address of Purchaser or Owner)
3. Location of Installation Richland, Washington WPPSS Hanford #2 Job Site (Name and Address)
4. Pump or Valve Gate Valve. Nominal Inlet Size 1 (Inches) Outlet Size 1 (Inches)

| | (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) | | 16863 thru 16872 | | 76700 | 2 | | 1977 |
| (2) | | | | | | | |
| (3) | | | | | | | |
| (4) | | | | | | | |
| (5) | | SW-V-694B, SIN 16868 | | | | | |
| (6) | | | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

Lindy Swift 8/12/97

5. The valves are designed to handle a fluid media which includes steam, water condensate, borated water, etc., associated with a PWR and BWR. The temperature pressure rating of the media is stated below. (Brief description of service for which equipment was designed)
6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class N/A (1)
7. Cold Working Pressure 3600 psi at 100°F.
8. Pressure Retaining Pieces

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| Gate-Code 1P14- | SA296 Type 630 | | *Mat'l Spec. was SA564 |
| Casting-75347 | | Rex Precision | |
| Machined-75348 | | NV Division | |
| Stem Code 1N54 | SA564 Type 630 | | |
| Bar Stock | | Jorgensen Co. | |
| Machined-75323 | | NV Division | |
| (b) Forgings | | | |
| Body-Code 1J60, 1K69- | SA105 | | |
| Forging-70453 | | Pacific Forge | |
| Machined-70476 | | NV Division | |
| Assembly-75348 | | NV Division | |
| Bonnet-Code 1M28- | SA 105 | | |
| Forged Stock 73973-11 | | Compton Forge | |
| Machined 73973 | | NV Division | |

(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.



N

215 14929 OB135

FORM NPV-1 (Back)

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (c) Bolting | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| (d) Other Parts | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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 1971, Addenda Winter 1973 (Date), Code Case No. _____ Date December 18, 1981

Signed Nuclear Valve Div., Borg Warner (N Certificate Holder) by [signature]

Our ASME Certificate of Authorization No. N-1254 to use the N (N) symbol expires 10/27/84 (Date)

## CERTIFICATION OF DESIGN

Design information on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409

Stress analysis report (Class 1 only) on file at _____

Design specifications certified by (1) David J. Murphy

PE State Washington Reg. No. 12542

Stress analysis certified by (1) _____

PE State _____ Reg. No. _____

(1) Signature not required. List name only.

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by Lumbermen's Mutual Casualty of Long Grove, Illinois have inspected the pump, or valve, described in this Data Report on December 18, 19 81 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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

Date December 18, 19 81

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

2125 0918

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PLAN No 2-1397

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:** 6/30/97
**Sheet:** 1 of 1
**Unit:** WNP-2

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

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| SLC(2)-3S | WPPSS | SLC(2)-3S-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| SLC-V-16 | Borg Warner | 14075 | N/A | N/A | 1976 | Replaced | Yes, Code Class 2 |
| SLC-V-16 | Borg Warner | 14082 | N/A | N/A | 1976 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced existing valve SLC-V-16. The replacement work was performed as follows:
   1) Removed existing valve SLC-V-16, Serial No 14075.
   2) Installed new replacement valve SLC-V-16, Serial No 14082.
   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
   6) 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 2, 1971 Edition with Winter 1973 Addenda for the Standby Liquid Control (SLC) piping system.
2) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the new replacement valve SLC-V-16, Serial No 14082.
2) The liquid penetrant (PT) examination on the final socket welds was performed in accordance with the requirements of ASME Section III, Code Class 2, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.
3) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.

PLAN No 2-1397

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: 1220 Psig — Test Temperature: 85.7° F

Component Design Pressure: 1400 Psig — Temperature: 150° F

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve SLC-V-16, Serial No 14082.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/30/97 — Date 6/30/97

### 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 12-17-96 to 6/30/97 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.

[signature] — Inspector's Signature

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

Date 6/30/97

PLAN NO. 2-1397

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

As Required by the Provisions of the ASME Code Rules

0-1030

Philip Smith 6/26/97

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Avenue, Van Nuys, Ca. (Name & Address of Manufacturer) Order No. 47713

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 (Name and Address) Order No. 215-3261

3. Owner WPPSS Hanford #2 Job Site SLC-V-16, S/N 14082

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification Nuclear Valve Div., P/N 76650-1, 1-1/2 Inch Y Type Globe Valve, SS Serial Numbers 14073 thru 14082 (10 Valves)
(Brief description of service for which equipment was designed)

(a) Drawing No. 76650-1 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No.

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

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

Edition 1971, Addenda Date Winter '73, Case No.

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| Disc - Code 1E82, 1H16 | Stellite #6 | Metals Tech. | |
| Casting - 71238 | NMS 71043 | Rex Precision | |
| Machined - 71239 | | NV Division | |
| (b) Forgings | | | |
| Body - Code 1K15 | SA182GRF316 | | |
| Forging - 71218 | | Pacific Forge | |
| Machined - 73243-11 | | NV Division | |
| Bonnet - Code 1H42, 1M27 | SA182GRF316 | | |
| Forged Stock | | Republic Steel | |
| Machined - 71278-11 | | NV Division | |

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WBG BR 2 15-16342

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1, 2, 5a and 5b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM NPV-1 (back)

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (c) Bolting | | | |
| (d) Other Parts | | | |
| Stem - Code 1K35 | SA564TY630 | | |
| Bar Stock | | Jorgensen Co. | |
| Machined - 73444 | | NV Division | |

S. Hydrostatic test 5400-5450 psi.

## CERTIFICATION OF DESIGN

Design information on file at Nuclear Valve Div. of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca.

Stress analysis report on file at N/A

Design specifications certified by David J. Murphy (1) Prof. Eng. State Wash. Reg. No. 12542

Stress analysis report certified by N/A (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 September 22 19 76 Signed Nuclear Valve Div. of Borg Warner (Manufacturer) By [signature]

Certificate of Authorization No. 1254 expires October 27, 1978

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of California and employed by Dept. of Bldg. & Safety of City of Los Angeles have inspected the equipment described in this Data Report on September 22 19 76, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

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

Date September 22 19 76

[signature] (Inspector) Commissions California (National Board, State, Province and No.)

BR 215-16342

PLAN No 2-1398

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:** 6/19/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Instrumentation (PI) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: 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-X84b | JCI | PI(1)-4S-X84b | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| PI-VX-269 | Target Rock | 14 | N/A | N/A | 1980 | Replaced | Yes, Code Class 2 |
| PI-VX-269 | Target Rock | 18 | N/A | N/A | 1991 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Replaced existing valve PI-VX-269. The replacement work was performed as follows:
1) Removed existing valve PI-VX-269, Serial No 14.
2) Installed new replacement valve PI-VX-269, Serial No 18.
3) Made required socket welds.
4) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

**NOTES -**
1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) System.
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the new replacement valve PI-VX-269, Serial No 18.

PLAN No 2-1398

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-VX-269, Serial No 18.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By

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

Date 6/19/97 Date 6/20/97

### 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 Commissions _____

Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN NO. 2-1398

Rudolph Smith 6/17/97

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

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735
(name and address of N Certificate Holder)
2. Manufactured for Washington Public Power, Richland, WA 99352
(name and address of Purchaser or Owner)
3. Location of installation WNP-2, Richland, WA 99352
(name and address)
4. Model No., Series No., or Type 79TT-001 Drawing 902-552-001 Rev. - CRN N/A
5. ASME Code Section III: 1974 (Edition) W 1975 (Addenda date) 2 (Class) N/A (Code Case no.)
6. Pump or valve Valve Nominal inlet size 1 (in.) Outlet size 1 (in.)
7. Material: Body SA-182 F316L Bonnet SA-479 316 Disk SA-479 316 ~~Bolting~~ Indicator Tube SA-479 316

| (a) Cert. Holder's Serial No. | (b) Nat'l Board No. | (c) Body Serial No. | (d) Bonnet Serial No. | (e) Disk Serial No. | (f) Indicator Tube Serial No. |
|---|---|---|---|---|---|
| 15 | N/A | 4735A | 3513 | 835 | 4016 |
| 16 | N/A | 4748A | 3558 | 994 | 3982 |
| 17 | N/A | 4764A | 3506 | 961 | 4015 |
| 18 | N/A | 4734A | 3609 | 915 | 3946 |
| N/A | N/A | N/A | N/A | N/A | N/A |

PI-VX-269, S/N 18

*Supplemental information in the 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

(1985) This form (E00037) may be obtained from the Order Dept., ASME, 345 E 47th St., New York, N Y 10017

E 4-30-97

FORM NPV-1 (back)

Mfr. Serial No. N/A

8. Remarks

9. Design conditions 45 (pressure) psi 340 (temperature) °F or valve pressure class N/A (1)

10. Cold working pressure 1545 psi at 100°F

11. Hydrostatic test 2345 psi Temp. Ambient °F Disk differential test pressure - psi

## CERTIFICATION OF DESIGN

Design Specification certified by Stanley Fox Prof. Eng. state WA Reg. No. 16168

Design Report certified by - Prof. Eng. state - Reg. No. -

## CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. 1947 Expires 12-12-92

Date 4/30/91 Name Target Rock Corporation (N Certificate Holder) Signed for E. Bajada, Q.A. Manager (Representative)

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on April 30 19 91, and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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

Date April 30 19 91.

Donald Shirey (Inspector) Commissions NYS 2360 (Nat'l Bd., (incl. endorsements) State, Prov. and No.)

(1) For manually operated valves only.

PLAN No 2-1399

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/12/97
**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(2)-2 | WPPSS | SW(2)-2-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| SW(22)-2 | WPPSS | SW(22)-2-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| SW-V-659 | Borg Warner | 16658 | N/A | N/A | 1977 | Replaced | Yes, Code Class 1 |
| SW-V-659 | Borg Warner | 80132 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| SW-V-670 | Borg Warner | 13642 | N/A | N/A | 1977 | Replaced | Yes, Code Class 1 |
| SW-V-670 | Borg Warner | 28699 | N/A | N/A | 1978 | Replacement | Yes, Code Class 1 |
| SW-V-721B | Borg Warner | 13562 | N/A | N/A | 1977 | Replaced | Yes, Code Class 1 |
| SW-V-721B | Borg Warner | 28744 | N/A | N/A | 1978 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced Service Water (SW) piping material and valves associated with seal cooler RHR-HX-2B. The replacement work was performed as follows:
   1) Removed existing piping material.
   2) Removed existing valves SW-V-659, Serial No 16658, SW-V-670, Serial No 13642 and SW-V-721B, Serial No 13562.
   3) Installed new replacement piping material such as elbows, reducing inserts, reducing tees, flanges and pipe.
   4) Installed new replacement valves SW-V-659, Serial No 80132, SW-V-670, Serial No 28699 and SW-V-721B, Serial No 28744.
   5) Made required socket welds.
   6) Performed visual examination on the final socket welds. Visual examination results acceptable.
   7) Installed new replacement support material.
   8) Installed new replacement studs and nuts for the bolted flanged joints.

**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 valves for ASME Section III, Code Class 3 application.

PLAN No 2-1399

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig Test Temperature: °F

Component Design Pressure: Psig Temperature: °F

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

| EPN No | Serial No |
|---|---|
| SW-V-659 | 80132 |
| SW-V-670 | 28699 |
| SW-V-721B | 28744 |

### 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 Tom Lewis for CM King

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

Date 8/12/97 Date 8/12/97

### 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 Commissions _____

Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN No. 2-1399

BOOK # 0J123

# FORM NPV-1 N CERTIFICATE HOLDER'S DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

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

Valdip Supt 8/12/91

1. Manufactured by Nuclear Valve Div., Borg Warner, 7500 Tyrone Ave., Van Nuys, Calif. 3000 George Washington Way
(Name and Address of N Certificate Holder)

2. Manufactured for Washington Public Power Supply Systems, Richland, Washington
(Name and Address of Purchaser or Owner)

3. Location of Installation Richland, Washington WPPSS Hanford #2 Job Site
(Name and Address)

4. Pump or Valve Y Globe Valve. Nominal Inlet Size 3/4 (inch) Outlet Size 3/4 (inch)

| | (a) Model No., Series No. or Type | (b) N Certificate Holder's Serial No. | (c) Canadian Registration No. | (d) Drawing No. | (e) Class | (f) Nat'l. Bd. No. | (g) Year Built |
|---|---|---|---|---|---|---|---|
| (1) | 1500# | 80129 thru | N/A | 76590-2 | 1 | N/A | 1983 |
| (2) | | 80135 | | | | | |
| (3) | | | | | | | |
| (4) | | | | | | | |
| (5) | | SW-V-659, S/N 80132 | | | | | |
| (6) | | | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. The valves are designed to handle a fluid media which includes steam, water condensate, borated water, etc., associated with a PHR and BHR. The temperature pressure rating of the media is stated below.
(Brief description of service for which equipment was designed)

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class N/A (1)

7. Cold Working Pressure 3600 psi at 100°F.

8. Pressure Retaining Pieces

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| Disc-Code 5F32 | Stellite #6 | Rex Precision | |
| 5F55 | | | |
| (b) Forgings | | | |
| Body-Code 5E9S | SA 105 | Pacific Forge | |

SECHTEL 709

BECHTEL

(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 | | | |
| Backseat-Code 5E84 | SA 564 Ty 630 | Jorgensen Steel | |

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

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. I, Edition 1974, Addenda Winter '75 (Date), Code Case No. N/A, Date 9/26/83

Signed Nuclear Valve Div., Borg Warner (N Certificate Holder) by [signature]

Our ASME Certificate of Authorization No. N-1254 to use the N (N) symbol expires 10/27/84 (Date).

## CERTIFICATION OF DESIGN

Design information on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409

Stress analysis report (Class 1 only) on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, CA

Design specifications certified by (1) David J. Murphy

PE State Washington Reg. No. 12542

Stress analysis certified by (1) Byron E. Leonard

PE State CA Reg. No. E123

(1) Signature not required. List name only.

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by Lumbermen's Mutual Casualty of Long Grove, Illinois have inspected the pump, or valve, described in this Data Report on 9/26 19 83, 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 9/26 19 83

[signature] (Inspector) Commissions 1275 CA (Nat'l Bd., State, Prov. and No.)

2 1 3 1 1 4 1 6

STUNTEL 708

PLAN No. 2-1399

Quality Supt 8/12/97

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

As Required by the Provisions of the ASME Code Rules

00128

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. (Name & Address of Manufacturer) Order No. 47713

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 (Name and Address) Order No. 215-32610

3. Owner WPPSS Hanford #2 Job Site SW-V-670, S/N 28699

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification Nuclear Valve Div. P/N 76590-2, 3/4 Inch Y Globe Valve, CS, 1500#

Serial Numbers 28694 thru 28718 (25 Valves)

(Brief description of service for which equipment was designed)

(a) Drawing No. 76590-2 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No. N/A

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

7. The material, design, construction, and workmanship complies with ASME Code Section III. Class 1

Edition 1974, Addenda Date Summer '75, Case No. N/A

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings 1W10 | | | |
| Disc - Code 1W95, 1W47 | Stellite #6 Per NMS 71043 | Rex Precision | |
| (b) Forgings | | | |
| Body - Code 1V46 | SA 105 | George Chiang | |
| Backseat - Code 2D89 | SA564 Ty 630 | Jorgensen Steel | |

RECEIVED MAR 13 1982 BECHTEL QUALITY CONTROL BY: CR

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

WDG. DIV. 219 150722

FOR INFORMATION ONLY

2 1 2 9 0 1 2 4

FORM NPV-1 (back)

| | Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|---|
| (c) Bolting N/A | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| (d) Other Parts N/A | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

8. Hydrostatic test 5400 psi.

## CERTIFICATION OF DESIGN

Design information on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409

Stress analysis report on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, CA 91409

Design specifications certified by David J. Murphy (1) Prof. Eng. State Wash. Reg. No. 12542

Stress analysis report certified by William E. Hill (1) Prof. Eng. State CA Reg. No. 11338

(1) Signature not required. List name only.

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

Date March 9 19 78 Signed Nuclear Valve Division of Borg Warner (Manufacturer) By [signature]

Certificate of Authorization No. N-1254 expires October 27, 1978

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of California and employed by Lumbermen's Mutual Casualty of Long Grove, Illinois have inspected the equipment described in this Data Report on March 9 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 Code, Section III.

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

Date March 9 19 78

[signature] (Inspector) Manuel B. Diana

Commissions CA-1275 (National Board, State, Province and No.)

PLAN No. 2-1399

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

As Required by the Provisions of the ASME Code Rules

Dwalip Singh 8/12/97

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. Order No. 47713
(Name & Address of Manufacturer)

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 Order No. 215-32610
(Name and Address)

3. Owner WPPSS Hanford #2 Job Site SW-V-7218, S/N 28744

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification Nuclear Valve Div. P/N 76590-2, 3/4" Y Globe Valve, 1500#, CS
Serial Numbers 28729 thru 28752 (24 Valves)
(Brief description of service for which equipment was designed)

(a) Drawing No. 76590 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No. N/A

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

7. The material, design, construction, and workmanship complies with ASME Code Section III, Class 1

Edition 1974, Addenda Date Summer '75, Case No. N/A

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| Disc - Code 1W10, 1W47, 1W95, 1W83- | Stellite #6 | Rex Precision | |
| (b) Forgings | | | |
| Body - Code 1V46, 1W92- | SA 105 | Chiang & Assoc./Pacific Forge | |
| Backseat - Code 2D89 | SA 564 Ty 630 | Jorgensen Steel | |

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MAR 24 1982
DECHRE QUALITY CONTROL
BY:

WBGBR 215 16344

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1, 2, 5a and b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is ...

FORM NPV-1 (back)

| | Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|---|
| (c) Bolting | N/A | | — | |
| (d) Other Parts | N/A | | | |

8. Hydrostatic test 5400 psi.

## CERTIFICATION OF DESIGN

Design information on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409

Stress analysis report on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, CA 91409

Design specifications certified by David J. Murphy (1) Prof. Eng. State Wash. Reg. No. 12542

Stress analysis report certified by William E. Hill (1) Prof. Eng. State CA Reg. No. 11338

(1) Signature not required. List name only.

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

Date March 16 19 78 Signed Nuclear Valve Division of Borg Warner (Manufacturer) By [signature]

Certificate of Authorization No. N-1254 expires October 27, 1978

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of California and employed by Lumbermen's Mutual Casualty of Long Grove, Illinois have inspected the equipment described in this Data Report on March 16 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 Code, Section III.

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

Date March 16 19 78

[signature] (Inspector) Manuel B. Diana

Commissions CA 1275 (National Board, State, Province and No.)

PLAN No 2-1400

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:** 6/20/97
**Sheet:** 1 of 1
**Unit:** WNP-2

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

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| B22-G001A | WPPSS | B22-G001A-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-RV-2A | Crosby | N63790-00-0054 | N/A | N/A | 1980 | Replaced | Yes, Code Class 1 |
| MS-RV-2A | 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-2A. The replacement work was performed as follows:
   1) Removed existing relief valve MS-RV-2A, Serial No N63790-00-0054 with set pressure of 1185 Psig at rated temperature of 575° F.
   2) Installed replacement relief valve with Serial No N63790-00-0053 with set pressure of 1185 Psig at rated temperature of 575° F.
   3) Performed VT-1 visual examination on twelve (12) new replacement nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
   4) Reused VT-3 visually examined existing studs for the relief valve inlet joint.
   5) Installed twelve (12) new replacement VT-1 visually examined nuts for the relief valve inlet joint.
   6) Installed sixteen (16) new replacement 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 body to bonnet joint. No evidence of leakage during the pressure test.
   8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side.
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side.
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0053.
4) VT-3 visual examination on the existing studs for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1369.
5) VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1369.
6) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1369.

PLAN No 2-1400

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 [*]

Test Pressure: 1020/7.5 Psig — Test Temperature: 245/67° F

Component Design Pressure: 1185 Psig — Temperature: 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for relief valve Serial No N63790-00-0053.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0053.
3) * Pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
4) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 67° F.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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 1/28/97 to 6/30/97 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.

[signature] — Inspector's Signature

Commissions 7486W/7486 WISB FJ — National Board, State, and Endorsements

Date 6/30/97

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

PLAN NO. 2-1400

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) Dulip Gupta 6/16/97

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0053 (mfr's. serial no.) n/a (Natl. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: 1971 (edition) n/a (addenda) n/a (Code Cases)

9. Design responsibilities n/a

10. Opening pressure: 1185 psig Blowdown (if applicable) n/a Set pressure and blowdown adjustments made at Western Repair Center (location) using steam (test medium)

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced 1 inlet stud (MC 54400514)

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96. Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) NJB SR. QA ENG (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7-19, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-19, 19 96. Signed Linda F. Reyes (Inspector) Commissions CA 15216 NB 6435 B (Natl. Board No. (including endorsements) state or province and number)

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

NR-1 Rev

~~AAS-RV-3B~~ 6/16/77

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1400

Philip Sugg 6/16/77 2.-44D

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

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 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. ~~Castings~~ Bar Stock & Forgings | | |
| Body | N93183-35-0072 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-35-0035 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| b. ~~Bar Stock & Forgings~~ ~~Supports~~ 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<br>K62857-35-0056 | ASTM A105-71 Gr. II<br>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<br>ASME SA564 Type 630 |
| c. Spring K62858-35-0035 | *N89722-0011 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | ~~ZX00380127~~ |
| e. ~~Other Pieces~~ 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<br>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<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW8) | N93218-0639 thru 0650 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button K63618-33-0062 | N93411-33-0062 | ASME SA193 Gr. B6 |

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

N63790-00-0053

## 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, 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. Passwant

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 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 11/21 1980.

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

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machine[illegible]v.

ZX00380128

PLAN No 2-1401

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:** 6/20/97
**Sheet:** 1 of 1
**Unit:** WNP-2

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

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| B22-G001A | WPPSS | B22-G001A-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-RV-3A | Crosby | N63790-00-0058 | N/A | N/A | 1980 | Replaced | Yes, Code Class 1 |
| MS-RV-3A | Crosby | N63790-00-0056 | N/A | N/A. | 1980 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-3A. The replacement work was performed as follows:
   1) Removed existing relief valve MS-RV-3A, Serial No N63790-00-0058 with set pressure of 1195 Psig at rated temperature of 575° F.
   2) Installed replacement relief valve with Serial No N63790-00-0056 with set pressure of 1195 Psig at rated temperature of 575° F.
   3) Performed VT-1 visual examination on nine (9) new replacement nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
   4) Performed VT-3 visual examination on three (3) existing nuts for the relief valve inlet joint. VT-3 visual examination results acceptable.
   5) Reused VT-3 visually examined existing studs for the relief valve inlet joint.
   6) Reused three (3) VT-3 visually examined existing studs for the relief valve inlet joint.
   7) Installed nine (9) new replacement VT-1 visually examined nuts for the relief valve inlet joint.
   8) Installed sixteen (16) new replacement bolts for the relief valve outlet joint.
   9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test.
   10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side.
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side.
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0056.
4) VT-3 visual examination on the existing studs for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1370.
5) VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1370.
6) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1370.

PLAN No 2-1401

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 [*]

Test Pressure: 1020/7.5 Psig — Test Temperature: 245/67° F

Component Design Pressure: 1195 Psig — Temperature: 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for relief valve Serial No N63790-00-0056.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0056.
3) * Pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
4) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 67° F.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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 1/28/97 to 6/30/97 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.

[signature] — Inspector's Signature

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

Date 6/30/97

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

PLAN NO. 2-1401

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) Kuldip Gupta 6/16/97

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N53790-00-0056 (mfr's. serial no.) n/a (Natl. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1195 psig Blowdown(if applicable) n/a Set pressure and blowdown adjustme made at Western Repair Center (location) using steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced disc (N93185-56-0248). Replaced 3 inlet studs (MC 54400514).

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) [signature] (authorized representative) NSD. SR QA Eng (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued b the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7.19, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warrant expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7.19, 19 96. Signed [signature] (Inspector) Commissions CA-1526 NB 9435.B (Natl. Board No.(including endorsements)state or province and numbe

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

NB-1 Rev

~~MS-RV-3D~~

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN NO. 2-1401

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

Q.C.-44D

Kuedip Gupta
6/16/97

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. N63790-00-0056 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 | N93183-35-0075 | ASTM A105 -71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-35-0038 | ASTM A105 -71 Gr. II<br>ASME SA105 Gr. II |
| b. | | |
| Disc Insert | N93185-34-0088 | ASME SA637 Gr. 718 |
| Nozzle | N93184-33-0060 | ASME SA182 Gr. F316 |
| Disc Holder *K55484-35-0096 | *N89714-34-0107 | AMS 5662B |
| Spring Washers K62858-35-0038 | K62856-35-0094<br>K62857-35-0059 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Adjusting Bolt | N93410-33-0063 | ASME SA193 Gr. B6 |
| Spindle Point K62873-35-0056 | *N89720-34-0069 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| c. Spring K62858-35-0038 | *N89722-0014 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | ZX00380146 |
| e. Spindle Ball K62873-35-0056 | N93213-0056 | Stellite #6 |
| Thrust Bearing Adapter | N93409-32-0058 | ASME SA193 Gr. B6 |
| Bonnet Stud (I17) | N93207-0669 thru 0680 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Bonnet Stud Nut (J87) | N93210-0889 thru 0900 | ASME SA194 Gr. 2H |
| Inlet Stud (BW6) | N93216-0671 thru 0682 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW8) | N93218-0675 thru 0686 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button K63618-33-0065 | N93411-33-0065 | ASME SA193 Gr. B6 |

Valve originally built against Crosby Order No. N103000, Assembly No. [illegible] modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk.
Original nameplate removed and new nameplate attached.

N103790-00-0056

## CERTIFICATE OF COMPLIANCE

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

Class 1

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

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

## CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

## CERTIFICATE OF SHOP INSPECTION

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

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

Date 11/18 1980.

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

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

ZX00380147

PLAN No 2-1402

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:** 6/20/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Main Steam (MS) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| B22-G001A | WPPSS | B22-G001A-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-RV-4A | Crosby | N63790-00-0135 | N/A | N/A | 1973 | Replaced | Yes, Code Class 1 |
| MS-RV-4A | Crosby | N63790-00-0136 | N/A | N/A | 1973 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced existing relief valve MS-RV-4A. The replacement work was performed as follows:
1) Removed existing relief valve MS-RV-4A, Serial No N63790-00-0135 with set pressure of 1205 Psig at rated temperature of 575° F.
2) Installed replacement relief valve with Serial No N63790-00-0136 with set pressure of 1205 Psig at rated temperature of 575° F.
3) Performed VT-1 visual examination on twelve (12) new replacement nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
4) Reused VT-3 visually examined existing studs for the relief valve inlet joint.
5) Installed twelve (12) new replacement VT-1 visually examined nuts for the relief valve inlet joint.
6) Installed sixteen (16) new replacement 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 body to bonnet joint. No evidence of leakage during the pressure test.
8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

**NOTES-**
1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side.
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side.
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0053.
4) VT-3 visual examination on the existing studs for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1373.
5) VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1373.
6) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1373.

PLAN No 2-1402

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** [*]

**Test Pressure:** 1020/7.5 Psig **Test Temperature:** 245/67° F

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

**9. Remarks:** 1) See attached NVR-1 Code Data Report for relief valve Serial No N63790-00-0136.
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 N56000-02-0043.
4) * Pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R601 "Reactor Pressure Vessel Leakage Test".
5) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 67° F.

### CERTIFICATE OF COMPLIANCE

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

**Type Code Symbol Stamp:** Not Applicable

**Certificate Of Authorization No.:** Not Applicable

**Expiration Date:** Not Applicable

**Prepared By** Kuldip Singh **Signed By** [signature]

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

**Date** 6/21/97 **Date** 6/23/97

### 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* 1/28/97 *to* 6/30/97 *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.*

[signature] **Commissions** 7486W/7486 NISB IS

Inspector's Signature National Board, State, and Endorsements

**Date** 6/30/97

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

PLAN No 2-1402

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address)
6/16/97

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0136 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1205 psig Blowdown (if applicable) n/a Set pressure and blowdown adjustment made at Western Repair Center (location) using steam (test medium)

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced disc (N93185-56-0242).

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) NSD. SR. QA Eng (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7-19, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-19, 19 96 Signed (Inspector) Commissions CA-1526 NB 9435 B (Nat. Board No. (including endorsements) state or province and number)

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

NB-
Rev.

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN NO. ~~2-1005~~ 2-1402

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

Rudolf Gugel
3/10/94

# 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. N63790-00-0136 -- -- ----- 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 N56000-02-0043 WAS MODIFIED TO N63790-00-0136
(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 | N93183-42-0125 |
| BONNET | N89717 | N93407-43-0054 |
| SPINDLE ASSY | K55465 | K62873-33-0006 |
| SPR.WASHER | N89724 | K62856-43-0202 |
| SPR.WASHER | N89723 | K62857-43-0202 |
| SPRING ASSY | K55466 | K62858-31-0005 |

| PART | PART NO. | REPLACED WITH |
|---|---|---|
| NOZZLE | N89713 | N93184-51-0153 |
| DISC INSERT | N89715 | N93185-52-0203 |
| SPRING | NX2689 | NX2689-0135 |
| THR.BRG.ADAPT. | N89725 | N93409-34-0009 |
| ADJ.BOLT | N89726 | N93410-31-0003 |
| ADJ.BOLT BUTT. | COMMERCIAL | N93411-33-0010 |
| ADJ.BOLT ASSY | COMMERCIAL | K63618-31-0003 |
| INLET STUD | N89727 | N93216/NAD QTY 10 |

2/23/94

Certificate Holder's Serial No. N63790-00-0136

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. Pires (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. 2-1402

Kuldip Singh
6/16/97

| 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. 2-1402 Rudolph Ramos 3/10/94

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.-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. N56000-02-0043 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) 1205 575° F (Rated Temperature)

Stamped Capacity 906250 Lbs. Hr. (Sat. Steam) 3 % Overpressure - Blowdown ~~XXXX~~ 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825

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

Class 1 ~~XXXX~~ Edition 1971 Addenda Date Summer 1972

Pressure Containing or Pressure Retaining Components

| | Serial No. Identification | Material Specification Including Type or Grade |
|---|---|---|
| a. ~~XXXXXXX~~ Forgings | | |
| Body | N89711-32-0025 | ASTM A-105-71 Gr. II<br>ASME SA-105 Gr. II |
| Bonnet ~~XXXXXX~~ | N89717-32-0019 | ASTM A-105-71 Gr. II<br>ASME SA-105 Gr. II |
| b. Bar Stock and Forgings | | |
| ~~XXXXXXXXX~~ Disc Insert | N89715-31-0029 | ASTM A-461-65 Type 630 |
| Nozzle | N89713-32-0027 | ASTM A-182-71 F316<br>ASME SA-182 F316 |
| Disc Holder | N89714-32-0043 | AMS 5662 B |
| Spring Washers Top | N89724-32-0046 | ASTM A-105-71 Gr. II |
| Spring Washers Bottom | N89723-32-0002 | ASME SA-105 Gr. II |
| Adjusting ~~XXXXX~~ Bolt | N89726-34-0047 | ASTM A-193-71 Gr. B6<br>ASME SA-193 Gr. B6 |
| Spindle Point | N89720-32-0035 | ASTM A-564-72 Type 630 |

BWRPD.OC
E.H.B.
3-3-75

| | Serial No. or Identification | Material Specification Including Type or Grade |
|---|---|---|
| c. Spring | NX2689-0048 | ASTM A-304-66 Gr. 4161H |
| d. Bolting | | |
| e. | | |
| Inlet Stud | N89727-0505 thru 0516 | ASTM A-193-71 Gr. B7<br>ASME SA-193 Gr. B7 |
| Inlet Stud Nut | N89728-0509 thru 0520 | ASTM A-194-71 Cl. 2H<br>ASME SA-194 Cl. 2H |
| Bonnet Stud | N89718-0509 thru 0520 | ASTM A-193-71 Gr. B7<br>ASME SA-193 Gr. B7 |
| Bonnet Stud Nut | N89719-0511 thru 0522 | ASTM A-194-71 Cl. 2H<br>ASME SA-194 Cl. 2H |
| OTHER PARTS | | |
| Spindle Ball | N89721-0035 | Stellite 6 |
| BARS & FORGINGS | | |
| Thrust Bearing Adapter | N89725-32-0032 | ASTM A-193-71 Gr. B6<br>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 1973

[signature] Commissions N.B. 6065 Mass. 1090
(Inspector) National Board, State, Province and No.)

BWRPD E.H.B.

3-3-75

PLAN No 2-1403

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:** 6/21/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   **(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No. | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| B22-G001B | WPPSS | B22-G001B-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-RV-1B | Crosby | N63790-01-0140 | N/A | N/A | 1994 | Replaced | Yes, Code Class 1 |
| MS-RV-1B | Crosby | N63790-00-0139 | N/A | N/A | 1976 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-1B. The replacement work was performed as follows:
   1) Removed existing relief valve MS-RV-1B, Serial No N63790-01-0140 with set pressure of 1165 Psig at rated temperature of 565° F.
   2) Installed replacement relief valve with Serial No N63790-00-0139 with set pressure of 1165 Psig at rated temperature of 575° F.
   3) Performed VT-1 visual examination on twelve (12) new replacement nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
   4) Reused VT-3 visually examined existing studs for the relief valve inlet joint.
   5) Installed twelve (12) new replacement VT-1 visually examined nuts for the relief valve inlet joint.
   6) Installed sixteen (16) new replacement 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 body to bonnet joint. No evidence of leakage during the pressure test.
   8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

**NOTES**

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side.
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side.
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0139.
4) VT-3 visual examination on the existing studs for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1375.
5) VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1375.
6) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1375.

PLAN No 2-1403

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** [*]

**Test Pressure:** 1020/7.5 Psig **Test Temperature:** 245/67° F

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

**9. Remarks:** 1) See attached NVR-1 Code Data Report for 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 N56000-01-0100.
4) * Pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
5) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 67° 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* [illegible]
Supervisor, Materials And Welding

*Date* 6/21/97 *Date* 6/23/97

### 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* 1/28/97 *to* 7/1/97 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*
*By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.*

[illegible]
Inspector's Signature

*Commissions* 7486 W/7486 NISB FS
National Board, State, and Endorsements

*Date* 7/1/97

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

PLAN No. 2-1403

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) 6/21/97

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0139 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1165 psig Blowdown (if applicable) n/a Set pressure and blowdown adjustment made at Western Repair Center (location) using steam (test medium)

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. 3 inlet studs replaced (MC 54400514)

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96. Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) NSD SR RA ENG. (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7.19, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7.19, 19 96 Signed (Inspector) Commissions CA1526 · NB 9635 B (Nat. Board No. (including endorsements) state or province and number)

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

NB-166
Rev.2

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN No. 2-1403

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

6/21/97

# 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. N63790-00-0139 – – ----- 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 N56000-01-0100 WAS MODIFIED TO N63790-00-0139
(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 | N93183-45-0128 |
| BONNET | N89717 | N93407-46-0057 |
| SPINDLE ASSY | K55465 | K62873-42-0056 |
| SPR.WASHER | N89724 | K62856-46-0205 |
| SPR.WASHER | N89723 | K62857-46-0205 |
| SPRING ASSY | K55466 | K62858-31-0004 |
| PART | PART NO: | REPLACED WITH |
| NOZZLE | N89713 | N93184-51-0158 |
| DISC INSERT | N89715 | N93185-52-0200 |
| THR.BRG.ADAPT. | N89725 | N93409-34-0010 |
| ADJ.BOLT | N89726 | N93410-36-0139 |
| ADJ.BOLT BUTT. | COMMERCIAL | N93411-33-0009 |
| ADJ.BOLT ASSY | COMMERCIAL | K63618-31-0002 |

E 2/23/94

Certificate Holder's Serial No. N63790.00.0139

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. 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. 2-1403

[illegible] Supb
6/21/97

| 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. 2-1403

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Rudolf Engels 6/21/97

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. N56000-01-0100 Drawing No. H-56000 Rev. C

Type 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 | N90118-35-0031 | ASTM A105-71 ASME SA105 |
| Bonnet | N89717-36-0086 | ASTM A105-71 ASME SA105 |
| b. Bar Stock and Forgings | | |
| ~~Stem~~ Disc Insert | N89715-36-0107 | ASTM A564-71 Type 630 ASME SA564 Type 630 |
| Nozzle | N89713-33-0051 | ASTM A182-71 Type 316 ASME SA182 Type 316 |
| Disc Holder K55484-39-0134 | N89714-35-0146 | AMS 5662B |
| Spring Washers K55466-36-0095 | N89724-36-0111 N89723-38-0129 | ASTM A105-71 ASME SA105 |
| Adjusting Bolt | N89726-40-0133 | ASTM A193-71 Gr. 36 ASME SA193 Gr. 36 |
| Spindle K55465-35-0104 | N89720-38-0126 | ASTM A564 Type 630 ASME SA564 Type 630 |
| Spindle Ball | N89721-0204 | Stoody No. 6 |
| Thrust Bearing Adapter | N89725-34-0104 | ASTM A193-71 Gr. 36 ASME SA193 Gr. 36 |

| | Serial No. or Identification | Material Specification Including Type or Grade |
|---|---|---|
| c. Spring | N89722-0069 | ASTM A304-66 |
| d. Bolting | | |
| e. Other Parts such as Pilot Components | | |
| Inlet Stud | N89727-1215 thru 1226 | ASME SA193 Gr. B7 |
| Inlet Nut | N89728-1209 thru 1220 | ASME SA194 Gr. 2H |
| Bonnet Stud | N89718-1234 thru 1245 | ASME SA193 Gr. B7 |
| Bonnet Nut | N89719-1228 thru 1239 | 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. By [signature]
Manufacturer QA Manager

Certificate of Authorization No. 926 expires Ocrober 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 Mass 1205
Inspector National Board, State, Province and No.

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

PLAN No 2-1404

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:** 6/21/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   **(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| B22-G001B | WPPSS | B22-G001B-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-RV-2B | Crosby | N63790-00-0050 | N/A | N/A | 1980 | Replaced | Yes, Code Class 1 |
| MS-RV-2B | Crosby | N63790-00-0047 | N/A | N/A | 1981 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-2B. The replacement work was performed as follows:
   1) Removed existing relief valve MS-RV-2B, Serial No N63790-00-0050 with set pressure of 1175 Psig at rated temperature of 575° F.
   2) Performed VT-1 visual examination on all existing studs for the replacement relief valve inlet joint. VT-1 visual examination results acceptable.
   3) Installed replacement relief valve with Serial No N63790-00-0047 with set pressure of 1175 Psig at rated temperature of 575° F.
   4) Performed VT-1 visual examination on twelve (12) new replacement nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
   5) Reused VT-1 visually examined existing studs for the relief valve inlet joint.
   6) Installed twelve (12) new replacement VT-1 visually examined nuts for the relief valve inlet joint.
   7) Installed sixteen (16) new replacement bolts for the relief valve outlet joint.
   8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve body to bonnet joint. No evidence of leakage during the pressure test.
   9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side.
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side.
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0047.
4) VT-3 visual examination on the existing studs for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1313.
5) VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1313.
6) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1313.

PLAN No 2-1404

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 [*]

Test Pressure: 1020/7.7 Psig — Test Temperature: 245/63.1° F

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

9. Remarks: 1) See attached NVR-1 Code Data Report for relief valve Serial No N63790-00-0047.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0047.
3) * Pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R601 "Reactor Pressure Vessel Leakage Test".
4) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.7 Psig and test temperature of 63.1° F.

### CERTIFICATE OF COMPLIANCE

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

*Type Code Symbol Stamp:* Not Applicable

*Certificate Of Authorization No.:* Not Applicable

*Expiration Date:* Not Applicable

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

*Signed By* [signature] — Supervisor, Materials And Welding

*Date* 6/21/97 — *Date* 6/23/97

### 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* 1/28/97 *to* 7/1/97 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] — Inspector's Signature

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

*Date* 7/1/97

OF NUCLEAR PRESSURE RELIEF DEVICES

PLAN No. 2-1404

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) Pulaski Smith 6/21/97

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

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

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0047 (mfr's. serial no.) N/A (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) N/A (addenda) N/A (Code Case(s)) 1 (Code Class)

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

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

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

9. Design responsibilities N/A

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

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

Remarks: None

## CERTIFICATE OF COMPLIANCE

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

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

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

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

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 3-29, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

3.29, 19 96 Signed Rene Shea (Inspector) Commissions GA 1716 (Nat. Board No.(including endorsements)state or province and number)

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

NB-166 Rev.2

~~NAG Review~~
Rudolph Gupta
5/4/88

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
PLAN No. 2-1404

DATA REPORT
Safety and Safety Relief Valves

Rudolph Gupta
6/21/97

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

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

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0047 Drawing No. DS-A-63790 Rev.C

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

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

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

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

Pressure Retaining Pieces

| | Serial No. Identification | Material Specification Including Type or Grade |
|---|---|---|
| a. ~~Castings~~ Bar Stock & Forgings | | |
| Body | N93183-35-0066 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-35-0029 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| b. ~~Forgings~~ | | |
| ~~Disc Insert~~ Disc Insert | N93185-34-0078 | ASME SA637 Gr. 718 |
| Nozzle | N93184-32-0049 | ASME SA182 Gr. F316 |
| Disc Holder *K55484-35-0098 | *N89714-34-0136 | AMS 5662B |
| Spring Washers K62858-35-0029 | K62856-35-0085<br>K62857-35-0050 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Adjusting Bolt | N93410-33-0054 | ASME SA193 Gr. B6 |
| Spindle Point K62873-37-0148 | N89720-43-0147 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| c. Spring K62858-35-0029 | *N89722-0003 | ASTM A304-66 Gr. 4161 H |
| d. Bolting | | ZX00380110 |
| e. ~~Knuckle~~ Spindle Ball K62873-37-0148 | N93213-0215 | Stoody #6 |
| Thrust Bearing Adapter | N93409-32-0049 | ASME SA193 Gr. B6 |
| Bonnet Stud (BW5, I17) | N93207-0561 thru 0572 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Bonnet Stud Nut (J87) | N93210-0781 thru 0792 | ASME SA194 Gr. 2H |
| Inlet Stud (BW6) | N93216-0563 thru 0574 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW8) | N93218-0567 thru 0578 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button K63618-33-0055 | N93411-33-0055 | ASME SA193 Gr. B6 |

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

MS-RV-2C
Rudolph Engr's 441
N1e3790-00-0047

## CERTIFICATE OF COMPLIANCE

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

Class 1

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

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

## CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 1/9, 19 81 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 1/9 19 81.

FOR INFORMATION ONLY

Signed John Dunne (Inspector) Commissions MASS 126 F (Nat'l. Bd., State, Prov. and No.)

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

ZX00380111

PLAN No 2-1405

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:** 6/21/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Main Steam (MS) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| B22-G001C | WPPSS | B22-G001C-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-RV-4C | Crosby | N63790-00-0057 | N/A | N/A | 1980 | Replaced | Yes, Code Class 1 |
| MS-RV-4C | Crosby | N63790-00-0137 | N/A | N/A | 1973 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced existing relief valve MS-RV-4C. The replacement work was performed as follows:
1) Removed existing relief valve MS-RV-4C, Serial No N63790-01-0057 with set pressure of 1195 Psig at rated temperature of 575° F.
2) Installed replacement relief valve with Serial No N63790-00-0137 with set pressure of 1195 Psig at rated temperature of 575° F.
3) Performed VT-1 visual examination on twelve (12) new replacement nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
4) Reused VT-3 visually examined existing studs for the relief valve inlet joint.
5) Installed twelve (12) new replacement VT-1 visually examined nuts for the relief valve inlet joint.
6) Installed sixteen (16) new replacement 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 body to bonnet joint. No evidence of leakage during the pressure test.
8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

**NOTES -**
1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side.
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side.
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0137.
4) VT-3 visual examination on the existing studs for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1374.
5) VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1374.
6) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1374.

PLAN No 2-1405

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 [*]

Test Pressure: 1020/7.5 Psig — Test Temperature: 245/67° F

Component Design Pressure: 1195 Psig — Temperature: 575° F

9. Remarks: 1) See attached NVR-1 Code Data Report for relief valve Serial No N63790-00-0137.
2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) for relief valve Serial No N63790-00-0137.
3) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-02-0042.
4) * Pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
5) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 67° F.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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 1/28/97 to 7/1/97 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486 w/7486 NB58 IS — National Board, State, and Endorsements

Date 7/1/97

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

PLAN NO. 2-1405

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) Rudolph Swab 6/21/97

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0137 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1195 psig Blowdown(if applicable) n/a Set pressure and blowdown adjustmen made at Western Repair Center (location) using steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced disc (N93185-56-0243).

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) [signature] (authorized representative) NSB SR. QA ENG. (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued b the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7.19, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7.19, 19 96. Signed [signature] (Inspector) Commissions CA-1526 NB 9435 B (Nat. Board No.(including endorsements)state or province and number

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

NB-16
Rev.2

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MA

PLAN No. 2-1405

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

Rudolph Swiab 6/21/97

# 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. N63790-00-0137 – – ----- 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 N56000-02-0042 WAS MODIFIED TO N63790-00-0137
(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 | N93183-41-0124 |
| BONNET | N89717 | N93407-44-0055 |
| SPINDLE ASSY | K55465 | K62873-44-0058 |
| SPR.WASHER | N89724 | K62856-44-0203 |
| SPR.WASHER | N89723 | K62857-44-0203 |
| SPRING ASSY | K55466 | K62858-31-0001 |
| PART | PART NO. | REPLACED WITH |
| NOZZLE | N89713 | N93184-51-0157 |
| DISC INSERT | N89715 | N93185-54-0231 |
| THRUST.BRG.ADAPT | N89725 | N93409-33-0007 |
| ADJ.BOLT | N89726 | N93410-32-0006 |
| ADJ.BOLT BUTT. | COMMERCIAL | N93411-34-0013 |
| ADJ.BOLT ASSY | COMMERCIAL | K63618-32-0006 |

L. [illegible]

Certificate Holder's Serial No. N63790-00-0137

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 A Pier, QA Eng Manager 25 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 [illegible]
(Inspector) (Nat'l. Bd., State, Prov. and No.)

PLAN NO. 2-1405

Rudolf Swift
6/21/97

| 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. 2-1405

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

6/21/97

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 [illegible]28/71

2. Manufactured For General Electric Company San Jose, California Order No. [illegible]
Name and Address

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

4. Location of Plant Baileytown, Indiana

5. Valve Identification MPL #B-22-F013 Serial No. N56000-02-0042 Drawing No. H-[illegible]00 Rev. C

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

6. Set Pressure (PSIG): 1195 575[illegible] F
Rated Temperature

Stamped Capacity 398800 Lbs. Hr. Sat. Steam 3 % Overpressure -- Blowdown ~~[illegible]~~ 5%

Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 3[illegible]

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

Class 1 ~~XXXX~~ 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 | N89711-32-0024 | ASTM A-105-[illegible] Gr. II<br>ASME SA-105 [illegible], II |
| Bonnet ~~XXXXXX~~ | N89717-32-0018 | ASTM A-105-[illegible] Gr. II<br>ASME SA-105 [illegible], II |
| b. Bar Stock and Forgings | | |
| ~~XXXXXXXX~~ Disc Insert | N89715-31-0034 | ASTM A-461-[illegible] Type 630 |
| Nozzle | N89713-32-0031 | ASTM A-182-[illegible] F316<br>ASME SA-182 [illegible] |
| Disc Holder | N89714-32-0042 | AMS 5662 B |
| Spring Washers Top | N89724-32-0042 | ASTM A-105-[illegible] Gr. II |
| Spring Washers Bottom | N89723-32-0003 | ASME SA-105 [illegible], II |
| Adjusting ~~XXXX~~ Bolt | N89726-32-0012 | ASTM A-193-[illegible] Gr. B6<br>ASME SA-193 [illegible] B6 |
| Spindle Point | N89720-32-0034 | ASTM A-564-[illegible] Type 630 |

BWRPD-CC
EH2
[illegible]

| | Serial No. or Identification | Material Specification Including Type or Grade |
|---|---|---|
| c. Spring | NX2689-0047 | ASTM A-304-66 Gr. 4161H |
| d. Bolting | | |
| e. ~~Other Pressure Retaining Components~~ | | |
| Inlet Stud | N89727-0493 thru 0504 | ASTM A-193-71 Gr. B7<br>ASME SA-193 Gr. B7 |
| Inlet Stud Nut | N89728-0497 thru 0508 | ASTM A-194-71 Cl. 2H<br>ASME SA-194 Cl. 2H |
| Bonnet Stud | N89718-0497 thru 0508 | ASTM A-193-71 Gr. B7<br>ASME SA-139 Gr. B7 |
| Bonnet Stud Nut | N89719-0499 thru 0510 | ASTM A-194-71 Cl. 2H<br>ASME SA-194 Cl. 2H |
| | | |
| OTHER PARTS | | |
| Spindle Ball | N89721-0034 | Stellite 6 |
| BARS & FORGINGS | N89725-31-0009 | ASTM A-193-71 Gr. B6<br>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. 6663 Mass. 1076
(Inspector) National Board, State, Province and No.

BWRPD-OC EHB. 3-7-75

PLAN No 2-1406

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:** 6/21/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| B22-G001C | WPPSS | B22-G001C-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-RV-5C | Crosby | N63790-00-0062 | N/A | N/A | 1980 | Replaced | Yes, Code Class 1 |
| MS-RV-5C | Crosby | N63790-00-0060 | N/A | N/A | 1980 | 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 MS-RV-5C, Serial No N63790-00-0062 with set pressure of 1205 Psig at rated temperature of 575° F.
   2) Installed replacement relief valve with Serial No N63790-00-0060 with set pressure of 1205 Psig at rated temperature of 575° F.
   3) Performed VT-1 visual examination on twelve (12) new replacement nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
   4) Reused VT-1 visually examined existing studs for the relief valve inlet joint.
   5) Installed twelve (12) new replacement VT-1 visually examined nuts for the relief valve inlet joint.
   6) Installed sixteen (16) new replacement 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 body to bonnet joint. No evidence of leakage during the pressure test.
   8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

**NOTES**

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side.
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side.
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0060.
4) VT-3 visual examination on the existing studs for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1371.
5) VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1371.
6) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1371.

PLAN No 2-1406

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 [*]

Test Pressure: 1020/7.5 Psig — Test Temperature: 245/67° F

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

9. Remarks: 1) See attached NVR-1 Code Data Report for relief valve Serial No N63790-00-0060.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0060.
3) * Pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
4) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 67° F.

### CERTIFICATE OF COMPLIANCE

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

*Type Code Symbol Stamp:* Not Applicable

*Certificate Of Authorization No.:* Not Applicable

*Expiration Date:* Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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* 1/28/97 *to* 7/1/97 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] — Inspector's Signature

Commissions 7486 w/ 7486 WISB IS — National Board, State, and Endorsements

Date 7/1/97

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

PLAN NO 2-1406

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WF (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) Philip Singh 6/21/97

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0060 (mfr's. serial no.) n/a (Nat. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1205 psig Blowdown(if applicable) n/a Set pressure and blowdown adjustm made at Western Repair Center (location) using steam (test medium)

11. Description of work:(include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing. Replaced nozzle (N93184-33-0070).

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) (authorized representative) NSO SR. QA Eng (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7-19, 19 96 and state that to the be of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Boar rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warra expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-19, 19 96 Signed Cirilo F. Reyes (Inspector) Commissions CA 15226 NB 9435-B (Natl. Board No.(including endorsements)state or province and num

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

NB R.

S/N N63790-00-0060

~~MS-RK-4D~~ 5/14/87

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

PLAN No. 2-1406

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

Q.C.-44D
6/21/97

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. N63790-00-0060 Drawing No. DS-A-63790 Rev. C

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

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

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

Hydrostatic Test (psig) Inlet 2370 Outlet 975 psig (Assembled Valve) 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 | N93183-35-0079 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-35-0042 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| b. Bar Stock & Forgings | | |
| Disc Insert | N93185-34-0092 | ASME SA637 Gr. 718 |
| Nozzle | N93184-33-0064 | ASME SA182 Gr. F316 |
| Disc Holder K55484-45-0185 | N89714-37-0224 | AMS 5662B |
| Spring Washers K62858-35-0042 | K62856-35-0098<br>K62857-35-0063 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Adjusting Bolt | N93410-33-0067 | ASME SA193 Gr. B6 |
| Spindle Point K62873-35-0060 | *N89720-34-0071 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| c. Spring K62858-35-0042 | *N89722-0018 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | 7X00380153 |
| e. Spindle Ball K62873-35-0060 | N93213-0060 | Stellite #6 |
| Thrust Bearing Adapter | N93409-32-0062 | ASME SA193 Gr. B6 |
| Bonnet Stud (BW5) | N93207-0717 thru 0728 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Bonnet Stud Nut (J87) | N93210-0937 thru 0948 | ASME SA194 Gr. 2H |
| Inlet Stud (BW6, BW18) | N93216-0721 thru 0730, 1709 & 1710 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW8) | N93218-0723 thru 0734 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |

-modification consist[illegible] Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.

N103790-00-0060

## 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, 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. 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.

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

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

ZX00380154

PLAN No 2-1407

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:** 6/21/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Main Steam (MS) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| B22-G001D | WPPSS | B22-G001D-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-RV-1D | Crosby | N63790-00-0134 | N/A | N/A | 1973 | Replaced | Yes, Code Class 1 |
| MS-RV-1D | Crosby | N63790-00-0049 | 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 MS-RV-1D, Serial No N63790-00-0134 with set pressure of 1175 Psig at rated temperature of 575° F.
2) Installed replacement relief valve with Serial No N63790-00-0049 with set pressure of 1175 Psig at rated temperature of 575° F.
3) Performed VT-1 visual examination on twelve (12) new replacement nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
4) Reused VT-1 visually examined existing studs for the relief valve inlet joint.
5) Installed twelve (12) new replacement VT-1 visually examined nuts for the relief valve inlet joint.
6) Installed sixteen (16) new replacement 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 body to bonnet joint. No evidence of leakage during the pressure test.
8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

**NOTES -**
1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side.
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side.
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0049.
4) VT-3 visual examination on the existing studs for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1368.
5) VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1368.
6) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1368.

PLAN No 2-1407

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 [*]

Test Pressure: 1020/7.5 Psig — Test Temperature: 245/67° F

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

9. Remarks: 1) See attached NVR-1 Code Data Report for relief valve Serial No N63790-00-0049.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0049.
3) * Pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
4) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 67° F.

### CERTIFICATE OF COMPLIANCE

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

*Type Code Symbol Stamp:* Not Applicable

*Certificate Of Authorization No.:* Not Applicable

*Expiration Date:* Not Applicable

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

*Signed By* [signature] — Supervisor, Materials And Welding

*Date* 6/21/97 — *Date* 6/27/97

### 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* 1/23/97 *to* 7/1/97 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] — Inspector's Signature

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

*Date* 7/1/97

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

PLAN No. 2-1407

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WE (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) Dulaup Singh 6/21/97

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0049 (mfr's. serial no.) n/a (Natl. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1175 psig Blowdown(if applicable) n/a Set pressure and blowdown adjustment made at Western Repair Center (location) using steam (test medium)

Description of work:(include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19 19 96. Signed Westinghouse Electric Corp. Western Repair Center (repair organization) [signature] (authorized representative) NSB. SR. QA ENG. (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7-19, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

7-19, 19 96. Signed [signature] (Inspector) Commissions CA1526 NB 9635 B (Natl. Board No.(including endorsements)state or province and number)

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

NB-166 Rev.2

~~AAS RV 2B~~

PLAN NO. 2-1407

Kuldip Singh
6/21/97

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-A3986
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 #822-F013 Serial No. N63790-00-0049 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 575 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. ~~XXXXXXXX~~ Bar Stock & Forgings | | |
| Body | N93183-35-0068 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-35-0031 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| b. ~~XXXXXXXXXXXXXXXX~~ | | |
| ~~XXXXXXXXXX~~ Disc Insert | N93185-34-0081 | ASME SA637 Gr. 7 |
| Nozzle | N93184-33-0053 | ASME SA182 Gr. F3 |
| Disc Holder *K55484-35-0095 | *N89714-34-0127 | AMS 5662B |
| Spring Washers K62858-35-0031 | K62856-35-0087<br>K62857-35-0052 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Adjusting Bolt | N93410-33-0056 | ASME SA193 Gr. B6 |
| Spindle Point K62873-35-0049 | *N89720-34-0092 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| c. Spring K62858-35-0031 | *N89722-0005 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | |
| e. ~~XXXXXXXXXX~~ Spindle Ball K62873-35-0049 | N93213-0049 | Stellite #6 |
| Thrust Bearing Adapter | N93409-32-0051 | ASME SA193 Gr. B6 |
| Bonnet Stud (BW5, J17) | N93207-0585 thru 0596 | ASTM A194-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Bonnet Stud Nut (J87) | N93210-0805 thru 0816 | ASME SA194 Gr. 2H |
| Inlet Stud (BW6) | N93216-0587 thru 0598 | ASTM A194-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW8) | N93218-0591 thru 0602 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button K63618-33-0037 | N93411-33-0057 | ASME SA193 Gr. B6 |

MAB 1-2-88

2

FOR INFORMATION ONLY

ZX00380986

S/N N6 3790-00 -0049
Rudi[illegible]
3/1/8[illegible]

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. A. Cormier
(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 [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
11

ZX00380987

PLAN No 2-1408

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:** 6/21/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Main Steam (MS) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   **(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| B22-G001D | WPPSS | B22-G001D-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-RV-2D | Crosby | N63790-00-0138 | N/A | N/A | 1973 | Replaced | Yes, Code Class 1 |
| MS-RV-2D | Crosby | N63790-00-0124 | N/A | N/A | 1981 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced existing relief valve MS-RV-2D. The replacement work was performed as follows:
   1) Removed existing relief valve MS-RV-2D, Serial No N63790-00-0138 with set pressure of 1185 Psig at rated temperature of 575° F.
   2) Installed replacement relief valve with Serial No N63790-00-0124 with set pressure of 1185 Psig at rated temperature of 575° F.
   3) Performed VT-1 visual examination on twelve (12) new replacement nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
   4) Reused VT-1 visually examined existing studs for the relief valve inlet joint.
   5) Installed twelve (12) new replacement VT-1 visually examined nuts for the relief valve inlet joint.
   6) Installed sixteen (16) new replacement 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 body to bonnet joint. No evidence of leakage during the pressure test.
   8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve inlet joint. No evidence of leakage during the pressure test.

**NOTES-**

1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system - Inlet side.
2) ASME Section III Code Class 3, 1971 Edition with Winter 1973 Addenda for the piping system - Outlet side.
3) ASME Section III Code Class 1, 1971 Edition with no Addenda for relief valve Serial No N63790-00-0124.
4) VT-3 visual examination on the existing studs for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1372.
5) VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint was previously performed. See ASME Section XI Plan No 2-1372.
6) VT-3 visual examination on the existing studs for the relief valve inlet joint was previously performed. See ASME Section XI Plan No 2-1372.

PLAN No 2-1408

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** [*]

**Test Pressure:** 1020/7.5 Psig **Test Temperature:** 245/67° F

**Component Design Pressure:** 1185 Psig **Temperature:** 575° F

**9. Remarks:** 1) See attached NVR-1 Code Data Report for relief valve Serial No N63790-00-0124.
2) See attached NV-1 Code Data Report for relief valve Serial No N63790-00-0124.
3) * Pressure test on the relief valve inlet joint - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
4) Pneumatic pressure test on the relief valve body to bonnet joint - Test pressure of 7.5 Psig and test temperature of 67° F.

### CERTIFICATE OF COMPLIANCE

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

**Type Code Symbol Stamp:** Not Applicable

**Certificate Of Authorization No.:** Not Applicable

**Expiration Date:** Not Applicable

**Prepared By** Kuldip Singh **Signed By** [signature]

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

**Date** 6/21/97 **Date** 6/23/97

### 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* 1/28/97 *to* 7/1/97 *and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.*

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

[signature] **Commissions** 7486 W/7486 N IIB-IS

Inspector's Signature National Board, State, and Endorsements

**Date** 7/1/97

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

PLAN NO. 2-1408

1. Work performed by Westinghouse Electric Corp., Western Repair Center (name of repair organization) C875WF (P.O. no., job no., etc.)
200 S. Highland Springs Ave., Banning, CA 92220 (address) Dhulaip Singh 6/21/97

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

3. Owner Washington Public Power Supply System, WNP-2 (name)
3000 Geo. Washington Way, Richland, WA 99352 (address)

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

5. a: Repaired pressure relief device: Main Steam Safety Relief Valve
b: Name of manufacturer Crosby
c: Identifying nos. HB-65-BP (type) N63790-00-0124 (mfr's. serial no.) n/a (Natl. Board No.) Steam (service) 6R10 (size) 1981 (year built)
d: Construction Code 1971 (edition) n/a (addenda) n/a (Code Case(s)) 1 (Code Class)

6. Section XI 1989 (edition) n/a (addenda) n/a (Code Case(s))

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

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

9. Design responsibilities n/a

10. Opening pressure: 1185 psig Blowdown(if applicable) n/a Set pressure and blowdown adjustmer made at Western Repair Center (location) using steam (test medium)

11. Description of work: (include name and identifying number of replacement parts) Full disassembly, set pressure & seat tightness certification testing.

12. Remarks:

## CERTIFICATE OF COMPLIANCE

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

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

Date 7/19, 19 96 Signed Westinghouse Electric Corp. Western Repair Center (repair organization) [signature] (authorized representative) NSS SR. QA ENG (title)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of California and employed by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 7.19, 19 96 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7.19, 19 96 Signed [signature] (Inspector) Commissions CA 1526 NB 9435 B (Natl. Board No. (including endorsements) state or province and number)

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

NB-1 Rev.

PLAN No. 2-1408

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Q.C. 6/21/97

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. N94281 Contract Date 4/24/79 National Board No. N/A

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

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

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

5. Valve Identification MPL #B22-F013 Serial No. N63790-00-0124 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 Rated Temperature 575° F

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 | N93183-36-0087 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| Bonnet | N93407-36-0098 | ASTM A105-71 Gr. II<br>ASME SA105 Gr. II |
| b. Disc Insert | N93185-37-0156 | ASME SA637 Gr. 718 |
| Nozzle | N93184-33-0072 | ASME SA182 Gr. F316 |
| Disc Holder K55484-31-0005 | N89714-31-0008 | AMS 5662B |
| Spring Washers K62858-36-0081 | K62856-36-0116<br>K62857-36-0130 | ASME SA105 Gr. II |
| Adjusting Bolt | N93410-33-0072 | ASME SA193 Gr. B6 |
| Spindle Point K62873-37-0136 | N89720-43-0157 | ASTM A564-71 Type 630<br>ASME SA564 Type 630 |
| c. Spring K62858-36-0081 | NX2689-0126 | ASTM A304-66 Gr. 4161H |
| d. Bolting | | |
| e. Spindle Ball K62873-37-0136 | N93213-0203 | Stoody #6 |
| Thrust Bearing Adapter | N93409-32-0065 | ASME SA193 Gr. B6 |
| Bonnet Stud (BW19) | N93207-1522 thru 1533 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Bonnet Stud Nut (J87) | N93210-1033 thru 1044 | ASME SA194 Gr. 2H |
| Inlet Stud (BW21) | N93216-1455 thru 1466 | ASTM A193-71 Gr. B7<br>ASME SA193 Gr. B7 |
| Inlet Stud Nut (BW22) | N93218-1389 thru 1400 | ASTM A194-71 Gr. 2H<br>ASME SA194 Gr. 2H |
| Adjusting Bolt Button K63618-33-0094 | N93411-33-0094 | ASME SA193 Gr. B6 |

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

N63790-00-0124

## CERTIFICATE OF COMPLIANCE

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

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

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

## CERTIFICATION OF DESIGN

Design information on file at Crosby Valve & Gage Company

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

Design specifications certified by[1] Boyd P. Brooks

PE State California Reg. No. 13655

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

PE State Massachusetts Reg. No. 14784

[1]Signature not required - list name only.

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts have inspected the pump, or valve, described in this Data Report on 1/13, 19 81 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 1/13 19 81.

Signed John Dinan (Inspector) Commissions MASS 1366 (Nat'l. Bd., State, Prov. and No.)

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

PLAN No 2-1410

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:** 6/26/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Water Clean Up (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(3)-4 | WPPSS | RWCU(3)-4-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| RWCU-V-607 | Borg Warner | 13735 | N/A | N/A | 1977 | Replaced | Yes, Code Class 1 |
| RWCU-V-608 | Borg Warner | 13824 | N/A | N/A | 1977 | Replaced | Yes, Code Class 1 |
| RWCU-V-607 | Borg Warner | 80117 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| RWCU-V-608 | Borg Warner | 80111 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced existing valves RWCU-V-607 and RWCU-V-608. The replacement work was performed as follows:

1) Removed existing valves RWCU-V-607, Serial No 13735 and RWCU-V-608, Serial No 13824.
2) Prepped socket end of the existing sockolet.
3) Performed liquid penetrant (PT) examination on the prepped socket end of the existing sockolet. Liquid penetrant (PT) examination results acceptable.
4) Installed new piping material.
5) Installed new replacement valves RWCU-V-607, Serial No 80117 and RWCU-V-608, Serial No 80111.
6) Made required socket welds.
7) Performed visual examination on the final socket welds. Visual examination results acceptable.
8) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

**NOTES -**

1) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the Reactor Water Clean Up (RWCU) piping system.
2) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the new replacement valves RWCU-V-607, Serial No 80117 and RWCU-V-608, Serial No 80111.

PLAN No 2-1410

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

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

| EPN No | Serial No |
|---|---|
| RWCU-V-607 | 80117 |
| RWCU-V-608 | 80111 |

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By

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

Date 6/26/97 Date 6/26/97

### 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 Commissions _____

Inspector's Signature National Board, State, and Endorsements

Date _____

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. 2-1410

1. Manufactured by Nuclear Valve Div., Borg Warner, 7500 Tyrone Ave., Van Nuys, Calif.
(Name and Address of N Certificate Holder)

2. Manufactured for Washington Public Power Supply Systems, 3000 George Washington Way, Richland, Washington
(Name and Address of Purchaser or Owner)

3. Location of Installation Richland, Washington WPPSS Hanford #2 Job Site
(Name and Address)

4. Pump or Valve Y Globe Valve. Nominal Inlet Size 3/4 (inch) Outlet Size 3/4 (inch)

| | (a) Model No., Series No. or Type | (b) N Certificate Holder's Serial No. | (c) Canadian Registration No. | (d) Drawing No. | (e) Class | (f) Nat'l. Bd. No. | (g) Year Built |
|---|---|---|---|---|---|---|---|
| (1) | 1500# | 80107 thru 80128 | N/A | 76590-2 | 1 | N/A | 1983 |
| (2) | | | | | | | |
| (3) | | | | | | | |
| (4) | | | | | | | |
| (5) | RWCU-V-607, S/N 80117 | | | | | | |
| (6) | | | | | | | |
| (7) | RWCU-V-608, S/N 80111 | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

Rudolph Smith 6/28/97

5. The valves are designed to handle a fluid media which includes steam, water condensate, borated water, etc., associated with a PWR and BWR. The temperature pressure rating of the media is stated below.
(Brief description of service for which equipment was designed)

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class N/A (1)

7. Cold Working Pressure 3600 psi at 100°F.

8. Pressure Retaining Pieces

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| Disc-Code 5F55 | Stellite #6 | Rex Precision | |
| 5F32 | | | |
| (b) Forgings | | | |
| Body-Code 5E99 | SA 105 | Pacific Forge | |

(1) For manually operated valves only.

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

FORM NPV-1 (Back)

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (c) Bolting N/A | | | |
| (d) Other Parts | | | |
| Backseat-Code 5E34 | SA 564 Tv630 | Jorgensen Steel | |

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

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1974, Addenda Winter '75 (Date), Code Case No. N/A, Date 6/30/83

Signed Nuclear Valve Div. Borg Warner (N Certificate Holder) by [signature]

Our ASME Certificate of Authorization No. N-1254 to use the N (N) symbol expires 10/27/84 (Date).

## CERTIFICATION OF DESIGN

Design information on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409

Stress analysis report (Class 1 only) on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, CA

Design specifications certified by (1) David J. Murphy

PE State Washington Reg. No. 12542

Stress analysis certified by (1) Byron E. Leonard

PE State CA Reg. No. E123

(1) Signature not required. List name only.

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by Lumbermen's Mutual Casualty of Long Grove, Illinois have inspected the pump, or valve, described in this Data Report on 9/30 1983, 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 9/30 1983

127N-C4

PLAN No 2-1414

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/12/97
**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:** 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 | Lonergan | 128261-1-1 | N/A | N/A | 1993 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Installed test port for spare relief valve Serial No 128261-1-1. 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 128261-1-1 was installed in the plant as RHR-RV-25B in accordance with ASME Section XI Plan No 2-1415.

PLAN No 2-1414

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 128261-1-1.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By Tom Davis for CM King — Supervisor, Materials And Welding

Date 8/12/97 — Date 8/12/97

### 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 3/6/97 to 8/13/97 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 WIS 8 IS — National Board, State, and Endorsements

Date 8/13/97

PLAN No. 2-1414

# 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



Kunkle Industries Inc.

1. Manufactured and certified by 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, P.O. Box 968, Richland, WA 99352 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHS Complex, WHS #1, Richland, WA 99352 (name and address) North Power Plant Loop

4. Valve ND30D (model no., series no.) Orifice size .1219 (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) NA (Code Case no.)

6. Type Spring (spring, pilot or power operated) 488 (set pressure, psig) N/A (blowdown, psi) 358°F (rated temp.) 732 (hydro. test, psig, inlet) at 70 °F

7. Identification 128261-1-1, 128261-1-2 (Cert. Holder's serial no.) N/A (CRN) A920112 Rev. 4 (drawing no.) N/A (Nat'l. Bd. no.) 1993 (year built)

8. Control ring settings 2 notches down

9. Pressure retaining items: SPARE VALVE S/N 128261-1-1

| | Serial No. or Identification | Mat'l. Spec., Including Type or Grade | Tensile Strength |
|---|---|---|---|
| Body | R2135-2, -3 | ASME SA-216 WCB | 70KSI |
| Bonnet or Yoke | T2457-15, -23 | ASME SA-216 WCB | 70KSI |
| ~~Gasket Retainer~~ Gag Plug Screw | 30091 | ASME SA-479 TY316 | 75KSI |
| Nozzle | H6283-9, -14 | ASME SA-351 CF8M | 70KSI |
| Disk | 9E6313 | ASME SA-479 TY316 | 75KSI |
| ~~Spindle~~ Cap | H7069-7, -22 | ASME SA-216 WCB | 70KSI |
| ~~Adjusting Screw~~ | | | |
| ~~Lock~~ Ring Pin Screw | 30091 | ASME SA-479 TY316 | 75KSI |
| ~~Spring~~ Plug Body/Bonnet | 73028 | ASME SA-479 TY316 | 75KSI |
| Bolting Studs | 8866612 | ASME SA-193 GR. B7 | 125KSI |
| Other Items Nut, Stud | 6014728 | ASME SA-194 GR. 2H | N/A |

10. Relieving capacity 12,518 lb/hr (~~25~~ 75.1 GPM) (steam or fluid, lb/hr) @ 10% (psi) overpressure as certified by the National Board 4/16/85 (date)

11. Remarks: None

## CERTIFICATION OF DESIGN

Design Specification certified by David M. Bosi P.E. State WA Reg. no. 20941

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 5-19-93 Name Kunkle Industries Inc., Lonergan Valve Division (NV Certificate Holder) Signed (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

L.V.D. AUTHENTICATION
FINAL Q.A. RECORD

02600800 1595

128261-1-1
128261-1-2

Certificate Holder's Serial No. _____

## 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 8-19-93, 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 8-19-93 Signed [signature] (Authorized Inspector) Commissions NB 7444 (N13 17), Mich 402 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Ins 840

026008001596

PLAN No 2-1415

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**Date:** 8/12/97
**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:** Residual Heat Removal (RHR) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| RHR(1)-2B | WPPSS | RHR(1)-2B-P1 | N/A | N/A | 1984 | Replacement | Yes, Code Class 2 |
| RHR-RV-25B | Lonergan | 509258-75-1 | N/A | N/A | 1982 | Replaced | Yes, Code Class 2 |
| RHR-RV-25B | Lonergan | 128261-1-1 | N/A | N/A | 1993 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced existing relief valve RHR-RV-25B. The replacement work was performed as follows:
   1) Removed existing relief valve RHR-RV-25B, Serial No 509258-75-1.
   2) Performed VT-3 visual examination on the existing studs for the relief valve outlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing nuts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Installed new replacement relief valve RHR-RV-25B, Serial No 128261-1-1.
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet joint. No evidence of leakage during the pressure test.

**NOTES**

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the Residual Heat Removal (RHR) piping system.
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda for the replacement relief valve RHR-RV-25B, Serial No 128261-1-1.

PLAN No 2-1415

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: 38.7 Psig — Test Temperature: 84.8° F

Component Design Pressure: 125 Psig — Temperature: 480° F

9. Remarks: 1) See attached NV-1 Code Data Report for the replacement relief valve RHR-RV-25B, Serial No 128261-1-1.
2) The component design pressure of 125 Psig and design temperature of 480° F is for the relief valve discharge 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 Tom Lewis for CM Kerr — Supervisor, Materials And Welding

Date 8/12/97 — Date 8/12/97

### 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 1/28/97 to 8/13/97 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 7486W/7486 NISB IS.
National Board, State, and Endorsements

Date 8/13/97

PLAN No. 2-1415

# FORM NV-1 CERTIFICATE HOLDER'S DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES*

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



Kunkle Industries Inc.

1. Manufactured and certified by 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, P.O. Box 968, Richland, WA 99352 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHS Complex, WHS #1, Richland, WA 99352 (name and address) North Power Plant Loop

4. Valve ND30D (model no., series no.) Orifice size .1219 (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) NA (Code Case no.)

6. Type Spring (spring, pilot or power operated) 428 (set pressure, psig) N/A (blowdown, psi) 358°F (rated temp.) 732 (hydro. test, psig, inlet) at 70 °F

7. Identification 128261-1-1, 128261-1-2 (Cert. Holder's serial no.) N/A (CRN) A920112 Rev. 4 (drawing no.) N/A (Nat'l. Bd. no.) 1993 (year built)

8. Control ring settings 2 notches down

9. Pressure retaining items: RHR-RV-25B, S/N 128261-1-1

| | Serial No. or Identification | Mat'l. Spec., Including Type or Grade | Tensile Strength |
|---|---|---|---|
| Body | R2135-2, -3 | ASME SA-216 WCB | 70KSI |
| Bonnet or Yoke | T2457-15, -23 | ASME SA-216 WCB | 70KSI |
| ~~Support Rod~~ Gag Plug Screw | 30091 | ASME SA-479 TY316 | 75KSI |
| Nozzle | H6283-9, -14 | ASME SA-351 CF8M | 70KSI |
| Disk | 9E6313 | ASME SA-479 TY316 | 75KSI |
| ~~Spring~~ Cap | H7069-7, -22 | ASME SA-216 WCB | 70KSI |
| ~~Adjusting Screw~~ | | | |
| ~~Set~~ Ring Pin Screw | 30091 | ASME SA-479 TY316 | 75KSI |
| ~~Spring~~ Plug Body/Bonnet | 73028 | ASME SA-479 TY316 | 75KSI |
| Bolting Studs | 8866612 | ASME SA-193 GR. B7 | 125KSI |
| Other Items Nut, Stud | 6014728 | ASME SA-194 GR. 2H | N/A |

10. Relieving capacity 12,518 lb/hr (25 GPM) 75.1 (steam or fluid, lb/hr) @ 10% (psi) overpressure as certified by the National Board 4/16/85 (date)

11. Remarks: None

## CERTIFICATION OF DESIGN

Design Specification certified by David M. Bosi P.E. State WA Reg. no. 20941

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 8-19-93 Name Kunkle Industries Inc., Lonergan Valve Division (NV Certificate Holder) Signed [signature] (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

128261-1-1
128261-1-2

Certificate Holder's Serial No. ____

## 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 8-19-93, 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 8-19-93 Signed [signature] (Authorized Inspector) Commissions NB 7444 (N13IA), Mich 402 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Ind 840

02600800 1596

PLAN No 2-1416

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:** 6/18/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Residual Heat Removal (RHR) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 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 | Lonergan | 128261-1-2 | N/A | N/A | 1993 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Installed test port for spare relief valve Serial No 128261-1-2. 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 liquid penetrant (PT) examination on the final weld. Liquid penetrant (PT) examination results acceptable.
7) Installed new cap on the male connector.

**NOTES -**

1) The modified spare relief valve Serial No 128261-1-2 will be installed in the plant as RHR-RV-25C in accordance with ASME Section XI Plan No 2-1417.

PLAN No 2-1416

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 128261-1-2.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 3/6/97 to 6/23/97 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.

[signature] — Inspector's Signature

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

Date 6/23/97

PLAN NO. 2-1416
Rulaf Sup b 6/8/97

# 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



02600801595

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, P.O. Box 968, Richland, WA 99352 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHS Complex, WHS #1, Richland, WA 99352 North Power Plant Loop (name and address)

4. Valve ND30D (model no., series no.) Orifice size .1219 (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) NA (Code Case no.)

6. Type Spring (spring, pilot or power operated) 428 (set pressure, psig) N/A (blowdown, psi) 358°F (rated temp.) 732 (hydro. test, psig, inlet) at 70 °F

7. Identification 128261-1-1, 128261-1-2 (Cert. Holder's serial no.) N/A (CRN) A920112 Rev. 4 (drawing no.) N/A (Nat'l. Bd. no.) 1993 (year built)

8. Control ring settings 2 notches down

SERIAL NO. 128261-1-2

9. Pressure retaining items:

| | Serial No. or Identification | Mat'l. Spec., Including Type or Grade | Tensile Strength |
|---|---|---|---|
| Body | R2135-2, -3 | ASME SA-216 WCB | 70KSI |
| Bonnet or Yoke | T2457-15, -23 | ASME SA-216 WCB | 70KSI |
| ~~Support Rods~~ Gag Plug Screw | 30091 | ASME SA-479 TY316 | 75KSI |
| Nozzle | H6283-9, -14 | ASME SA-351 CF8M | 70KSI |
| Disk | 9E6313 | ASME SA-479 TY316 | 75KSI |
| ~~Spring~~ Cap | H7069-7, -22 | ASME SA-216 WCB | 70KSI |
| ~~Adjusting Screw~~ | | | |
| ~~Spring~~ Ring Pin Screw | 30091 | ASME SA-479 TY316 | 75KSI |
| ~~Spring~~ Plug Body/Bonnet | 73028 | ASME SA-479 TY316 | 75KSI |
| Bolting Studs | 8866612 | ASME SA-193 GR. B7 | 125KSI |
| Other Items Nut, Stud | 6014728 | ASME SA-194 GR. 2H | N/A |

10. Relieving capacity 12,518 lb/hr (75.1 GPM) (steam or fluid, lb/hr) @ 10% (psi) overpressure as certified by the National Board 4/16/85 (date)

11. Remarks: None

## CERTIFICATION OF DESIGN

Design Specification certified by David M. Bosi P.E. State WA Reg. no. 20941

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 8-19-93 Name Kunkle Industries Inc., Lonergan Valve Division (NV Certificate Holder) Signed [signature] (authorized representative)

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

This form (E00042) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

L.V.D. AUTHENTICATION
FINAL Q.A. RECORD

128261-1-1
128261-1-2

Certificate Holder's Serial No. ____

## 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 Provin[illegible] of Michigan and employed by HSBI & I Co. of Hartford, CT have inspected the valve described in this Data Report on 8-19-93, 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 8-19-93 Signed [illegible] (Authorized Inspector) Commissions NB 7444 (N13 17), Ind 840, Mich 402 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

02600800 1596

PLAN No 2-1418

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 4/1/97
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** 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 plates) 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) Removed existing outboard mechanical seal (gland plate) from the pump.
4) Installed new outboard mechanical seal (gland plate) in the pump. The new outboard mechanical seal (gland plate) was removed from the pump due to leakage observed during post maintenance test. The original mechanical seal (gland plate) was reinstalled in the pump.
5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. Leakage was observed during the pressure test. Leakage was evaluated to be acceptable.

PLAN No 2-1418

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: 90 Psig — Test Temperature: 89° 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)

Signed By [signature] — Supervisor, Materials And Welding

Date 4/1/97 — Date 4/1/97

### 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 1/15/97 to 4/20/97 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.

[signature] — Inspector's Signature

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

Date 4/30/97

PLAN No 2-1419

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:** 6/26/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Recirculation (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:** Removed maintenance flanges for bonnet vent line for valve RRC-V-67A. The replacement work was performed as follows:

1) Removed existing flanges and associated piping material.
2) Prepped socket ends for the existing fittings.
3) Performed liquid penetrant (PT) examination on the prepped socket ends for the existing fittings. Liquid penetrant (PT) examination results acceptable.
4) Installed new piping material.
5) Made required socket welds.
6) Performed visual examination on the final socket welds. Visual examination results acceptable.
7) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

PLAN No 2-1419

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/26/97 — Date 6/26/97

### 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 2-1420

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:** 6/30/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Reactor Recirculation (RRC) 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 |
|---|---|---|---|---|---|---|---|
| RRC(51)-1 | WPPSS | RRC(51)-1-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Removed maintenance flanges for seal staging line for pump RRC-P-1B. The replacement work was performed as follows:
   1) Removed existing flanges and associated piping material.
   2) Installed new piping material.
   3) Made required socket welds.
   4) Performed visual examination on the final socket welds. Visual examination results acceptable.
   5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

PLAN No 2-1420

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/30/97 — Date 6/30/97

### 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 2-1421

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:** 6/16/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Standby Liquid Control (SLC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   **(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| SLC(2)-3S | WPPSS | SLC(2)-3S-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| SLC-RV-29A | Lonergan | 509258-82-1 | N/A | N/A | 1978 | Replaced | Yes, Code Class 2 |
| SLC-RV-29A | Lonergan | 137180-1-1 | N/A | N/A | 1994 | 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 509258-82-1.
   2) Performed VT-3 visual examination on the existing studs for the relief valve outlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing nuts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Installed replacement relief valve SLC-RV-29A, Serial No 137180-1-1.
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet joint. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the 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 137180-1-1.

PLAN No 2-1421

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 Psig — Test Temperature: 81° F

Component Design Pressure: 150 Psig — Temperature: 150° F

9. Remarks: See attached NV-1 Code Data Report for the replacement relief valve SLC-RV-29A, Serial No 137180-1-1.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2/12/97 to 6-25-97 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.

[signature] — Inspector's Signature

Commissions 7486w/7486 NBIT IS — National Board, State, and Endorsements

Date 6/25/97

FORM NV-1 CERTIFICATE HOLDER'S 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 46319 (name and address of NV Certificate Holder) PLAN No. 2-1421

2. Manufactured for Washington Public Power Supply System, WNP-2 OPS WHS Complex, Warehouse 1, North Power Plant Loop, Richland, WA 99352 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHS Complex, Warehouse 1, North Power Plant Loop, Richland, WA 99352 (name and address)

4. Valve ND50DS (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 137180-1-1 thru -1-2 (Cert. Holder's serial no.) N/A (CRN) A930246 Rev. 0 (drawing no.) N/A (Nat'l. Bd. no.) 1994 (year built)

8. Control ring settings N/A

SLC-RV-29A, S/N 137180-1-1

9. Pressure retaining items:

Rudolf Singh 6/16/97

| | Serial No. or Identification | Mat'l. Spec., Including Type or Grade | Tensile Strength |
|---|---|---|---|
| Body | T3815-1, -2 | SA-351 Gr. CF8M | 70 ksi |
| Bonnet ~~XXXXX~~ | T3304-3, -4 | SA-351 Gr. CF8M | 70 ksi |
| ~~XXXXXXXXXX~~ Stem | 94918 | SA-479 TY 316 | 75 ksi |
| Nozzle | 35726 | SA-479 TY 316 | 75 ksi |
| Disk | 30340 | SA-479 TY 316 | 75 ksi |
| Spring ~~XXXXXX~~ Step | 31828 | SA-479 TY 316 | 75 ksi |
| ~~XXXXXXXXXXXXXXX~~ Ring Pin Screws | 30091 | SA-479 TY 316 | 75 ksi |
| ~~XXXXX~~ Plug | 73028 | SA-479 TY 316 | 75 ksi |
| Spring | 20330 | ASTM A-313 TY 316 | * |
| ~~XXXXX~~ Nut | 8079541 / N4C | SA-194 Gr. 2H | N/A |
| ~~XXXXXXXX~~ Stud | 8866612 | SA-193 Gr. B7 | 125 ksi |

Continued below **

10. Relieving capacity 63,533 lb./hr. (12.7 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.

| | | | |
|---|---|---|---|
| ** Cap | H8506-10, -13 | SA-351 Gr. CF8M | 70 ksi |
| Compression Screw | 700737 | SA-479 TY 316 | 75 ksi |
| Gag Plug Screw | 30091 | SA-479 TY 316 | 75 ksi |

**CERTIFICATION OF DESIGN**

Design Specification certified by David M. Bosi P.E. State WA Reg. no. 20941

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 2-24-94 Name Kunkle Industries, Inc. Lonergan Valve Division (NV Certificate Holder) Signed Brian J. McClure (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. 137180-1-1 thru

**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 2-24-94, 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 2-24-94 Signed Richard R. Quay (Authorized Inspector) Commissions NB 7444 (NB IP), Ind. 840 Mich 402 (Nat'L Bd. (incl. endorsements) and state or prov. and no.)

PLAN No 2-1422

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:** 6/16/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Standby Liquid Control (SLC) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   **(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| SLC(2)-3S | WPPSS | SLC(2)-3S-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| SLC-RV-29B | Lonergan | 139407-1-2 | N/A | N/A | 1994 | Replaced | Yes, Code Class 2 |
| SLC-RV-29B | Lonergan | 137180-1-2 | 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 139407-1-2.
   2) Performed VT-3 visual examination on the existing studs for the relief valve outlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing nuts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Installed replacement relief valve SLC-RV-29B, Serial No 137180-1-2.
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet joint. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the 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 137180-1-2.

PLAN No 2-1422

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 Psig — Test Temperature: 79.6° F

Component Design Pressure: 150 Psig — Temperature: 150° F

9. Remarks: See attached NV-1 Code Data Report for the replacement relief valve SLC-RV-29B, Serial No 137180-1-2.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 2/12/97 to 6/23/97 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.

[signature] — Inspector's Signature

Commissions 7486/7486 NB IS IS — National Board, State, and Endorsements

Date 6/23/97

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 46319 (name and address of NV Certificate Holder) PLAN NO. 2-1422

2. Manufactured for Washington Public Power Supply System, WNP-2 OPS WHS Complex, Warehouse 1, North Power Plant Loop, Richland, WA 99352 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHS Complex, Warehouse 1, North Power Plant Loop, Richland, WA 99352 (name and address)

4. Valve ND50DS (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 137180-1-1 thru -1-2 (Cert. Holder's serial no.) N/A (CRN) A930246 Rev. 0 (drawing no.) N/A (Nat'l. Bd. no.) 1994 (year built)

8. Control ring settings N/A

SLC-RV-29B, S/N 137180-1-2

9. Pressure retaining items:

Kuldip Singh 6/13/97

| | Serial No. or Identification | Mat'l. Spec., Including Type or Grade | Tensile Strength |
|---|---|---|---|
| Body | T3815-1, -2 | SA-351 Gr. CF8M | 70 ksi |
| Bonnet ~~XXXXX~~ | T3304-3, -4 | SA-351 Gr. CF8M | 70 ksi |
| ~~XXXXXXXXXX~~ Stem | 94918 | SA-479 TY 316 | 75 ksi |
| Nozzle | 35726 | SA-479 TY 316 | 75 ksi |
| Disk | 30340 | SA-479 TY 316 | 75 ksi |
| Spring ~~XXXXX~~ Step | 31828 | SA-479 TY 316 | 75 ksi |
| ~~XXXXXXXXXXXXX~~ Ring Pin Screws | 30091 | SA-479 TY 316 | 75 ksi |
| ~~XXXXX~~ Plug | 73028 | SA-479 TY 316 | 75 ksi |
| Spring | 20330 | ASTM A-313 TY 316 | * |
| ~~XXXXX~~ Nut | 8079541 / N4C | SA-194 Gr. 2H | N/A |
| ~~XXXXXXX~~ Stud | 8866612 | SA-193 Gr. B7 | 125 ksi |

Continued below **

10. Relieving capacity 63,533 lb/hr (12.7 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.

| | | | |
|---|---|---|---|
| ** Cap | H8506-10, -13 | SA-351 Gr. CF8M | 70 ksi |
| Compression Screw | 700737 | SA-479 TY 316 | 75 ksi |
| Gag Plug Screw | 30091 | SA-479 TY 316 | 75 ksi |

**CERTIFICATION OF DESIGN**

Design Specification certified by David M. Bosi P.E. State WA Reg. no. 20941

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 2-24-94 Name Kunkle Industries, Inc. Lonergan Valve Division (NV Certificate Holder) Signed [signature] (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. 137180-1-1 thru

**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 2-24-94, 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 2-24-94 Signed Richard P. Quay (Authorized Inspector) Commissions NB 7444 (NB IP), Ind. 840, Mich 402 (Nat'l. Bd. (incl. Endorsements) and state or prov. and no.)

PLAN No 2-1423

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:** 6/23/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Containment 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 |
| CIA-V-600A | Dragon | PB 1257 | N/A | N/A | 1996 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Installed test connection for accumulator tank MS-TK-1A. The replacement work was performed as follows:

1) Installed new piping material.
2) Installed new valve CIA-V-600A, Serial No PB 1257.
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 welds. Liquid penetrant (PT) examination results acceptable.
6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.
2) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the Containment Instrument Air (CIA) piping system.
3) ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda for the new valve CIA-V-600A, Serial No PB 1257.

PLAN No 2-1423

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: 108 Psig — Test Temperature: 86° F

Component Design Pressure: 200 Psig — Temperature: 340° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CIA-V-600A, Serial No PB 1257.

### 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 [illegible] — Supervisor, Materials And Welding

Date 6/28/97 — Date 6/25/97

### 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 4/1/97 to 6/26/97 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.

[illegible] — Inspector's Signature

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

Date 6/26/97

# 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. 2-1423

1. Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA. 90650 (Name and Address of N Certificate Holder)

Pulaip Singh 6/23/97

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 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) | 7N057SW7D | PB1257 | N/A | 13828 | 1 | N/A | 1996 |
| (2) | | Thru | | Rev. A | | | |
| (3) | | PB1258 | | | | | |
| (4) | | | | | | | |
| (5) | | | C1A-V-600A, S/N PB1257 | | | | |
| (6) | | | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. Globe Valve OS & Y ( 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)

Cold Working Pressure 3600 psi at 100°F.

Pressure Retaining Pieces

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings N/A | | | |
| (b) Forgings | | | |
| HT. 38061 | 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.

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| 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 S'75 (Date), Code Case No. N/A. Date February 15, 1996

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

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

Design specifications certified by (1) David J. Murphy

PE State WA. Reg. No. 12542

Stress analysis certified by (1) Harold M. Braund

PE State CA. Reg. No. M20589

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

PLAN No 2-1424

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:** 6/23/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Containment 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 |
| CIA-V-600B | Dragon | PB 1258 | N/A | N/A | 1996 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Installed test connection for accumulator tank MS-TK-1B. The replacement work was performed as follows:

1) Installed new piping material.
2) Installed new valve CIA-V-600B, Serial No PB 1258.
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 welds. Liquid penetrant (PT) examination results acceptable.
6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.
2) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the Containment Instrument Air (CIA) piping system.
3) ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda for the new valve CIA-V-600B, Serial No PB 1258.

PLAN No 2-1424

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: 108 Psig — Test Temperature: 86° F

Component Design Pressure: 200 Psig — Temperature: 340° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CIA-V-600B, Serial No PB 1258.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/28/97 — Date 6/25/97

### 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 4/1/97 to 6/26/97 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.

[signature] — Inspector's Signature

Commissions 7486 w/7486 NISP II — National Board, State, and Endorsements

Date 6/26/97

# 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. 2-1424

1. Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA. 90650 Rusclip Rupp 6/23/97
(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 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) | 7N057SW7D | PB1257 | N/A | 13828 | 1 | N/A | 1995 |
| (2) | | Thru | | Rev. A | | | |
| (3) | | PB1258 | | | | | |
| (4) | | | | | | | |
| (5) | | | C/A-Y-600B, S/N PB1258 | | | | |
| (6) | | | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. Globe Valve OS & Y ( 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)

Cold Working Pressure 3600 psi at 100°F.

Pressure Retaining Pieces

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings N/A | | | |
| (b) Forgings | | | |
| HT. 38061 | 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.

| 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 S'75 (Date), Code Case No. N/A. Date February 15, 1996

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

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

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

Design specifications certified by (1) David J. Murphy

PE State WA. Reg. No. 12542

Stress analysis certified by (1) Harold M. Braund

PE State CA. Reg. No. M20589

(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.)

PLAN No 2-1425

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:** 6/18/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Containment 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 |
| CIA--V-600C | Dragon | PB 1228 | N/A | N/A | 1994 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Installed test connection for accumulator tank MS-TK-1C. The replacement work was performed as follows:

1) Installed new piping material.
2) Installed new valve CIA-V-600C, Serial No PB 1228.
3) Made required welds.
4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable.
5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.
2) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the Containment Instrument Air (CIA) piping system.
3) ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda for the new valve CIA-V-600C, Serial No PB 1228.

PLAN No 2-1425

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: 108 Psig — Test Temperature: 84° F

Component Design Pressure: 200 Psig — Temperature: 340° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CIA-V-600C, Serial No PB 1228.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/1/97 to 6/23/97 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.

[signature] — Inspector's Signature

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

Date 6/23/97

# 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. 2-1425

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. P.O. Box 968, Richland, WA 99352 Phillip Sup 6/18/97
(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) | 7N057SW7D | PB1227 | N/A | 13828 | 1 | N/A | 1994 |
| (2) | | Thru | | Rev. N/C | | | |
| (3) | | PB1231 | | | | | |
| (4) | | | | | | | |
| (5) | | | | | | | |
| (6) | | | | | | | |
| (7) | | C/A-V-600C, S/N PB1228 | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. Globe Valve O S & Y ( 5 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.38061 | 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

02580015/6

FORM NPV-1 (Back)

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (c) Bolting N/A | | | |
| (d) Other Parts | | | |
| HT.853543 | 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 S'75 (Date). Code Case No. N/A. Date January 26, 1994

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 5/6/96 (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) David J. Murphy

PE State WA Reg. No. 12542

Stress analysis certified by (1) Harold M. Braund

PE State CA Reg. No. M20589

SATISFACTORY ✓ UNSATISFACTORY ____

H. M. Braund II 2/8/94

RECEIPT INSPECTOR / LEVEL / DATE

(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 Jan. 28 19 94, 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 1-28 19 94.

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

02582B001577

PLAN No 2-1426

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:** 6/23/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Containment 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 |
| CIA-V-600D | Dragon | PB 1229 | N/A | N/A | 1994 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Installed test connection for accumulator tank MS-TK-1~~B~~D. The replacement work was performed as follows:

1) Installed new piping material.
2) Installed new valve CIA-V-600D, Serial No PB 1229.
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 welds. Liquid penetrant (PT) examination results acceptable.
6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES-**

1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.
2) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the Containment Instrument Air (CIA) piping system.
3) ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda for the new valve CIA-V-600D, Serial No PB 1229.

PLAN No 2-142

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: 108 Psig — Test Temperature: 84° F

Component Design Pressure: 200 Psig — Temperature: 340° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CIA-V-600D, Serial No PB 1229.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/25/97 — Date 6/25/97

### 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 4/1/97 to 6/24/97 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.

[signature] — Inspector's Signature

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

Date 6/24/97

# 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. 2-1426

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. P.O. Box 968, Richland, WA 99352 Rudolf Engl. 6/23/97
(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) | 7N057SW7D | PB1227 | N/A | 13828 | 1 | N/A | 1994 |
| (2) | | Thru | | Rev. N/C | | | |
| (3) | | PB1231 | | | | | |
| (4) | | | | | | | |
| (5) | | | | | | | |
| (6) | | | CIA-V-600D, S/N PB1229 | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. Globe Valve O S & Y ( 5 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 | | | |
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| | | | |
| | | | |
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| | | | |
| | | | |
| | | | |
| (b) Forgings | | | |
| HT.38061 | ASME SA182 GR. F316 | Ajax Forge Co. | Body |
| HT.A19167 | ASME SA182 GR. F316 | Ajax Forge Co. | Bonnet Yoke |
| | | | |
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(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.853543 | 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 S'75 (Date), Code Case No. N/A. Date January 26, 1994

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 5/6/96 (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) David J. Murphy

PE State WA Reg. No. 12542

Stress analysis certified by (1) Harold M. Braund

PE State CA Reg. No. M20589

SATISFACTORY ✓ UNSATISFACTORY ____

H. M. Braund II 2/8/94

RECEIPT INSPECTOR / LEVEL / DATE

(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 Jan. 28 19 94, 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 1-28 19 94.

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

02582800157

PLAN No 2-1427

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:** 7/10/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 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 |
| CAS-V-614A | Dragon | PB 1160 | N/A | N/A | 1992 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Installed test connection for accumulator tank MS-TK-2A. The replacement work was performed as follows:
   1) Installed new piping material.
   2) Installed new valve CAS-V-614A, Serial No PB 1160.
   3) Made required welds.
   4) Performed visual examination on the final welds. Visual examination results acceptable..
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 3 application.
2) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Control Air System (CAS) piping system.
3) ASME Section III, Code Class 1, 1974 Edition with Winter 1976 Addenda for the new valve CAS-V-614A, Serial No PB 1160.

PLAN No 2-1427

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: 109 Psig — Test Temperature: 80° F

Component Design Pressure: 150 Psig — Temperature: 150° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CAS-V-614A, Serial No PB 1160.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/10/97 — Date 7/15/97

### 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 4-1-97 to 7-16-97 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.

[signature] — Inspector's Signature

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

Date 7-16-97

# 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. 2-1427

1. Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA 90650
(Name and Address of N Certificate Holder)

2. Manufactured for Wash. Public Pwr. Sup. System, 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) | 7N057SW7D | PB1160 | N/A | 13828 | 1 | N/A | 1992 |
| (2) | | Thru | | Rev. N/C | | | |
| (3) | | PB1162 | | | | | |
| (4) | | | | | | | |
| (5) | | | | | | | |
| (6) | | CAS-V-614A, S/N PB1160 | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | Philip Swift | | | |
| (10) | | | | 7/9/97 | | | |

5. Globe Valve (3 pcs.)
(Brief description of service for which equipment was designed)

6. Design Conditions 3600 (Pressure) psi 100 (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. 692017 | 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

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (c) Bolting N/A | | | |
| (d) Other Parts | | | |
| HT. 853543 | ASME SA564 GR 630 | Carpenter Steel | 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 June 11, 1992
Signed DRAGON VALVES, INC (N Certificate Holder) by [signature]
Our ASME Certificate of Authorization No. N-1033 to use the N (N) symbol expires 5-6-9[illegible] (Date).

## CERTIFICATION OF DESIGN

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

Design specifications certified by (1) James F. Hagen, Jr.
PE State WA Reg. No. 13579
Stress analysis certified by (1) Harold M. Braund
PE State CA Reg. No. M20589

SATISFACTORY ✓ UNSATISFACTORY ____
[signature] II 6-26-92
RECEIPT INSPECTOR / LEVEL / DATE

(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 6-15 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 6-15 19 92.
[signature] (Inspector) Commissions CA1494 (Nat'l Bd., State, Prov. and No.)

PLAN No 2-1428

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:** 6/23/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Control 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 |
| CAS-V-614B | Dragon | PB 1259 | N/A | N/A | 1996 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Installed test connection for accumulator tank MS-TK-2B. The replacement work was performed as follows:
   1) Installed new piping material.
   2) Installed new valve CAS-V-614B, Serial No PB 1259.
   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 welds. Liquid penetrant (PT) examination results acceptable.~~ 7/14/97
   6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**
1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 3 application.
2) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Control Air System (CAS) piping system.
3) ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda for the new valve CAS-V-614B, Serial No PB 1259.

PLAN No 2-1428

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: 109 Psig — Test Temperature: 80° F

Component Design Pressure: 150 Psig — Temperature: 150° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CAS-V-614B, Serial No PB 1259.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/25/97 — Date 6/25/97

### 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 4/1/97 to 6/26/97 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.

[signature] — Inspector's Signature

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

Date 6/26/97

# 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. 2-1428

1. Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA. 90650 Lucip Supt 6/23/97
(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 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) | 7N057SW7D | PB1257 | N/A | 13828 | 1 | N/A | 1995 |
| (2) | | Thru | | Rev. A | | | |
| (3) | | PB1258 | | | | | |
| (4) | | | | | | | |
| (5) | | | | | | | |
| (6) | | | CAS-V-614B, S/N PB1259 | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. Globe Valve OS & Y (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)

Cold Working Pressure 3600 psi at 100°F.

Pressure Retaining Pieces

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings N/A | | | |
| (b) Forgings | | | |
| HT. 38061 | 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.

| 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 S'75 (Date), Code Case No. N/A. Date February 15, 1996

Signed Dragon Valves, Inc. (N Certificate Holder) by [signature]

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

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

Design specifications certified by (1) David J. Murphy

PE State WA. Reg. No. 12542

Stress analysis certified by (1) Harold M. Braund

PE State CA. Reg. No. M20589

(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

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

PLAN No 2-1429

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:** 6/18/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Control 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 |
| CAS--V-614C | Dragon | GT 1224 | N/A | N/A | 1978 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Installed test connection for accumulator tank MS-TK-2C. The replacement work was performed as follows:

1) Installed new piping material.
2) Installed new valve CAS--V-614C, Serial No GT 1224.
3) Made required welds.
4) Performed visual examination on the final welds. Visual examination results acceptable.
5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 2 valve for ASME Section III, Code Class 3 application.
2) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Control Air System (CAS) piping system.
3) ASME Section III, Code Class 2, 1974 Edition with Summer 1976 Addenda for the new valve CAS--V-614C, Serial No GT 1224.

PLAN No 2-1429

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: 109 Psig — Test Temperature: 80° F

Component Design Pressure: 150 Psig — Temperature: 150° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CAS--V-614C, Serial No GT 1224.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/15/97 to 6/23/97 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.

[signature] — Inspector's Signature

Commissions 7486 w/7486 NB IS IS — National Board, State, and Endorsements

Date 6/23/97

CORRECTED DRAWING NO. 12997 (was) 10880

PLAN NO. 2-1429
Philip Sugg 6/18/97



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

As Required by the Provisions of the ASME Code Rules

CAS-V-614C, S/N GT1224

1. Manufactured by DRAGON VALVES, INC. • 13457 Excelsior Drive • Norwalk, CA. 90650 Order No. N17709R SUPPL. #3
(Name & Address of Manufacturer)

2. Manufactured for WSH/BOECON/GERI, Richland, Washington 99352 Order No. 215-15410
(Name and Address)

3. Owner Washington Public Power Supply System, Hanford Jobsite No. 2

4. Location of Plant Richland, Washington

5. Pump or Valve Identification Serial Numbers GT1210 thru GT1231 (22 Pcs.)

1/2 Inch FNPT Instrument Globe Valves, Part Number 500FN057D.
(Brief description of service for which equipment was designed)

A.I. JCW 2/11/82 JCB

(a) Drawing No. ~~10880~~ 12997 Prepared by Dragon Valves, Inc.

(b) National Board No. ----

WBGBR 215 16356

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F or Pressure Class _____ (1)

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

Edition 1974, Addenda Date 6-30-76, Case No. _____

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings None | | | |
| | | | |
| (b) Forgings | | | |
| Body HT 76285 | SA182 Gr. F316 | Ajax Forge Co. | |

RECEIVED MAR 26 1982 BECHTEL QUALITY CONTROL BY: CX

(1) For manually operated valves only

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1, 2, 5a and 5b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

6

FORM NPV-1 (back)

| | Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|---|
| (c) Bolting - None | | | | |
| (d) Other Parts - | | | | |
| Bonnet | HT 8643313 | SA479 TY 316 | Republic Steel Corp. | |
| Disc | HT 02984 | SA564 Gr. 630 | Al Tech Spec. Metals Div. | |
| Union Nut | HT 11684 | SA479 TY 316 | Carpenter Technology Corp. | |

8. Hydrostatic test 5400 psi.

## CERTIFICATION OF DESIGN

Design information on file at WSH/BOECON/GERI

Stress analysis report on file at not applicable

Design specifications certified by David J. Murphy (1) Prof. Eng. State WA Reg. No. 12542

Stress analysis report certified by not required (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 December 11, 19 78 Signed DRAGON VALVES, INC. (Manufacturer) By [signature]

Certificate of Authorization No. N-1033 expires May 6, 1981

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of CALIFORNIA and employed by Division of Industrial Safety of CALIFORNIA have inspected the equipment described in this Data Report on 12-11-1978, 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.

WBGBR 215 16356

Date 12-11- 19 78

[signature] (Inspector) Commissions Cal. 857 (National Board, State, Province and No.)

Printed in U.S.A.

PLAN No 2-1430

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:** 7/10/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 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 |
| CAS-V-614D | Dragon | PB 1230 | N/A | N/A | 1994 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Installed test connection for accumulator tank MS-TK-2D. The replacement work was performed as follows:
   1) Installed new piping material.
   2) Installed new valve CAS-V-614D, Serial No PB 1230.
   3) Made required welds.
   4) Performed visual examination on the final welds. Visual examination results acceptable.
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 3 application.
2) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Control Air System (CAS) piping system.
3) ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda for the new valve CAS-V-614D, Serial No PB 1230.

PLAN No 2-1430

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: 109 Psig — Test Temperature: 80° F

Component Design Pressure: 150 Psig — Temperature: 150° F

9. Remarks: See attached NPV-1 Code Data Report for the new valve CAS-V-614D, Serial No PB 1230.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Date 7/10/97

Signed By [signature] — Supervisor, Materials And Welding

Date 7/15/97

### 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 4-1-97 to 7-16-97 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.

[signature] — Inspector's Signature

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

Date 7-16-97

# 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. 2-1430

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. 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) | 7N057SW7D | PB1227 | N/A | 13828 | 1 | N/A | 1994 |
| (2) | | Thru | | Rev. N/C | | | |
| (3) | | PB1231 | | | | | |
| (4) | | | | | | | |
| (5) | | | | | | | |
| (6) | | CAS-V-614D, S/N PB1230 | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | Rudolf Bugb | | | |
| (10) | | | | 7/19/97. | | | |

5. Globe Valve O S & Y (5 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.38061 | 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.853543 | 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 S'75 (Date), Code Case No. N/A. Date January 26, 1994
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 5/6/96 (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) David J. Murphy
PE State WA Reg. No. 12542
Stress analysis certified by (1) Harold M. Braund
PE State CA Reg. No. M20589

SATISFACTORY ✓ UNSATISFACTORY ____
H. Braund II 2/8/94
RECEIPT INSPECTOR / LEVEL / DATE

(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 Jan. 28 19 94, 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 1-28 19 94.
Ralph Shum (Inspector) Commissions CA 1716 (Nat'l Bd., State, Prov. and No.)

02582B001577

PLAN No 2-1432

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:** 6/30/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Reactor Core Isolation Cooling (RCIC) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 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 |
|---|---|---|---|---|---|---|---|
| RCIC-V-76 | Borg Warner | 35595 | N/A | N/A | 1979 | Replacement | Yes, Code Class 1 |
| Existing Bonnet | Borg Warner | * | N/A | N/A | 1979 | Replaced | Code Class 1* |
| Replacement Bonnet | Borg Warner | 325695 | N/A | N/A | 1997 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced existing bonnet for valve RCIC-V-76. The replacement work was performed as follows:
   1) Cut/ground valve body to bonnet seal weld.
   2) Removed the existing bonnet.
   3) Prepped the valve body.
   4) Performed liquid penetrant (PT) examination on the prepped valve body surfaces. Liquid penetrant (PT) examination results acceptable.
   5) Installed new bonnet, Serial No 325695.
   6) Made required body to bonnet seal weld.
   7) Performed visual examination on the final body to bonnet seal weld. Visual examination results acceptable.
   8) Performed liquid penetrant (PT) examination on the final body to bonnet seal weld. Liquid penetrant (PT) examination results acceptable.

**NOTES -**

1) * The existing bonnet was furnished as part of the fully assembled ASME Code stamped valve RCIC-V-76, Serial No 35595.
2) ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda for the existing valve bonnet.
3) ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda for the new replacement valve bonnet, Serial No 325695.

PLAN No 2-1432

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 valve bonnet, Serial No 325695.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/30/97 — Date 6/30/97

### 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. 2-1432

Richard Smith 6/27/97

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

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

Not to Exceed One Day's Production



1. Manufactured and certified by BW/IP INTERNATIONAL, INC. PUMP DIV. LOS ANGELES OPERATIONS 2300 E. VERNON, VERNON CA. 90058
   (name and address of NPT Certificate Holder)
2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEMS, NORTH POWER PLANT LOOP RICHLAND, WASHINGTON, 99352
   (name and address of Purchaser)
3. Location of installation WASHINGTON PUBLIC POWER SUPPLY SYSTEMS, NORTH POWER PLANT LOOP RICHLAND, WASHINGTON, 99352
   (name and address)
4. Type: 2000084, REV.0 (drawing no.) ASME SA105 (mat'l. spec. no.) 70,000 PSI (tensile strength) N/A (CRN) 1997 (year built)
5. ASME Code, Section III, Division 1: * 1974 (edition) SUMMER 1975 (addenda date) 1 (class) N/A (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A
7. Remarks: BW/IP JOB NO. 97SN6802 PART NAME: BONNET

   HYDROSTATIC TESTING NOT PERFORMED NAMEPLATE ATTACHED BY WIRE

   PRESSURE CLASS: 1500# MEETS SECTION II & III 1986 ED., WINTER 1988 ADD. CL.1
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 No. in Numerical Order |
|---|---|---|---|---|---|
| (1) | 325695 | N/A | (26) | | |
| (2) | | | (27) | | |
| (3) | | | (28) | | |
| (4) | | | (29) | | |
| (5) | BONNET FOR VALVE | | (30) | RCIC-V-76 | |
| (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) | | |

Design pressure 3600 psi. Temp. 100 °F. Hydro. test pressure N/A (when applicable) at temp. °F

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ × 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.

(12/88) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Certificate Holder's Serial Nos. 325695 through N/A

## CERTIFICATION OF DESIGN

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

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

## CERTIFICATE OF COMPLIANCE

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

NPT Certificate of Authorization No. N-1131 Expires JUNE 10, 1999

Date 3-21-97 Name BW/IP INTERNATIONAL, INC. (NPT 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. FACTORY MUTUAL ENGINEERING ASSOCIATION of NORWOOD, MASS. have inspected these items described in this Data Report on 3/25/97, 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, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 3/25/97 Signed [signature] (Authorized Inspector) Commissions NBI-15, CA1864 (Nat'l. Bd. (incl. endorsements) and state or prov. no.)

SATISFACTORY ✓ UNSATISFACTORY ____

[signature] 4/7/97

RECEIPT INSPECTOR / LEVEL / DATE

PLAN No 2-1433

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:** 6/19/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Recirculation Cooling (RRC) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with 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-19 | Target Rock | 7 | N/A | N/A | 1983 | Replaced | Yes, Code Class 1 |
| RRC-V-19 | Target Rock | 3 | N/A | N/A | 1997 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced existing valve RRC-V-19. The replacement work was performed as follows:
1) Removed existing valve RRC-V-19, Serial No 7, Model No 82M-001.
2) Installed new replacement piping material.
3) Installed new replacement valve RRC-V-19, Serial No 3, Model No 96T-001.
4) Made required socket welds.
5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.
6) Installed new support material.

**NOTES -**
1) ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda for the Reactor Recirculation Cooling (RRC) System.
2) ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda for the new replacement valve RRC-V-19, Serial No 3.
3) ASME Section III, Code Class NF(1), 1971 Edition with Winter 1973 Addenda for the new support material.

PLAN No 2-1433

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-19, Serial No 3.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By

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

Date 6/19/97 Date 6/20/97

### 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 Commissions _____

Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN No. 2-1433
Kulaip Gupta
6/17/93

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

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



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-19, S/N 3

* 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 psi (pressure) 575 °F (temperature) 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 2-1434

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:** 6/30/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Process Sampling Radioactive (PSR) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 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-X-77Ad | JCI | PI(1)-4S-X-77Ad | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| PSR-V-X77A/3 | Target Rock | 3 | N/A | N/A | 1986 | Replaced | Yes, Code Class 1 |
| PSR-V-X77A/3 | Target Rock | 1 | N/A | N/A | 1997 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced existing valve PSR-V-X77A/3. The replacement work was performed as follows:
   1) Removed existing valve PSR-V-X77A/3, Serial No 3, Model No 86Q-001-1.
   2) Installed new replacement piping material.
   3) Installed new replacement valve PSR-V-X77A/3, Serial No 1, Model No 96T-001.
   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.

**NOTES -**

1) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the Process Sampling Radioactive (PSR) System.
2) ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda for the new replacement valve PSR-V-X77A/3, Serial No 1.

PLAN No 2-1434

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: See attached NPV-1 Code Data Report for the new replacement valve PSR-V-X77A/3, Serial No 1.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/30/97 — Date 6/30/97

### 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. 2-1434
Kulcip Singh 6/26/93

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

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



1. Manufactured and certified by Target Rock Corp.; 1966E Broadhollow Rd.; Farmingdale, 1173
(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 | | | | |

PSR-V-X77A13, SN 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.

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 2-1435

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:** 6/26/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Sampling Radioactive (PSR) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 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-X-77Ad | JCI | PI(1)-4S-X-77Ad | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| PSR-V-X77A/4 | Target Rock | 4 | N/A | N/A | 1986 | Replaced | Yes, Code Class 1 |
| PSR-V-X77A/4 | Target Rock | 4 | N/A | N/A | 1997 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced existing valve PSR-V-X77A/4. The replacement work was performed as follows:
1) Removed existing valve PSR-V-X77A/4, Serial No 4, Model No 86Q-001-1.
2) Installed new replacement piping material.
3) Installed new replacement valve PSR-V-X77A/4, Serial No 4, Model No 96T-001.
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.

**NOTES -**
1) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the Process Sampling Radioactive (PSR) System.
2) ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda for the new replacement valve PSR-V-X77A/4, Serial No 4.

PLAN No 2-1435

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/4, Serial No 4.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/26/97 — Date 6/26/97

### 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. 2-1435

# 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

6/28/92



1. Manufactured and certified by Target Rock Corp.; 1966E Broadhollow Rd.; Farmingdale, 1173
(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 | | | | |

PSR-V-X77A/4, S/N 4

* 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 2-1436

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:** 6/26/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Process Sampling Radioactive (PSR) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: N-71*
   (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-X-77Ad | JCI | PI(1)-4S-X-77Ad | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Modified support associated with valve PSR-V-X77A/4. 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.

**NOTES -**

1) ASME Section III, Code Class NF(1), 1974 Edition with Winter 1975 Addenda for the support work.
2) * Code Case N-71 for A-500 Gr B tube steel.

PLAN No 2-1436

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

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

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

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

Signed By
Supervisor, Materials And Welding

Date 6/26/97 Date 6/26/97

### 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 2-1437

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:** 6/25/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Floor Drains Radioactive (FDR) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1976 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: N-416-1
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| Floor Drains Radioactive (FDR) | PDM | 16713 FDR | N/A | N/A | 1982 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Installed prefabricated flushing connection assembly for 3" FDR(48)-1. The installation work was performed as follows:

1) Cut existing pipe.
2) Beveled cut pipe end.
3) Installed prefabricated flushing connection assembly.
4) Made required circumferential butt welds.
5) Performed visual examination on the final circumferential butt welds. Visual examination results acceptable.
6) Performed radiographic (RT) examination on the final circumferential butt welds. Radiographic (RT) examination results acceptable.
7) Installed new blind flanges.
8) Installed new studs and nuts associated with the blind flanges.
9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES -**

1) The radiographic (RT) examination on the final circumferential butt welds was performed in accordance with the requirements of ASME Section III, Code Class 2, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.
2) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the commitments made in Relief Request No 2ISI-13 for Code Case N-416-1.
3) The flushing connection assembly was previously prefabricated in accordance with ASME Section XI Plan No 2-1388.

PLAN No 2-1437

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:** Atmospheric **Temperature:** 150° F

**9. Remarks:** 1) * The upper half of the flushing connection assembly consisting of three (3) welded joints and the upper one half of the spectacle flanged joint were VT-2 visually examined during gravity flush - Test pressure of 6.6 Psig and test temperature of 78.4° F.
2) * The lower half of the flushing connection assembly consisting of three (3) welded joints and the lower one half of the spectacle flanged joint were VT-2 visually examined during pressurized flush - Test pressure of 100 Psig and test temperature of 87.5° F.
3) * All the bolted flanged joints were VT-2 visually examined during water level above the FDR drywell sump - Test pressure of "Static" and test temperature of 76.1° F.

### CERTIFICATE OF COMPLIANCE

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

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

**Signed By** [signature]
Supervisor, Materials And Welding

**Date** 6/25/97 **Date** 6/25/97

### 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* 4/8/97 *to* 6/26/97 *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.*

[signature]
Inspector's Signature

**Commissions** 7486 w/ 7486 WFSB IS
National Board, State, and Endorsements

**Date** 6/26/97

PLAN No 2-1438

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:** 6/23/97
**Sheet:** 1 of 1
**Unit:** WNP-2

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

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| SLC-V-4A | Conax | N/A | 91 | N/A | 1975 | Replacement | Yes, Code Class 1 |
| Trigger Body | Conax | 4209 | N/A | N/A | 1993 | Replaced | Yes, Code Class 1 |
| Trigger Body | Conax | 4586 | N/A | N/A | 1995 | Replacement | Yes, Code Class 1 |
| Inlet Fitting | Conax | 4211 | N/A | N/A | 1993 | Replaced | Yes, Code Class 1 |
| Inlet Fitting | Conax | 4571 | N/A | N/A | 1995 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Replaced parts for the existing valve SLC-V-4A. The replacement work was performed as follows:
   1) Removed the existing Trigger Body Subassembly Serial No 4209 from the valve.
   2) Installed new Trigger Body Subassembly Serial No 4586 in the valve.
   3) Removed the existing Inlet Fitting Serial No 4211 from the valve.
   4) Installed new Inlet Fitting Serial No 4571 in the valve.
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

**NOTES**

1) ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda for the existing valve SLC-V-4A.
2) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new Trigger Body Subassembly Serial No 4586. 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 2-1438.
3) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new Inlet Fitting Serial No 4571. 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 2-1438.

PLAN No 2-1438

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:** 1150/1220 Psig **Test Temperature:** 77.7/81° F

**Component Design Pressure:** 1400 Psig **Temperature:** 150° F

**9. Remarks:** 1) See attached N-2 Code Data Reports for the following new valve parts:

| Valve Part | Serial No |
|---|---|
| Trigger Body Subassembly | 4586 |
| Inlet Fitting | 4571 |

2) Test pressure on the down stream side of valve SLC-V-4A (RPV Side) - Test pressure of 1150 Psig and test temperature of 77.7° F.

3) Test pressure on the up stream side of valve SLC-V-4A (SLC-P-1A Side) - Test pressure of 1220 Psig and test temperature of 81° F.

### CERTIFICATE OF COMPLIANCE

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

*Type Code Symbol Stamp:* Not Applicable

*Certificate Of Authorization No.:* Not Applicable

*Expiration Date:* Not Applicable

*Prepared By* Kuldip Singh *Signed By* [signature]

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

*Date* 6/23/97 *Date* 6/23/97

### 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* 4/30/97 *to* 6/30/97 *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.*

[signature] *Commissions* 7486W/7486 NB18 IS

Inspector's Signature National Board, State, and Endorsements

*Date* 6/30/97

PLAN No. 2-1438
Pump Supp

# 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 Conax Buffalo Corporation, 2300 Walden Avenue, Cheektowaga, NY 14225
(name and address of NPT Certificate Holder)

2. Manufactured for Washington Public Power Supply, Richland, WA 99352
(name and address of Purchaser)

3. Location of installation WNP-2, Richland, WA 99352
(name and address)

4. Type: N38017, Rev. F (drawing no.) SA479 304SST (mat'l spec. no.) 75 KSI (tensile strength) N/A (CRN) 1995 (year built)

5. ASME Code, Section III, Division 1: 77 (edition) S77 (addenda date) 1 (class) N/A (Code Case no.)

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

7. Remarks: Inlet Fitting for explosive actuated valve replacement kit for standby liquid control system.

USED S/N 4571

Pressure Test at 2800 psi for 10 minutes.

8. Nom. thickness (in.) .040 Min. design thickness (in.) .031 Dia. ID (ft & in.) .895" Length overall (ft & in.) 2.245"

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 No. in Numerical Order |
|---|---|---|---|---|---|
| (1) | 4570 | 4570 | (26) | | |
| (2) | 4571 | 4571 | (27) | | |
| (3) | | | (28) | | |
| (4) | | | (29) | | |
| (5) | | | (30) | | |
| (6) | | | (31) | | |
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| (8) | | | (33) | | |
| (9) | | | (34) | | |
| (10) | | | (35) | | |
| (11) | | | (36) | | |
| (12) | | | (37) | | |
| (13) | | | (38) | | |
| (14) | | | (39) | | |
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| (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 the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

SATISFACTORY ✓ UNSATISFACTORY ____

Vijay K Bell II 6-19-95
RECEIPT INSPECTOR / LEVEL / DATE

Certificate Holder's Serial Nos. 4570 through 4571

## CERTIFICATION OF DESIGN

Design specifications certified by Clyde T. Nieh (when applicable) P.E. State CA Reg. no. 15587

Design report* certified by Francis J. Domino (when applicable) P.E. State NY Reg. no. 36832

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Inlet Fittings conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1850 Expires September 2, 1995

Date 5/18/95 Name Conax Buffalo Corporation (NPT 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 NY and employed by Hartford Steam Boiler Inspection & Insurance Company of Hartford, CT have inspected these items described in this Data Report on 5-18-95, 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, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 5-18-95 Signed [signature] (Authorized Inspector) Commissions NB7640 N (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

SATISFACTORY ✓ UNSATISFACTORY ____

Vijay K Bel II 6-19-95

RECEIPT INSPECTOR / LEVEL / DATE

# 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

PLAN No. 2-1438
Philip Sup
Pg. 1 of 2 6/20/9

1. Manufactured and certified by Conax Buffalo Corporation, 2300 Walden Avenue, Cheektowaga, NY 14225
(name and address of NPT Certificate Holder)

2. Manufactured for Washington Public Power Supply, Richland, WA 99352
(name and address of Purchaser)

3. Location of installation WNP-2, Richland, WA 99352
(name and address)

4. Type: N20000, Rev. G (drawing no.) | SA479 304SST (mat'l spec. no.) | 75 KSI (tensile strength) | N/A (CRN) | 1995 (year built)

5. ASME Code, Section III, Division 1: 77 (edition) | S77 (addenda date) | 1 (class) | N/A (Code Case no.)

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

7. Remarks: Trigger Body Subassembly for explosive actuated valve replacement kit for standby liquid control system.

Para. NB-2121 (b) is applicable to ram. Press Fit/Seal on .328 & .4375 diameters. Overall subassembly length is 2.5".

Pressure Test at 2800 psi for 10 minutes. USED S/N 4586

8. Nom. thickness (in.) See Remarks Min. design thickness (in.) See Remarks Dia. ID (ft & in.) See Remarks Length overall (ft & in.) See Remarks

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 No. in Numerical Order |
|---|---|---|---|---|---|
| (1) | 4585 | 4585 | (26) | | |
| (2) | 4586 | 4586 | (27) | | |
| (3) | | | (28) | | |
| (4) | | | (29) | | |
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| (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 the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

SATISFACTORY ✓ UNSATISFACTORY ____

Vijay Kbell II 6-19-95
RECEIPT INSPECTOR / LEVEL / DATE

Certificate Holder's Serial Nos. 4585 through 4586

## CERTIFICATION OF DESIGN

Design specifications certified by Clyde T. Nieh (when applicable) P.E. State CA Reg. no. 15[illegible]

Design report* certified by Francis J. Domino (when applicable) P.E. State NY Reg. no. 36832

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Trigger Body Subassemblies conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1850 Expires September 2, 1995

Date 5/16/95 Name Conax Buffalo Corporation (NPT Certificate Holder) Signed [illegible] (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 NY and employed by Hartford Steam Boiler Inspection & Insurance Company of Hartford, CT have inspected these items described in this Data Report on 5-18-95, 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, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 5-18-95 Signed [illegible] (Authorized Inspector) Commissions NB 7645 NJ (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

SATISFACTORY ✓ UNSATISFACTORY ___

Vijay K Behl II 6-19-95

RECEIVING INSPECTOR / LEVEL / DATE

PLAN No 2-1439

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:** 6/17/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** 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 |
|---|---|---|---|---|---|---|---|
| DMA-CC-21* | CVI Corporation | 03-A084 | 286 | N/A | 1975 | Replacement | Yes, Code Class 3 |
| DMA-CC-21* | CVI Corporation | 03-A085 | 285 | 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 DMA-CC-21*, Serial No 03-A085, National Board No 285
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 DMA-CC-21*, Serial No 03-A084, National Board No 286
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 Reports for these units are coded as DMA-AH-21/1 and DMA-AH-21/2. These Code Data Reports are for cooling coils DMA-CC-21/1 and DMA-CC-21/2. Cooling coil DMA-CC-21 consists of two (2) cooling coils as follows:

DMA-CC-21/1, Upper Cooling Coil, Serial No 03-A085, National Board No 285
DMA-CC-21/2, Lower Cooling Coil, Serial No 03-A084, National Board No 286

PLAN No 2-1439

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: 210 Psig — Test Temperature: 60° 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 [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/27/97 to 6/23/97 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.

[signature] — Inspector's Signature

Commissions 7486 W/ 7486 NSIB IX — National Board, State, and Endorsements

Date 6/23/97

PLAN No 2-1440

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:** 6/23/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** 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 |
|---|---|---|---|---|---|---|---|
| DMA-CC-22* | CVI Corporation | 03-A087 | 248 | N/A | 1975 | Replacement | Yes, Code Class 3 |

**7. Description Of Work Performed:** Replaced threaded hex head pipe plug for the cooling coil. 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 DMA-AH-22. The Code Data Report is for cooling coil DMA-CC-22.

PLAN No 2-1440

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: 210 Psig — Test Temperature: 60° 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 [signature] — Supervisor, Materials And Welding

Date 6/25/97 — Date 6/25/97

### 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 4/21/97 to 6/26/97 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.

[signature] — Inspector's Signature

Commissions 7486W/7486 WFSB 25 — National Board, State, and Endorsements

Date 6/26/97

PLAN No 2-1441

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:** 6/21/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** 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 |
|---|---|---|---|---|---|---|---|
| DMA-CC-31* | CVI Corporation | 03-A080 | 283 | N/A | 1975 | Replacement | Yes, Code Class 3 |

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

Upper Cooling Coil Inlet Nozzle For DMA-CC-31*, Serial No 03-A080, National Board No 283
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 DMA-AH-31/1. The Code Data Report is for cooling coil DMA-CC-31/1. Cooling coil DMA-CC-31 consists of two (2) cooling coils as follows:

DMA-CC-31/1, Upper Cooling Coil, Serial No 03-A080, National Board No 283
DMA-CC-31/2, Lower Cooling Coil, Serial No 03-A081, National Board No 245

PLAN No 2-1441

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: 55 Psig
Component Design Pressure: 300 Psig
Test Temperature: 65° 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)
Date 6/21/97

Signed By
Supervisor, Materials And Welding
Date 6/23/97

### 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 4/25/97 to 7/1/97 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions 7486 W/7486 NB IS
National Board, State, and Endorsements

Date 7/1/97

PLAN No 2-1442

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:** 6/17/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** 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 |
|---|---|---|---|---|---|---|---|
| WMA-CC-52B/1* | CVI Corporation | 03-A072 | 282 | N/A | 1975 | Replacement | Yes, Code Class 3 |

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

Service Water (SW) Cooling Coil Inlet Nozzle For WMA-CC-52B/1*, Serial No 03-A072, National Board No 282
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.

Service Water (SW) Cooling Coil Outlet Nozzle For WMA-CC-52B/1*, Serial No 03-A072, National Board No 282
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 Reports for these units are coded as WMA-CC-52B/1 and WMA-CC-52B/2. These Code Data Reports are for cooling coils WMA-CC-52B/1 and WMA-CC-52B/2. Cooling coil WMA-CC-52 consists of two (2) cooling coils as follows:

WMA-CC-52B/1, Service Water (SW) Cooling Coil, Serial No 03-A072, National Board No 282
WMA-CC-52B/2, Chilled Water (WCH) Cooling Coil, Serial No 03-A065, National Board No 281

PLAN No 2-1442

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: 215 Psig — Test Temperature: 60° 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 [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/25/97 to 6/23/97 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.

[signature] — Inspector's Signature

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

Date 6/23/97

PLAN No 2-1443

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:** 6/18/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** 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 |
|---|---|---|---|---|---|---|---|
| WMA-CC-53B/1* | CVI Corporation | 03-A095 | 227 | N/A | 1975 | Replacement | Yes, Code Class 3 |

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

Lower Cooling Coil Inlet Nozzle For WMA-CC-53B/1*, Serial No 03-A095, National Board No 227

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 WMA-AH-53B/1. The Code Data Report is for cooling coil WMA-CC-53B/1. Cooling coil WMA-CC-53B/1 consists of two (2) cooling coils as follows:

WMA-CC-53B/1, Upper Cooling Coil, Serial No 03-A093, National Board No 229
WMA-CC-53B/3, Lower Cooling Coil, Serial No 03-A095, National Board No 227

PLAN No 2-1443

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: 215 Psig — Test Temperature: 60° 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 [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/25/97 to 6/23/97 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.

[signature] — Inspector's Signature

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

Date 6/23/97

PLAN No 2-1446

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:** 6/23/97
   **Address:** 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:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** 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-3* | CVI Corporation | 03-A076 | 223 | N/A | 1975 | Replacement | Yes, Code Class 3 |

7. **Description Of Work Performed:** Replaced threaded hex head pipe plug for the cooling coil. The replacement work was performed as follows:
   1) Modified threaded hex head pipe plugs.
   2) Installed modified threaded hex head pipe plugs.
   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-3. The Code Data Report is for cooling coil RRA-CC-3.

PLAN No 2-1446

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: 100 Psig — Test Temperature: 75° 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 [signature] — Supervisor, Materials And Welding

Date 6/25/97 — Date 6/25/97

### 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 4/14/97 to 6/26/97 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.

[signature] — Inspector's Signature

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

Date 6/26/97

PLAN No 2-1447

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:** 6/19/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Instrumentation (PI) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: 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)-1-X54Aa | JCI | PI(1)-1-X54Aa | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Installed blind flange on the bulkhead for the deactivated instrument line. The replacement work was performed as follows:

1) Installed new blind flange on the bulkhead.
2) Installed studs and nuts associated with the blind flange.

PLAN No 2-1447

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By

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

Date 6/19/97 Date 6/20/97

### 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 Commissions _____

Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN No 2-1448

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:** 6/18/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Service Water (SW) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

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

**7. Description Of Work Performed:** Made weld associated with SW-RO-13A. The work was performed as follows:
1) Installed slip-on flange on the existing elbow.
2) Made required weld.
3) Performed visual examination on the final weld. Visual examination results acceptable.
4) Performed flow test to satisfy pressure test requirements. Flow test results acceptable.

PLAN No 2-1448

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]

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

Component Design Pressure: 300 Psig — Temperature: 150° F

9. Remarks:* Performed flow test to satisfy pressure test requirements.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 4/28/97 to 6/28/97 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.

[signature] — Inspector's Signature

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

Date 6/28/97

PLAN No 2-1449

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:** North Power Plant Loop, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 6/18/97
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Service Water (SW) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| SW-21-2-11 | BF Shaw | SW-21-2-11 | N/A | N/A | 1979 | Replacement | Yes, Code Class 3 |

**7. Description Of Work Performed:** Made weld associated with SW-RO-13B. The work was performed as follows:
1) Installed slip-on flange on the existing elbow.
2) Made required weld.
3) Performed visual examination on the final weld. Visual examination results acceptable.
4) Performed flow test to satisfy pressure test requirements. Flow test results acceptable.

PLAN No 2-1449

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]

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

Component Design Pressure: 300 Psig — Temperature: 150° F

9. Remarks:* Performed flow test to satisfy pressure test requirements.

### 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 6/25/97

Signed By [signature] — Supervisor, Materials And Welding

Date 6/25/97

### 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 4/28/97 to 6/26/97 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.

[signature] — Inspector's Signature

Commissions 7486W/7484 NBSB IS — National Board, State, and Endorsements

Date 6/26/97

PLAN No 2-1453

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:** 6/21/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Service Water (SW) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: N-416-1
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| SW(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-8A. 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 2-1453

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 [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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 5/8/97 to 6/30/97 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.

[signature] — Inspector's Signature

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

Date 6/30/97

PLAN No 2-1454

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:** 6/18/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Containment Instrument Air (CIA) 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 |
|---|---|---|---|---|---|---|---|
| CIA-V-20 | Borg Warner | 35697 | N/A | N/A | 1979 | Repaired | Yes, Code Class 2 |

7. **Description Of Work Performed:** Repaired valve CIA-V-20. The repair work was performed as follows:
   1) Cut or ground valve body to bonnet seal weld.
   2) Removed the disc from the valve.
   3) Machined the disc seat surfaces.
   4) Performed liquid penetrant (PT) examination on the valve disc machined surfaces. Liquid penetrant (PT) examination results acceptable
   5) Reinstalled the valve parts.
   6) Made valve body to bonnet seal weld.
   7) Performed liquid penetrant (PT) examination on the final valve body to bonnet seal weld. Liquid penetrant (PT) examination results acceptable.

PLAN No 2-1454

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 [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/5/97 to 6/25/97 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.

[signature] — Inspector's Signature

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

Date 6/25/97

PLAN No 2-1455

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:** 6/30/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Recirculation Cooling (RRC) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 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 |
|---|---|---|---|---|---|---|---|
| RRC(5)-4S-B | WPPSS | RRC(5)-4S-B-P1 | N/A | N/A | 1983 | Repaired | Yes, Code Class 2 |

**7. Description Of Work Performed:** Cut and rewelded socket welds associated with valve RRC-V-14B. The repair work was performed as follows:

1) Cut or ground existing socket welds and removed the valve.
2) Reinstalled the valve.
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.
6) Installed new U bolt and associated jam nuts.

**NOTES**

1) ASME Section III, Code Class NF(2) for the support material.

PLAN No 2-1455

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 [signature] — Supervisor, Materials And Welding

Date 6/30/97 — Date 6/30/97

### 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 5/15/97 to 6/30/97 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.

[signature] — Inspector's Signature

Commissions 7486 w/7486 WISB IS — National Board, State, and Endorsements

Date 6/30/97

PLAN No 2-1456

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:** 6/17/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Reactor Building Closed Cooling (RCC) 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 |
|---|---|---|---|---|---|---|---|
| RCC(3)-1 | WPPSS | RCC(3)-1-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| RCC(36)-1 | WPPSS | RCC(36)-1-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |

7. **Description Of Work Performed:** Replaced studs and nuts for the bolted piping flanged joints associated with heat exchanger EDR-HX-1. The replacement work was performed as follows:

Reactor Building Closed Cooling (RCC) Return Line
1) Installed eight (8) new studs for the bolted piping flanged joint.
2) Installed sixteen (16) new nuts for the bolted piping flanged joint.
3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the bolted piping flanged joint. No evidence of leakage during the pressure test.

Reactor Building Closed Cooling (RCC) Supply Line
1) Installed eight (8) new studs for the bolted piping flanged joint.
2) Installed sixteen (16) new nuts for the bolted piping flanged joint.
3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the bolted piping flanged joint. No evidence of leakage during the pressure test.

PLAN No 2-1456

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: 88 Psig — Test Temperature: 80° F

Component Design Pressure: 195 Psig — Temperature: 150° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/20/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/2/97 to 6/23/97 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.

[signature] — Inspector's Signature

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

Date 6/23/97

PLAN No 2-1457

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:** 6/21/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Feedwater (RFW) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

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

**7. Description Of Work Performed:** Replaced existing pipe clamp for support RFW-180. The replacement work was performed as follows:

1) Removed the existing pipe clamp from the support.
2) Installed new pipe clamp for the support.
3) Performed VT-3 visual examination on the installed new pipe clamp. VT-3 visual examination results acceptable.

PLAN No 2-1457

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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 5/1/97 to 6/30/97 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.

[signature] — Inspector's Signature

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

Date 6/30/97

PLAN No 2-1458

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:** 6/30/97
**Sheet:** 1 of 1
**Unit:** WNP-2

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

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| RHR(1)-2C | WPPSS | RHR(1)-2C-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| RHR-RV-25C | Lonergan | 509258-76-1 | N/A | N/A | 1979 | Replaced | Yes, Code Class 2 |
| RHR-RV-25C* | Lonergan | 509258-75-1* | N/A | N/A | 1982 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced existing relief valve RHR-RV-25C. The replacement work was performed as follows:
   1) Removed existing relief valve RHR-RV-25C, Serial No 509258-76-1.
   2) Performed VT-3 visual examination on the existing studs for the relief valve outlet joint. VT-3 visual examination results acceptable.
   3) Performed VT-3 visual examination on the existing nuts for the relief valve outlet joint. VT-3 visual examination results acceptable.
   4) Installed new relief valve RHR-RV-25C, Serial No 509258-75-1.
   5) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the relief valve outlet joint. No evidence of leakage during the pressure test.

**NOTES -**

1) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the Residual Heat Removal (RHR) piping system.
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda for the replacement relief valve RHR-RV-25C, Serial No 509258-75-1.
3) * Relief valve RHR-RV-25C, Serial No 509258-75-1 was previously installed in the plant as RHR-RV-25B.

PLAN No 2-1458.

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: 38.8 Psig — Test Temperature: 78.8° F

Component Design Pressure: 125 Psig — Temperature: 480° F

9. Remarks: 1) See attached NV-1 Code Data Report for the replacement relief valve RHR-RV-25C, Serial No 509258-75-1. Relief valve RHR-RV-25C, Serial No 509258-75-1 was previously installed in the plant as RHR-RV-25B.
2) The component design pressure of 125 Psig and design temperature of 480° F is for the relief valve discharge 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 [signature] — Supervisor, Materials And Welding

Date 6/30/97 — Date 6/30/97

### 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 5-29-97 to 7-16-97 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.

[signature] — Inspector's Signature

Commissions 7466/7486 WI/B IS — National Board, State, and Endorsements

Date 7-16-97

**Corrected Copy 1/18/8

* Correction

# FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES*

As required by the Provisions of the ASME Code Rules

PLAN NO. 2-1458

1. Manufactured by J. E. Lonergan Company, 10050 Sandmeyer Lane, Philadelphia, PA 19115
   Name and Address

   Model No. D-30D Order No. 509258 Contract Date 8/5/75 National Board No. N/A 6/26/87

2. Manufactured For Bovee & Crail Const. Co. and General Energy Resources, Inc., Richland, WA Order No. 215-15190
   Name and Address

3. Owner Washington Public Power, Hanford, Washington 99352
   Name and Address

   S/N 509258-75-1
   USED FOR RHR-RV-25C

4. Location of Plant Hanford #2 Jobsite, 12 Miles North of Richland, Washington 99352

5. Valve Identification RHR-RV-25B Serial No. 509258-75-1 Drawing No. A-2369, Rev. B

   Type Safety Relief Valve (Safety; Safety Relief; Pilot; Power Actuated) Orifice Size 0.110 Sq. Inch Pipe Size ____ Inch Inlet 1 Inch Outlet 2

6. Set Pressure (PSIG) 500 450 °F (Rated Temperature)

   Stamped Capacity 40.1 GPM ~~xxxxxx~~ 10 % Overpressure Blowdown (PSIG) **

   Hydrostatic Test (PSIG) Inlet 750 Outlet Valve 425

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

   Class 2, Edition 1974 Winter Addenda, Addenda Date 12/31/74, Case No. 1555 & 1567

Pressure Containing or Pressure Retaining Components

| | Serial No. or Identification | Material Specification Including Type or Grade |
|---|---|---|
| a. Castings | | |
| Body | D8348-2 | ASME SA-216/WCB |
| Bonnet ~~xxxxxx~~ | D8350-21 | ASME SA-216/WCB |
| b. Bar Stock and Forgings | | |
| Support Rods | N/A | N/A |
| Nozzle | C17792 | ASME SA-479 Type 304 |
| Disc | 01629 | ASME SA-479 Type 304 |
| Spring Washers | C17792 | ASME SA-479 Type 304 |
| Adjusting Screw | 91015 | ASME SA-479 Type 304 |
| Spindle | 91372 | ASME SA-479 Type 410 |

REVIEWED JUL 30 1982 SECTION QUALITY CONTROL BY.

*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.

FORM NV-1 (back)

| | Serial No. or Identification | Material Specification Including Type or Grade |
|---|---|---|
| c. Spring | HD6377 | ASTM A-229 |
| 2. Bolting | N/A | N/A |

c. Other Parts such as Pilot Components

| | | |
|---|---|---|
| Body Studs | Certificate of Conformance | ASME SA-193 Gr. B7 |
| Stud Nuts | Certificate of Conformance | ASME SA-194 Gr. 2H |
| Cap | E4006-5 | ASME SA-216/WCB |

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

** Date 1-18 19 82 Signed J. E. Lonergan Co. (Manufacturer) By T. A. Nickey

Certificate of Authorization No. N-1443 expires August 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 _____ 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 1-18 19 82

** Paul W. Frank (Inspector) Commissions PA. 2346 (National Board, State, Province and No.)

PLAN No 2-1459

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:** 6/21/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 — **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) — **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Reactor Building Closed Cooling (RCC) 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 |
|---|---|---|---|---|---|---|---|
| RCC(5)-2 | WPPSS | RCC(5)-2-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| RCC-RV-34A | Lonergan | 307469-1-1 | N/A | N/A | 1975 | Replaced | Yes, Code Class 3 |
| RCC-RV-34A | Lonergan | 137916-2-1 | N/A | N/A | 1994 | Replacement | Yes, Code Class 3 |

**7. Description Of Work Performed:** Replaced existing relief valve RCC-RV-34A. The replacement work was performed as follows:
1) Removed existing relief valve RCC-RV-34A, Serial No 307469-1-1.
2) Installed replacement relief valve RCC-RV-34A, Serial No 137916-2-1.

**NOTES -**
1) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Reactor Building Closed Cooling (RCC) System.
2) ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda for the replacement relief valve RCC-RV-34A, Serial No 137916-2-1.

PLAN No 2-1459

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 replacement relief valve RCC-RV-34A, Serial No 137916-2-1.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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 5/30/97 to 6/30/97 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.

[signature] — Inspector's Signature

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

Date 6/30/97

PLAN No. 2-1459

# FORM NV-1 CERTIFICATE HOLDER'S 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)

Philip Sims 6/20/97

2. Manufactured for Washington Public Power Supply System, Accts. Pay. MD 055, P.O. Box 968, Richland, WA 99352-0968 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WISE Complex, Whse. #1, North Power Plant Loop, Richland, WA 99352 (name and address)

4. Valve NJL14J-D21-DG0265 (model no., series no.) Orifice size 0.312 (in.) Nom. inlet size 3/4" (in.) Outlet size 1" (in.)

5. ASME Code, Section III, Division 1: 1971 (edition) Winter 1971 (addenda date) 3 (class) N/A (Code Case no.)

6. Type Spring (spring, pilot or power operated) 265 (set pressure, psig) N/A (blowdown, psi) 100° F (rated temp.) 397 (hydro. test, psig, inlet) at 33 °F

7. Identification 137916-2-1 through 137916-2-2 (Cert. Holder's serial no.) N/A (CRN) A930298 Rev. 1 (drawing no.) N/A (Nat'l. Bd. no.) 1994 (year built)

8. Control ring settings N/A

RCC-RV-34A, SN 137916-2-1

9. Pressure retaining items:

| | Serial No. or Identification | Mat'l. Spec., Including Type or Grade | Tensile Strength |
|---|---|---|---|
| ~~XXXX~~Compression Screw | 34601 | SA-479 TY 316 | 75 ksi |
| Bonnet~~XXXXXX~~ (Assy.) | A6139-C472, -C473 / | SA-216 WCB | 70 ksi |
| ~~XXXXXXXXXX~~ | 701093 / 841TNT | SA-479 TY 316 / SA-105 | 75 ksi / 70 ksi |
| ~~XXXXX~~ Guide Pin | 35486 | SA-479 TY 316 | 75 ksi |
| Disk | 9E6313 | SA-479 TY 316 | 75 ksi |
| Spring ~~XXXXXX~~Step | 30340 | SA-479 TY 316 | 75 ksi |
| ~~XXXXXXXXXXXXX~~Base Assy | J1579-6, -16 / | SA-351 CF8M | 70 ksi |
| ~~XXXXX~~ | 36560-6/38062 / 840TNF | SA-479 TY 316 / SA-105 | 75 ksi / 70 ksi |
| Spring | 8E6170 | A-313 TY 316 | * |
| ~~XXXX~~Gag Plug Screw | 39883 | SA-479 TY 316 | 75 ksi |
| ~~XXXXXXXX~~ Cap | 701632 | SA-479 TY 316 | 75 ksi |
| Stem | 9E6313 | SA-479 TY 316 | 75 ksi |

10. Relieving capacity 11,800 lb./hr. (23.6 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 ND-2000 but meets design requirements of ND-3595.

## 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 5-24-94 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.

This form (E00042) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

137916-2-1 through

Certificate Holder's Serial No. 137916-2-2

## 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 MAY 25 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 5-24-94 Signed Richard R. Lacy (Authorized Inspector) Commissions NB 7444 (NB/IN), In & 34D (Nat'l. Bd. (incl. endorsement(s)) and state or prov. and no.)

0126067000149

PLAN No 2-1460

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:** 6/21/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** 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(1)-1 | WPPSS | FPC(1)-1-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| FPC-RV-117A | Lonergan | 307469-2-1 | N/A | N/A | 1975 | Replaced | Yes, Code Class 3 |
| FPC-RV-117A | Lonergan | 137916-1-1 | N/A | N/A | 1994 | Replacement | Yes, Code Class 3 |

7. **Description Of Work Performed:** Replaced existing relief valve FPC-RV-117A. The replacement work was performed as follows:
   1) Removed existing relief valve FPC-RV-117A, Serial No 307469-2-1.
   2) Installed replacement relief valve FPC-RV-117A; Serial No 137916-1-1.

**NOTES -**

1) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Fuel Pool Cooling (FPC) System.
2) ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda for the replacement relief valve FPC-RV-117A, Serial No 137916-1-1.

PLAN No 2-1460

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 replacement relief valve FPC-RV-117A, Serial No 137916-1-1.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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 5/29/97 to 6/30/97 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.

[signature] — Inspector's Signature

Commissions 7486/7486 WISB II — National Board, State, and Endorsements

Date 6/30/97

PLAN NO. 2-1460

# FORM NV-1 CERTIFICATE HOLDER'S 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) Buildup Sub 6/20/91

2. Manufactured for Washington Public Power Supply System, Accts. Pay. MD 055, P.O. Box 968, Richland, WA 99352-0968 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHSE, Complex Whse #1, North Power Plant Loop, Richland, WA 99352 (name and address)

4. Valve NUL14J-D21-DC0150 (model no., series no.) Orifice size 0.312 (in.) Nom. inlet size 3/4 (in.) Outlet size 1 (in.)

5. ASME Code, Section III, Division 1: 1971 (edition) Winter 1971 (addenda date) 3 (class) N/A (Code Case no.)

6. Type Spring (spring, pilot or power operated) 150 (set pressure, psig) N/A (blowdown, psi) 400° F (rated temp.) 225 (hydro. test, psig, inlet) at 33 °F

7. Identification 137916-1-1 through 137916-1-2 (Cert. Holder's serial no.) N/A (CRN) A930298 Rev. 1 (drawing no.) N/A (Nat'l. Bd. no.) 1994 (year built)

8. Control ring settings N/A

9. Pressure retaining items: FPC-RV-117A, S/N 137916-1-1 Buildup Sub

| | Serial No. or Identification | Mat'l. Spec., Including Type or Grade | Tensile Strength |
|---|---|---|---|
| ~~XXXX~~ Compression Screw | 34601 | SA-479 TY 316 | 75 ksi |
| Bonnet ~~XXXXX~~(Assy.) | A6139/C469 / A6139/C476 / | SA-216 WCB | 70 ksi |
| ~~XXXXXXXXXX~~ | 98848/701093 / 841TNT/M25024 Code | ARPN SA-479 TY 316 / SA-105 | 75 ksi / 70 ksi |
| ~~XXXX~~ Guide Pin | 35486 | SA-479 TY 316 | 75 ksi |
| Disk | 9E6313 | SA-479 TY 316 | 75 ksi |
| ~~XXXXXXXXXX~~Base (Assy.) | 11579-13, -17 / | SA-351 CF8M | 70 ksi |
| ~~XXXXXXXXXXXX~~ | 38062 / 840TNF | SA-479 TY 316 / SA-105 | 75 ksi / 70 ksi |
| ~~XXXXX~~ Gag Plug Screw | 39883 | SA-479 TY 316 | 75 ksi |
| Spring | 8E5901 | A-313 TY 316 | * |
| ~~XXXXX~~Spring Step | 30340 | SA-479 TY 316 | 75 ksi |
| ~~XXXXXX~~ Cap | 701632 | SA-479 TY 316 | 75 ksi |
| Stem | 9E6313 | SA-479 TY 316 | 75 ksi |

10. Relieving capacity 8,900 lb./hr. (17.8 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 ND-2000 but meets design requirements of ND-3595.

## 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 5-23-94 Name Kunkle Industries, Inc. Lonergan Valve Division (NV Certificate Holder) Signed Debra A. Wittzel (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.

5/30/94

FORM NV-1 (Back — Pg. 2 of 2)

137916-1-1 through

Certificate Holder's Serial No. 137916-1-2

## 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 MAY 25, 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 5-25-94 Signed Richard L. Gray (Authorized Inspector) Commissions NB7444 (NBIA), IND 8YD (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

0260670000017

PLAN No 2-1461

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:** 6/21/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** 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(1)-1 | WPPSS | FPC(1)-1-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 3 |
| FPC-RV-117B | Lonergan | 307469-2-2 | N/A | N/A | 1975 | Replaced | Yes, Code Class 3 |
| FPC-RV-117B | Lonergan | 137916-1-2 | N/A | N/A | 1994 | Replacement | Yes, Code Class 3 |

7. **Description Of Work Performed:** Replaced existing relief valve FPC-RV-117B. The replacement work was performed as follows:
   1) Removed existing relief valve FPC-RV-117B, Serial No 307469-2-2.
   2) Installed replacement relief valve FPC-RV-117B, Serial No 137916-1-2.

**NOTES -**

1) ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda for the Fuel Pool Cooling (FPC) System.
2) ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda for the replacement relief valve FPC-RV-117B, Serial No 137916-1-2.

PLAN No 2-1461

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 replacement relief valve FPC-RV-117B, Serial No 137916-1-2.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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 5/28/97 to 7/1/97 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

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

Date 7/1/97

PLAN (NO. 2-14 61

# *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) Rudolph Sumb 6/20/97

2. Manufactured for Washington Public Power Supply System, Accts. Pay. MD 055, P.O. Box 968, Richland, WA 99352-0968 (name and address of Purchaser)

3. Location of installation Washington Public Power Supply System, WNP-2 OPS WHSE, Complex Whse #1, North Power Plant Loop, Richland, WA 99352 (name and address)

4. Valve NJL14J-D21-DC0150 (model no., series no.) Orifice size 0.312 (in.) Nom. inlet size 3/4 (in.) Outlet size 1 (in.)

5. ASME Code, Section III, Division 1: 1971 (edition) Winter 1971 (addenda date) 3 (class) N/A (Code Case no.)

6. Type Spring (spring, pilot or power operated) 150 (set pressure, psig) N/A (blowdown, psi) 400° F (rated temp.) 225 (hydro. test, psig, inlet) at 33 °F

7. Identification 137916-1-1 through 137916-1-2 (Cert. Holder's serial no.) N/A (CRN) A930298 Rev. 1 (drawing no.) N/A (Nat'l. Bd. no.) 1994 (year built)

8. Control ring settings N/A

FPC-RV-117B, S/N 137916-1-2

9. Pressure retaining items:

| | Serial No. or Identification | Mat'l. Spec., Including Type or Grade | Tensile Strength |
|---|---|---|---|
| XXXX Compression Screw | 34601 | SA-479 TY 316 | 75 ksi |
| Bonnet XXXXX(Assy.) | A6139/C469 / A6139/C476 / | SA-216 WCB | 70 ksi |
| XXXXXXXXXX | 98848/701093 / 841TNT/M25024 Code | ARPN SA-479 TY 316 / SA-105 | 75 ksi / 70 ksi |
| XXXXX Guide Pin | 35486 | SA-479 TY 316 | 75 ksi |
| Disk | 9E6313 | SA-479 TY 316 | 75 ksi |
| XXXXXXXXXXXBase (Assy.) | 11579-13, -17 / | SA-351 CF8M | 70 ksi |
| XXXXXXXXXXXX | 38062 / 840TNF | SA-479 TY 316 / SA-105 | 75 ksi / 70 ksi |
| XXXXX Gag Plug Screw | 39883 | SA-479 TY 316 | 75 ksi |
| Spring | 8E5901 | A-313 TY 316 | * |
| XXXXXXSpring Step | 30340 | SA-479 TY 316 | 75 ksi |
| XXXXXXXX Cap | 701632 | SA-479 TY 316 | 75 ksi |
| Stem | 9E6313 | SA-479 TY 316 | 75 ksi |

10. Relieving capacity 8,900 lb./hr. (17.8 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 ND-2000 but meets design requirements of ND-3595.

## 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 5-23-94 Name Kunkle Industries, Inc. Lonergan Valve Division (NV Certificate Holder) Signed Debra A. Wittzel (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.

F 3/30/94

137916-1-1 through

Certificate Holder's Serial No. 137916-1-2

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 MAY 25, 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 5-25-94 Signed Richard P. Craig (Authorized Inspector) Commissions NB7444 (NBIA), IND 840 [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

012606700001017

PLAN No 2-1463

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:** 6/19/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Containment 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(1)-2-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| CIA-V-23 | Borg Warner | 53262 | N/A | N/A | 1980 | Replaced | Yes, Code Class 2 |
| CIA-V-23 | Borg Warner | 17008 | N/A | N/A | 1976 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Replaced existing valve RRC-V-19. The replacement work was performed as follows:
1) Removed existing valve CIA-V-23, Serial No 53262.
2) Installed new replacement valve CIA-V-23, Serial No 17008.
3) Made required socket welds.
4) 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 Containment Instrument Air (CIA) System.
2) ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda for the new replacement valve CIA-V-23, Serial No 17008.

PLAN No 2-1463

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 CIA-V-23, Serial No 17008.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By

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

Date 6/19/97 Date 6/20/97

### 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 Commissions _____

Inspector's Signature National Board, State, and Endorsements

Date _____

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PLAN NO. 2-1463

Rudolph Supt.

6/18/97.

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

As Required by the Provisions of the ASME Code Rules

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Avenue, Van Nuys, Ca. Order No. 47713
(Name & Address of Manufacturer)

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 Order No. 215-3261Q
(Name and Address)

3. Owner WPPSS Hanford #2 Job Site C/A-V-23, S/N 17008

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification Nuclear Valve Div., P/N 76700-1, 3/4 Inch Gate Valve, CS

Serial Numbers 16997 Thru 17021 (25 Valves)
(Brief description of service for which equipment was designed)

(a) Drawing No. 76700 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No.

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

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

Edition 1971, Addenda Date Winter '73, Case No.

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| Gate - Code 1P14, 1M62 | SA487 Gr.CA6NM | | |
| Casting - 75347 | | Rex Precision | |
| Machined - 75346 | | NV Division | |
| REVIEWED MAY 19 1992 BECHTEL QUALITY CONTROL BY | | REVIEWED APR 28 1992 BECHTEL QUALITY CONTROL BY | |
| (b) Forgings | | | |
| Body - Code 1K69 | SA 105 | | |
| Forging - 70453 | | Pacific Forge | |
| Machined - 70474 | | NV Division | |
| Assembly - 75349 | | NV Division | |
| Bonnet - Code 1M28 | SA 105 | | |
| Forged Stock | | Compton Forge | |
| Machined - 73973-11 | | NV Division | NBC CR - 13 - 18536A |
| Assembly 73973 | | NV Division | |

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

3

FORM NPV-1 (back)

| | Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|---|
| (c) Bolting | | | | |
| (d) Other Parts | | | | |
| Stem - Code | 1935 | SA564 Type 630 | | |
| Bar Stock | | | Jorgensen Steel | |
| Machined - | 75323 | | NV Division | |

8. Hydrostatic test 5400 - 5450 psi.

## CERTIFICATION OF DESIGN

Design information on file at Nuclear Valve Div. of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca.

Stress analysis report on file at N/A

Design specifications certified by David J. Murphy (1) Prof. Eng. State Wash. Reg. No. 12542

Stress analysis report certified by N/A (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 December 30 19 76 Signed Nuclear Valve Div. of Borg Warner (Manufacturer) By R V Palmer

Certificate of Authorization No. 1254 expires October 27, 1978

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of California and employed by Dept. of Bldg. & Safety of City of Los Angeles have inspected the equipment described in this Data Report on December 30 19 76, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

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

Date December 30 19 76

_____ (Inspector) Commissions _____ (National Board, State, Province and No.)

WBG BR 215-18536A

Printed in U.S.A. (6/72)

This form (E17) is obtainable from the ASME, 345 E. 47th St., New York, N.Y. 10017

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PLAN No. 2-1463 00014

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

As Required by the Provisions of the ASME Code Rules

Philip Smith 6/18/97

1. Manufactured by Nuclear Valve Division of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409 Order No. 47713/04180
(Name & Address of Manufacturer)

2. Manufactured for Bovee & Crail/G.E.R.I. P.O. Box 1040, Richland, Washington 99352 Order No. 215-3261Q
(Name and Address)

3. Owner WPPSS Hanford #2 Jobsite

4. Location of Plant Richland, Washington 99352

5. Pump or Valve Identification NVD Part Number 76700-1, 3/4 Inch Gate Valve, 1500#, CS

Serial Numbers 16997 thru 17003, 17005 thru 17019 and 17021 (23 Valves)
(Brief description of service for which equipment was designed)

(a) Drawing No. 76700-1 Prepared by Nuclear Valve Division of Borg Warner

(b) National Board No. N/A

6. Design Conditions 3600 (Pressure) psi 100 (Temperature) °F

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

Edition 1971, Addenda Date Winter '73, Case No. N/A

MODIFIED NPV-1

Original NPV-1 was dated and signed on December 30, 1976

Seat replaced and weld material removed from seal weld - re-welded with Weld Material N-Code 2E17 .

Hydrostatic Tested.

REVIEWED
MAY 10 1982
BECHTEL QUALITY CONTROL
BY.

REVIEWED
APR 28 1981
BECHTEL QUALITY CONTROL
BY

WBG BR 215-18536A

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2 1 2 9 2 1 2 6 3

PLAN No 2-1466

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:** 6/18/97
**Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
**Address:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Containment Supply Purge (CSP) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1, 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 |
|---|---|---|---|---|---|---|---|
| CSP-V-800/1 | Borg Warner | 73429 | N/A | N/A | 1981 | Repaired | Yes, Code Class 1 |

**7. Description Of Work Performed:** Repaired valve CSP-V-800/1. The repair work was performed as follows:
1) Removed the disc from the valve.
2) Machined the disc seat surfaces.
3) Performed liquid penetrant (PT) examination on the valve disc machined surfaces. Liquid penetrant (PT) examination results acceptable
4) Reinstalled the valve parts.

PLAN No 2-1466

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 [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/19/97 to 6/23/97 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.

[signature] — Inspector's Signature

Commissions 7486w/7486 NIIB IS — National Board, State, and Endorsements

Date 6/23/97

PLAN No 2-1467

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:** 6/26/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Sampling Radioactive (PSR) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 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-X-77Ac | JCI | PI(1)-4S-X-77Ac | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| PSR-V-X77A/2 | Target Rock | 5 | N/A | N/A | 1986 | Replaced | Yes, Code Class 1 |
| PSR-V-X77A/2 | Target Rock | 2 | N/A | N/A | 1997 | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced existing valve PSR-V-X77A/2. The replacement work was performed as follows:
1) Removed existing valve PSR-V-X77A/2, Serial No 5, Model No 86Q-001-1.
2) Installed new replacement piping material.
3) Installed new replacement valve PSR-V-X77A/2, Serial No 2, Model No 96T-001.
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.

**NOTES -**
1) ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda for the Process Sampling Radioactive (PSR) System.
2) ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda for the new replacement valve PSR-V-X77A/2, Serial No 2.

PLAN No 2-1467

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/2, Serial No 2.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/26/97 — Date 6/26/97

### 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. 2-1467

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

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

Pg. 1 of 2

1. Manufactured and certified by Target Rock Corp.; 1966E Broadhollow Rd.; Farmingdale, 1173
(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 | | | | |

PSR-V-X77A/2, S/N 2

* 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 2-1468

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:** 6/26/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** North Power Plant Loop, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** Process Sampling Radioactive (PSR) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: N-71*
   (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-X-77Ac | JCI | PI(1)-4S-X-77Ac | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |

7. **Description Of Work Performed:** Modified support associated with valve PSR-V-X77A/2. 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.

**NOTES -**

1) ASME Section III, Code Class NF(1), 1974 Edition with Winter 1975 Addenda for the support work.
2) * Code Case N-71 for A-500 Gr B tube steel.

PLAN No 2-1468

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By

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

Date 6/26/97 Date 6/26/97

### 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 Commissions _____

Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN No 2-1470

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:** 6/16/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Containment 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 stud and nuts for the bolted piping flanged joint for flex hose CIA-FLX-1A. The replacement work was performed as follows:
   1) Installed one (1) new stud for the bolted piping flanged joint.
   2) Installed two (2) new nuts for the bolted piping flanged joint.
   3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the bolted piping flanged joint. No evidence of leakage during the pressure test.

PLAN No 2-1470

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: 185 Psig — Test Temperature: 96° F

Component Design Pressure: 200 Psig — Temperature: 340° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/19/97 — Date 6/20/97

### 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 Washington and employed by Arkwright Mutual Insurance Company of Waltham, Massachusetts have inspected the components described in this Owner's Report during the period 5/30/97 to 6/23/97 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.

[signature] — Inspector's Signature

Commissions 7486 W/7486 WI58 IS — National Board, State, and Endorsements

Date 6/23/97

PLAN No 2-1471

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:** 6/24/97
   **Address:** 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:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Residual Heat Removal (RHR) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 2, 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 |
|---|---|---|---|---|---|---|---|
| RHR-RV-25C | Lonergan | 509258-75-1 | N/A | N/A | 1982 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced parts for relief valve RHR-RV-25C. The replacement work was performed as follows:
   1) Removed existing disc from the relief valve.
   2) Installed new replacement disc in the relief valve.
   3) Removed existing nozzle from the relief valve.
   4) Installed new replacement nozzle in the relief valve.

PLAN No 2-1471

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/25/97 — Date 6/25/97

### 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 5/19/97 to 6/26/97 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.

[signature] — Inspector's Signature

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

Date 6/26/97

PLAN No 2-1472

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:** 7/05/97
**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:** Containment Supply Purge (CSP) System
5. (a) **Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) **Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
6. **Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| CSP(1)-1A | WPPSS | CSP(1)-1A-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Installed weir plate (dam) adjacent to valve CSP-V-2. The work was performed as follows:
   1) Installed weir plate.
   2) Made required weld.
   3) Performed visual examination on the final weld. Visual examination results acceptable.

PLAN No 2-1472

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/5/97 — Date 7/15/97

### 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 5-30-97 to 7/16/97 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.

[signature] — Inspector's Signature

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

Date 7-16-97

PLAN No 2-1473

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:** 7/05/97
**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:** 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(5)-2B | WPPSS | CIA(5)-2B-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced U bolt for support CIA-4132-14. The replacement work was performed as follows:
   1) Installed new replacement U bolt and associated nuts.

**NOTES -**

1) ASME Section III, Code Class NF(2) for the support material.

PLAN No 2-1473

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [illegible] — Supervisor, Materials And Welding

Date 7/5/97 — Date 7/15/97

### 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 6-9-97 to 7-16-97 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.

[illegible] — Inspector's Signature

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

Date 7-16-97

PLAN No 2-1474

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:** 6/21/97
**Sheet:** 1 of 1
**Unit:** WNP-2

1. **Owner:** Washington Public Power Supply System (WPPSS)
   **Address:** 3000 George Washington Way, Richland, Washington, 99352
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   **Address:** Hanford Reservation, Benton County, Washington
3. (a) **Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   (b) **Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   (c) **Type Code Symbol Stamp:** Not Applicable
   (d) **Certificate Of Authorization No.:** Not Applicable
   (e) **Expiration Date:** Not Applicable
4. **Identification Of System:** 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 |
|---|---|---|---|---|---|---|---|
| DMA-CC-31* | CVI Corporation | 03-A081 | 245 | N/A | 1975 | Replacement | Yes, Code Class 3 |

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

Lower Cooling Coil Inlet Nozzle For DMA-CC-31*, Serial No 03-A081, National Board No 245

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 DMA-AH-31/2. The Code Data Report is for cooling coil DMA-CC-31/2. Cooling coil DMA-CC-31 consists of two (2) cooling coils as follows:

DMA-CC-31/1, Upper Cooling Coil, Serial No 03-A080, National Board No 283
DMA-CC-31/2, Lower Cooling Coil, Serial No 03-A081, National Board No 245

PLAN No 2-1474

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: 55 Psig — Test Temperature: 65° 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 [signature] — Supervisor, Materials And Welding

Date 6/21/97 — Date 6/23/97

### 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 5/29/97 to 7/1/97 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] — Inspector's Signature

Commissions 7486W/7486 NI-18 IS — National Board, State, and Endorsements

Date 7/1/97

PLAN No 2-1478

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:** 6/30/97
**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 (Building) Exhaust Air (REA) 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(1)-ST-(IR-71)-12 | JCI | PI(1)-ST-(IR-71)-12 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

7. **Description Of Work Performed:** Replaced piping material associated with relief valve REA-RV-1. The replacement work was performed as follows:
   1) Removed existing piping material such as pipe and flange.
   2) Installed new replacement piping material such as such as pipe and flange.
   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 for socket weld XI-2 and unacceptable for socket weld XI-1.
   6) Removed unacceptable indication for socket weld XI-1 by surface prepping (filing).
   7) Performed visual examination on the final socket weld XI-1. Visual examination results acceptable.
   8) Performed liquid penetrant (PT) examination on the final socket weld XI-1. Liquid penetrant (PT) examination results acceptable for socket weld XI-1.

PLAN No 2-1478

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 6/30/97 — Date 6/30/97

### 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 2-1479

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:** 6/19/97
   **Address:** 3000 George Washington Way, Richland, Washington, 99352 **Sheet:** 1 of 1
2. **Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) **Unit:** WNP-2
   **Address:** Hanford Reservation, Benton County, Washington
3. **(a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
   **(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
   **(c) Type Code Symbol Stamp:** Not Applicable
   **(d) Certificate Of Authorization No.:** Not Applicable
   **(e) Expiration Date:** Not Applicable
4. **Identification Of System:** Reactor Water Cleanup (RWCU) System
5. **(a) Applicable Construction Code:** ASME Section III, Code Class 3, 1971 Edition with Winter 1971 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-HX-1C | General Electric | 223397 | 54361 | N/A | 1972 | Replacement | Yes, Code Class 3 |

7. **Description Of Work Performed:** Installed new fastener material for RWCU-RV-1 inlet bolted flanged joint. The replacement work was performed as follows:
   1) Installed one (1) new stud.
   2) Installed two (2) new nuts.

PLAN No 2-1479

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig Test Temperature: ° F

Component Design Pressure: Psig Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh Signed By

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

Date 6/19/97 Date 6/20/97

### 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 Commissions _____

Inspector's Signature National Board, State, and Endorsements

Date _____

PLAN No 2-1480

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS) **Date:** 7/05/97
**Address:** 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:** Hanford Reservation, Benton County, Washington
**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), North Power Plant Loop, Richland, WA, 99352.
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Process Instrumentation (PI) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| PI(1)-4S-X-84b | JCI | PI(1)-4S-X-84b | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| PI-VX-269 | Target Rock | 18 | N/A | N/A | 1991 | Replaced | Yes, Code Class 2 |
| PI-VX-269 | Target Rock | 19 | N/A | N/A | 1992 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Replaced existing valve PI-VX-269. The replacement work was performed as follows:
1) Removed existing valve PI-VX-269, Serial No 18.
2) Installed new replacement valve PI-VX-269, Serial No 19.
3) Made required socket welds.
4) Performed visual examination on the final socket welds. Visual examination results acceptable.
5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

**NOTES -**
1) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the Process Instrumentation (PI) System.
2) ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda for the new replacement valve PI-VX-269, Serial No 19.

PLAN No 2-1480

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-VX-269, Serial No 19.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/5/97 — Date 7/15/97

### 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. 2-1480

Rudolph Smith 7/3/97

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

1. Manufactured and certified by Target Rock Corp.; 1966E Broadhollow Rd; E. Farmingdale, NY 11735
(name and address of N Certificate Holder)
2. Manufactured for Washington Public Power Supply System; Richland, WA 99352
(name and address of Purchaser or Owner)
3. Location of installation WNP-2; Richland, WA 99352
(name and address)
4. Model No., Series No., or Type 79TT-001 Drawing 91Z-527-001 Rev. C CRN N/A
5. ASME Code Section III: 1974 (Edition) W 1975 (Addenda date) 2 (Class) N/A (Code Case no.)
6. Pump or valve Valve Nominal inlet size 1 (in.) Outlet size 1 (in.)
7. Material: Body SA-182 F316L Bonnet SA-479 316 Disk SA-479 316 Bolting SA-479 316
Indicator Tube

| (a) Cert. Holder's Serial No. | (b) Nat'l Board No. | (c) Body Serial No. | (d) Bonnet Serial No. | (e) Disk Serial No. | Indicator Tube Serial No. |
|---|---|---|---|---|---|
| 19 | N/A | 4398 | 3778 | 897 | 4090 |
| N/A | N/A | N/A | N/A | N/A | N/A |

PI-VX-269, S/N 19

*Supplemental information in the 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

(6/85) This form (E00037) may be obtained from the Order Dept., ASME, 345 E 47th St., New York, N.Y. 10017

TAB 2

FORM NPV-1 (back)

Mfr. Serial No. N/A

8. Remarks

9. Design conditions 45 (pressure) psi 340 (temperature) °F or valve pressure class N/A (1)

10. Cold working pressure 1545 psi at 100°F

11. Hydrostatic test 2345 psi Temp. Ambient °F Disk differential test pressure N/A psi

## CERTIFICATION OF DESIGN

Design Specification certified by Stanley Fox Prof. Eng. state WA Reg. No. 16168

Design Report certified by N/A Prof. Eng. state N/A Reg. No. N/A

## CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. 1947 Expires 12-12-92

Date 3/26/92 Name Target Rock Corporation (N Certificate Holder) Signed E. Bajada, Jr. Director

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by Commercial Union Ins. Co. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 3/26 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 3/26 19 92

William A. Roland (Inspector)

Commissions N. Y. STATE COMMISSION NO. 2288 ALSO COMMISSIONED IN PENN., OHIO & CONN. (Nat'l Bd., (incl. endorsements) State, Prov. and No.)

(1) For manually operated valves only.

WO No TG 9806
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

**1. Owner:** Washington Public Power Supply System (WPPSS)
**Address:** 3000 George Washington Way, Richland, Washington, 99352
**2. Plant:** Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
**Address:** Hanford Reservation, Benton County, Washington

**Date:** 8/23/96
**Sheet:** 1 of 1
**Unit:** WNP-2

**3. (a) Work Performed By:** Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA, 99352
**(b) Repair Organization P.O. No, Job No, etc.:** Washington Public Power Supply System (WPPSS)
**(c) Type Code Symbol Stamp:** Not Applicable
**(d) Certificate Of Authorization No.:** Not Applicable
**(e) Expiration Date:** Not Applicable
**4. Identification Of System:** Hydraulic (HY) System
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 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 |
|---|---|---|---|---|---|---|---|
| HY(1)-6S-A | WPPSS | HY(1)-6S-A-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| HY(1)-6S-B | WPPSS | HY(1)-6S-B-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |

**7. Description Of Work Performed:** Deleted Hydraulic (HY) process piping lines by removing the piping material and associated valves and supports. The work was performed in accordance with BDC No 94-0057-0A and WO No TG 9806. The Containment Vessel Penetrations X76b, X76c, X76e, X76f, X77b, X77c, X77e and X77f pertaining to the deleted Hydraulic (HY) process piping lines were spared in place by installing cover plates (plugs). The cover plates (plugs) were installed by welding for Containment Vessel Penetrations X76b, X76c, X76e and X76f in accordance with ASME Section XI Plan No 2-1232 and for Containment Vessel Penetrations X77b, X77c, X77e and X77f in accordance with ASME Section XI Plan No 2-1233

**NOTES -**

1) The ASME Section III, Code Class 2 jurisdictional boundary for Hydraulic (HY) process piping lines for Code Systems HY(1)-6S-A-P1 and HY(1)-6S-B-P1 is as shown on Flow Diagram M-530-1

**REVISION -**

1) * Revised on 7/05/97 to correct Code Edition of ASME Section XI from 1980 Edition with no Addenda to 1989 Edition with no Addenda.

WO No TG,9806
REVISED

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/5/97 — Date 7/15/97

### 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 _____

WO No DBM 405

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:** 7/01/97
**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:** 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(1)-4A | WPPSS | MS(1)-4A-P3 | N/A | N/A | 1983 | Replacement (REMOVED) | Yes, Code Class 2 |

7. **Description Of Work Performed:** Deleted (removed) snubber from support MS-2619-13. The work was performed as follows:
   1) Removed existing snubber with Serial No 625.

WO No DBM 405

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/2/97 — Date 7/2/97

### 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 4-1-97 to 7/8/97 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.

[signature] — Inspector's Signature

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

Date 7/8/97

WO No ~~DDK~~ 101
DKK

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:** 7/01/97
**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:** 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(9)-1 | WPPSS | RHR(9)-1-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| RHR-20 Snubber | Pacific | 413 | N/A | PSA-1/2 | N/A | Replaced | No, Code Class NF(2) |
| RHR-20 Snubber | Pacific | 2488 | N/A | PSA-1/2 | N/A | Replacement | No, Code Class NF(1) |

7. **Description Of Work Performed:** Replaced snubber for support RHR-20. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 413.
   2) Installed replacement snubber with Serial No 2488.
   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) Replacement snubber ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application.

WO No ~~DDK~~ 101
DKK

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/2/97 — Date 7/2/97

### 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 4-1-97 to 7/8/97 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.

[signature] — Inspector's Signature

Commissions 7486/7486 VFSB ES — National Board, State, and Endorsements

Date 7/8/97

WO No ~~DDK~~ 101
DKK

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:** 7/01/97
**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:** 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 |
|---|---|---|---|---|---|---|---|
| MS(1)-4B | WPPSS | MS(1)-4B-P3 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| MS-145 Snubber | Pacific | 14556 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-145 Snubber | Pacific | 9897 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |

7. **Description Of Work Performed:** Replaced snubber for support MS-145. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 14556.
   2) Installed replacement snubber with Serial No 9897 previously removed from support MSRV-3C-7.
   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) Replacement snubber ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application.

WO No ~~BDK~~ 101
DKK

WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

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

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh — Kuldip Singh - Program Lead Engineer (PLE)
Signed By [signature] — Supervisor, Materials And Welding
Date 7/2/97 — Date 7/2/97

### 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 4-1-97 to 7/8/97 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.

[signature] — Inspector's Signature
Commissions 7486W/7486 WIS B IS — National Board, State, and Endorsements

Date 7/8/97

WO No ~~DDK~~ 101
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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:** 7/01/97
**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:** Standby Liquid Control (SLC) 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 |
|---|---|---|---|---|---|---|---|
| SLC(2)-4S | WPPSS | SLC(2)-4S-P2 | N/A | N/A | 1982 | Replacement | Yes, Code Class 1 |
| SLC-4475-21 Snubber | Pacific | 366 | N/A | PSA-1 | N/A | Replaced | No, Code Class NF(1) |
| SLC-4475-21 Snubber | Pacific | 223 | N/A | PSA-1 | N/A | Replacement | No, Code Class NF(1) |

7. **Description Of Work Performed:** Replaced snubber for support SLC-4475-21. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 366.
   2) Installed replacement snubber with Serial No 223 previously removed from support FDR-902N.
   3) Installed replacement forward bracket assembly previously removed from support FDR-902N.
   4) Performed operability test on the replacement snubber. Operability test acceptable.
   5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

WO No ~~DDK~~ 101
DKK

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 7/2/97

Signed By
Supervisor, Materials And Welding
Date 7/2/97

### 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 4-1-97 to 7-8-97 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 7486W/7486 NIS8 IS
National Board, State, and Endorsements

Date 7/8/97

WO No ~~DDK~~ 101
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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:** 7/01/97
**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 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-1549-62 Snubber | Pacific | 28437 | N/A | PSA-1/4 | N/A | Replaced | No, Code Class NF(1) |
| RRC-1549-62 Snubber | Pacific | 28430 | N/A | PSA-1/4 | N/A | Replacement | No, Code Class NF(1) |

7. **Description Of Work Performed:** Replaced snubber for support RRC-1549-62. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 28437.
   2) Installed replacement snubber with Serial No 28430 previously removed from support HY-4236-110.
   3) Installed replacement forward bracket assembly previously removed from support HY-4236-110.
   4) Performed operability test on the replacement snubber. Operability test acceptable.
   5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

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WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

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

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

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

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

Signed By
Supervisor, Materials And Welding

Date 7/2/97

Date 7/2/97

### 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 4/1/97 to 7/8/97 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 7486W/7486 NISD-IS
National Board, State, and Endorsements

Date 7/8/97

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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:** 7/01/97
**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:** 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(9)-4 | WPPSS | MS(9)-4-P1 | N/A | N/A | 1983 | Replacement | Yes, Code Class 1 |
| MS-1368-12 Snubber | Pacific | 2537 | N/A | PSA-1/2 | N/A | Replaced | No, Code Class NF(1) |
| MS-1368-12 Snubber | Pacific | 4013 | N/A | PSA-1/2 | N/A | Replacement | No, Code Class NF(1) |

7. **Description Of Work Performed:** Replaced snubber for support MS-1368-12. The replacement work was performed as follows:
   1) Removed existing snubber with Serial No 2537.
   2) Installed replacement snubber with Serial No 4013 previously removed from support CEP-905S.
   3) Installed replacement forward bracket assembly previously removed from support CEP-905S.
   4) Performed operability test on the replacement snubber. Operability test acceptable.
   5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/2/97 — Date 7/2/97

### 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 4/1/97 to 7/8/97 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.

[signature] — Inspector's Signature

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

Date 7/8/97

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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:** 7/02/97
**Sheet:** 1 of 2
**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 |
|---|---|---|---|---|---|---|---|
| MS(1)-4C | WPPSS | MS(1)-4C-P2 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| MS-27 Snubber-T | Pacific | 124 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-27 Snubber-T | Pacific | 681 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-27 Snubber-B | Pacific | 121 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-27 Snubber-B | Pacific | 714 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-38 Snubber-T | Pacific | 117 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-38 Snubber-T | Pacific | 9947 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |

7. **Description Of Work Performed:** Replaced snubbers for supports. The replacement work was performed as follows:

<u>Support MS-27 - Top</u>
1) Removed existing snubber with Serial No 124.
2) Installed replacement snubber with Serial No 681 previously removed from support MSRV-1C-7.
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.

<u>Support MS-27 - Bottom</u>
1) Removed existing snubber with Serial No 121.
2) Installed replacement snubber with Serial No 714 previously removed from support MSRV-4C-7.
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.

<u>Support MS-38 - Top</u>
1) Removed existing snubber with Serial No 117.
2) Installed replacement snubber with Serial No 9947 previously removed from support MSRV-2C-6.
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.

*Continued On Sheet 2 of 2*

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WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: °F

Component Design Pressure: Psig — Temperature: °F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/2/97 — Date 7/2/97

### 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 4/1/97 to 4/8/97 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.

[signature] — Inspector's Signature

Commissions 7486W/7486 WISB ES — National Board, State, and Endorsements

Date 7/8/97

WO No ~~BDK~~ 101
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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:** 7/02/97
**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:** 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 |
|---|---|---|---|---|---|---|---|
| MS(1)-4A | WPPSS | MS(1)-4A-P4 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| MS-96 Snubber-T | Pacific | 772 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-96 Snubber-T | Pacific | 685 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-96 Snubber-B | Pacific | 286 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-96 Snubber-B | Pacific | 116 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-114 Snubber | Pacific | 285 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-114 Snubber | Pacific | 9921 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |

7. **Description Of Work Performed:** Replaced snubbers for supports. The replacement work was performed as follows:

<u>Support MS-96 - Top</u>
1) Removed existing snubber with Serial No 772.
2) Installed replacement snubber with Serial No 685 previously removed from support MSRV-2C-1.
3) Installed replacement pin.
4) Performed operability test on the replacement snubber. Operability test acceptable.
5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

<u>Support MS-96 - Bottom</u>
1) Removed existing snubber with Serial No 286.
2) Installed replacement snubber with Serial No 116 previously removed from support MSRV-4C-6.
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.

<u>Support MS-114 - South</u>
1) Removed existing snubber with Serial No 285.
2) Installed replacement snubber with Serial No 9921 previously removed from support MSRV-2C-5.
3) Installed replacement pin.
4) Performed operability test on the replacement snubber. Operability test acceptable.
5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

**NOTES -**
1) Replacement snubbers ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application.
2) T - Top
3) B - Bottom

WO No ~~BDK~~ 101
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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

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

Signed By [signature] — Supervisor, Materials And Welding

Date 7/2/97 — Date 7/2/97

### 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 4/1/97 to 7/8/97 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.

[signature] — Inspector's Signature

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

Date 7/8/97

WO No ~~DBK~~ 101
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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:** 7/02/97
**Sheet:** 2 of 2
**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 |
|---|---|---|---|---|---|---|---|
| MS-1002N Snubber-N | Pacific | 9900 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-1002N Snubber-N | Pacific | 9908 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-1002N Snubber-S | Pacific | 9960 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-1002N Snubber-S | Pacific | 9946 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |

**Continuation From Sheet 1 of 2**

7. **Description Of Work Performed:** Replaced snubbers for supports. The replacement work was performed as follows:

<u>Support MS-1002N - North</u>
1) Removed existing snubber with Serial No 9900.
2) Installed replacement snubber with Serial No 9908 previously removed from support MSRV-1C-5.
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.

<u>Support MS-1002N - South</u>
1) Removed existing snubber with Serial No 9960.
2) Installed replacement snubber with Serial No 9946 previously removed from support MSRV-4C-5.
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) Replacement snubbers ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application.
2) T - Top
3) B - Bottom
4) N - North
5) S - South

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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:** 7/02/97
**Sheet:** 1 of 4
**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 |
|---|---|---|---|---|---|---|---|
| MS(1)-4B | WPPSS | MS(1)-4B-P2 | N/A | N/A | 1983 | Replacement | Yes, Code Class 2 |
| MS-162 Snubber-T | Pacific | 325 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-162 Snubber-T | Pacific | 9903 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-148 Snubber | Pacific | 292 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-148 Snubber | Pacific | 9954 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-177 Snubber-S | Pacific | 299 | N/A | PSA-3 | N/A | Replaced | No, Code Class NF(2) |
| MS-177 Snubber-S | Pacific | 224 | N/A | PSA-3 | N/A | Replacement | No, Code Class NF(1) |
| MS-177 Snubber-N | Pacific | 1071 | N/A | PSA-3 | N/A | Replaced | No, Code Class NF(2) |
| MS-177 Snubber-N | Pacific | 2362 | N/A | PSA-3 | N/A | Replacement | No, Code Class NF(1) |

7. **Description Of Work Performed:** Replaced snubbers for supports. The replacement work was performed as follows:

<u>Support MS-162 - Top</u>
1) Removed existing snubber with Serial No 325.
2) Installed replacement snubber with Serial No 9903 previously removed from support MSRV-5C-5.
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.

<u>Support MS-148</u>
1) Removed existing snubber with Serial No 292.
2) Installed replacement snubber with Serial No 9954 previously removed from support MSRV-2C-9.
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.

<u>Support MS-177 - South</u>
1) Removed existing snubber with Serial No 299.
2) Installed replacement snubber with Serial No 224 previously removed from support RHR-5B-39.
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.

<u>Support MS-177 - North</u>
1) Removed existing snubber with Serial No 1071.
2) Installed replacement snubber with Serial No 2362 previously removed from support RHR-5B-39.
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.

*Continued On Sheet 2 of 4*

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WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

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

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

Test Pressure: Psig — Test Temperature: ° F

Component Design Pressure: Psig — Temperature: ° F

9. Remarks: None

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: Not Applicable

Certificate Of Authorization No.: Not Applicable

Expiration Date: Not Applicable

Prepared By Kuldip Singh — Signed By [signature]

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

Date 7/2/97 — Date 7/2/97

### 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 7/1/97 to 7/8/97 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.

[signature] — Commissions 7486W/7486 NIS-2 IS

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

Date 7/8/97

WO No ~~DDK~~ 101
DVK
KS

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:** 7/02/97
**Sheet:** 2 of 4
**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 |
|---|---|---|---|---|---|---|---|
| MS-996N Snubber-T | Pacific | 9961 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-996N Snubber-T | Pacific | 319 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-1996N Snubber-B | Pacific | 9955 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-996N Snubber-B | Pacific | 9926 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |

**Continuation From Sheet 1 of 4**

7. **Description Of Work Performed:** Replaced snubbers for supports. The replacement work was performed as follows:

<u>Support MS-996N - Top</u>
1) Removed existing snubber with Serial No 9961.
2) Installed replacement snubber with Serial No 319 previously removed from support MSRV-3C-6.
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.

<u>Support MS-996N - Bottom</u>
1) Removed existing snubber with Serial No 9955.
2) Installed replacement snubber with Serial No 9926 previously removed from support MSRV-2C-7.
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.

**Continued On Sheet 3 of 4**

WO No ~~DDK~~ 101
DKK

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:** 7/02/97
**Sheet:** 3 of 4
**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 |
|---|---|---|---|---|---|---|---|
| MS-167 Snubber-B | Pacific | 9950 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-167 Snubber-B | Pacific | 9963 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-167 Snubber-T | Pacific | 9895 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-167 Snubber-T | Pacific | 273 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| | Pacific | | | | | | |

**Continuation From Sheet 2 of 4**

7. **Description Of Work Performed:** Replaced snubbers for supports. The replacement work was performed as follows:

<u>Support MS-167 - Bottom</u>
1) Removed existing snubber with Serial No 9950.
2) Installed replacement snubber with Serial No 9963 previously removed from support MSRV-5C-9.
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.

<u>Support MS-167 - Top</u>
1) Removed existing snubber with Serial No 9895.
2) Installed replacement snubber with Serial No 273 previously removed from support MSRV-5C-7.
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.

**Continued On Sheet 4 of 4**

WO No ~~BDK~~ 101
DEK
LS

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:** 7/02/97
**Sheet:** 4 of 4
**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 |
|---|---|---|---|---|---|---|---|
| MS-998N Snubber-N | Pacific | 710 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-998N Snubber-N | Pacific | 712 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |
| MS-998N Snubber-S | Pacific | 718 | N/A | PSA-10 | N/A | Replaced | No, Code Class NF(2) |
| MS-998N Snubber-S | Pacific | 4871 | N/A | PSA-10 | N/A | Replacement | No, Code Class NF(1) |

**Continuation From Sheet 3 of 4**

7. **Description Of Work Performed:** Replaced snubbers for supports. The replacement work was performed as follows:

<u>Support MS-998N - North</u>
1) Removed existing snubber with Serial No 710.
2) Installed replacement snubber with Serial No 712 previously removed from support MSRV-4C-1.
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.

<u>Support MS-998N - South</u>
1) Removed existing snubber with Serial No 718.
2) Installed replacement snubber with Serial No 4871 previously removed from support MSRV-2C-3.
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) Replacement snubbers ASME Section III, Code Class NF(1) for ASME Section III, Code Class NF(2) application.
2) T - Top
3) B - Bottom
4) N - North
5) S - South

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:** 7/17/97
**Sheet:** 1 of 3
**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 Drives (CRD's)
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1. See below for Code Edition, Addenda and Code Cases
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| CRD's | General Electric | See Below | N/A | N/A | See Below | Replaced | Yes, Code Class 1 |
| CRD's | General Electric | See Below | N/A | N/A | See Below | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:** Replaced eighteen (18) Control Rod Drives (CRD's). The replacement work was performed in accordance with plant procedure PPM No 10.5.7 " Control Rod Drive Removal And Replacement Using General Electric (GE) Equipment" as follows:

1) Removed all the existing cap screws for each Control Rod Drive (CRD) bolted flanged connection for all the core locations listed below - Eight (8) cap screws for each core location.
2) Removed eighteen (18) existing Control Rod Drives (CRD's).
3) Performed VT-1 visual examination on all the new replacement cap screws. VT-1 visual examination results acceptable.
4) Installed replacement Control Rod Drives (CRD's).
5) Installed VT-1 visually examined new replacement cap screws for each Control Rod Drive (CRD) bolted flanged connection for all the core locations listed below - Eight (8) cap screws for each core location.
6) Torqued the cap screws for the Control Rod Drive (CRD) bolted flanged connections to the required torque values.
7) Performed VT-2 visual examination during pressure test on Control Rod Drive (CRD) bolted flanged connections to confirm pressure boundary integrity. Leakage was observed during pressure test and was evaluated to be acceptable.

| WO* No | Core Loc. | CRD Replaced Serial Number | Code Edition And Addenda | Year Built | CRD Replacement Serial Number | Code Edition And Addenda | Year Built | Code Case |
|---|---|---|---|---|---|---|---|---|
| 111 | 50-19 | 7299 | 1971/- | 1974 | A9420 | 1974/W75 | 1995 | Note 2 |

**NOTES -**
1) * All the Work Order (WO) numbers are prefixed with "DDG".
2) ASME Section III Code Cases for the replacement Cylinder Tube And Flange (CT&F) assemblies and Control Rod Drives (CRD's) are as listed on the attached N-2 Code Data Reports.
3) New replacement cap screws, ASME Section III, Code Class 1, SA-540 Gr B23, Class 4.

Continued On Sheet 2 of 3

WO No DDG

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

8 Tests Conducted: Hydrostatic [ ] Pneumatic [ ] Nominal Operating Pressure [*] Other [ ] None

Test Pressure: 1020 Psig — Test Temperature: 245° F

Component Design Pressure: 1250 Psig — Temperature: 575° F

9. Remarks: 1) See attached N-2 Code Data Reports for the following replacement Cylinder Tube And Flange (CT&F) assemblies and Control Rod Drives (CRD's):

| Serial No | Serial No | Serial No | Serial No | Serial No |
|---|---|---|---|---|
| A9420 | A8562 | 5491 | 7047 | A8503 |
| A8659 | A9128 | 6449 | A9447 | A9280 |
| 7200 | 6299 | 5399 | A9348 | |
| A9172 | A9159 | 5982 | A9350 | |

2) * Pressure test on the CRD bolted flanged connections - Test pressure of 1020 Psig and test temperature of 245° F recorded during ASME Section XI pressure test 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 [signature] — Supervisor, Materials And Welding

Date 7/17/97 — Date 7/17/97

### 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 4-14-97 to 7/17/97 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.

[signature] — Inspector's Signature

Commissions 7486W/7486 NISB IS — National Board, State, and Endorsements

Date 7/17/97

WO No DDG

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

## FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
## As Required By The Provisions Of The ASME Code Section XI

**1. Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/17/97
**Address:** WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 — **Sheet:** 2 of 3
**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:** Control Rod Drives (CRD's)
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1. See below for Code Edition, Addenda and Code Cases
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| CRD's | General Electric | See Below | N/A | N/A | See Below | Replaced | Yes, Code Class 1 |
| CRD's | General Electric | See Below | N/A | N/A | See Below | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:**

**Continuation From Sheet 1 of 3**

| WO* No | Core Loc. | CRD Replaced Serial Number | Code Edition And Addenda | Year Built | CRD Replacement Serial Number | Code Edition And Addenda | Year Built | Code Case |
|---|---|---|---|---|---|---|---|---|
| 112 | 54-47 | 7084 | 1971/- | 1975 | A8659 | 1974/W75 | 1988 | Note 2 |
| 113 | 06-35 | 6502 | 1971/- | 1974 | 7200 | 1974/S75 | 1975 | Note 2 |
| 114 | 14-31 | 5249 | 1971/- | 1974 | A9172 | 1974/W75 | 1992 | Note 2 |
| 115 | 38-47 | 7248 | 1971/ | 1975 | A8562 | 1974/W75 | 1988 | Note 2 |
| 116 | 42-07 | 7305 | 1971/- | 1975 | A9128 | 1974/W75 | 1993 | Note 2 |
| 117 | 50-47 | 7037 | 1971/- | 1975 | 6299 | 1971/- | 1974 | Note 2 |
| 118 | 54-19 | 6392 | 1971/- | 1975 | A9159 | 1974/W75 | 1992 | Note 2 |
| 119 | 54-23 | 6229 | 1971/- | 1975 | 5491 | 1971/- | 1974 | Note 2 |
| 120 | 54-27 | 7195 | 1971/- | 1975 | 6449 | 1971/- | 1974 | Note 2 |
| 121 | 58-31 | 6595 | 1971/- | 1975 | 5399 | 1971/- | 1974 | Note 2 |
| 122 | 06-27 | A8915 | 1974/W75 | 1991 | 5982 | 1971/- | 1974 | Note 2 |

NOTES -
1) See notes on Sheet 1 of 3

Continued On Sheet 3 of 3

WO No·DDG

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

## FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
## As Required By The Provisions Of The ASME Code Section XI

**1. Owner:** Washington Public Power Supply System (WPPSS) — **Date:** 7/17/97
**Address:** WNP-2 Plant Site, North Power Plant Loop, Richland, Washington, 99352 — **Sheet:** 3 of 3
**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:** Control Rod Drives (CRD's)
**5. (a) Applicable Construction Code:** ASME Section III, Code Class 1. See below for Code Edition, Addenda and Code Cases
**(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements:** 1989 Edition with no Addenda, Code Case: None
**6. Identification Of Components Repaired Or Replaced And Replacement Components**

| Name Of Component | Name Of Manufacturer | Manufacturer's Serial No | National Board No | Other I.D. | Year Built | Repaired, Replaced Or Replacement | ASME Code Stamped (Yes Or No) Code Class |
|---|---|---|---|---|---|---|---|
| CRD's | General Electric | See Below | N/A | N/A | See Below | Replaced | Yes, Code Class 1 |
| CRD's | General Electric | See Below | N/A | N/A | See Below | Replacement | Yes, Code Class 1 |

**7. Description Of Work Performed:**

**Continuation From Sheet 2 of 3**

| WO* No | Core Loc. | CRD Replaced Serial Number | Code Edition And Addenda | Year Built | CRD Replacement Serial Number | Code Edition And Addenda | Year Built | Code Case |
|---|---|---|---|---|---|---|---|---|
| 123 | 58-27 | 6543 | 1974/- | 1974 | 7047 | 1971/- | 1974 | Note 2 |
| 124 | 18-55 | A8460 | 1974/W75 | 1988 | A9447 | 1974/W75 | 1995 | Note 2 |
| 125 | 38-59 | A8740 | 1974/W75 | 1988 | A9348 | 1974/W75 | 1993 | Note 2 |
| 126 | 54-43 | 7327 | 1971/- | 1975 | A9350 | 1974/W75 | 1993 | Note 2 |
| 127 | 38-31 | 4970 | 1971/- | 1974 | A8503 | 1974/W75 | 1987 | Note 2 |
| 128 | 38-35 | A8745 | 1974/W75 | 1988 | A9280 | 1974/W75 | 1995 | Note 2 |

**NOTES -**

1) See notes on Sheet 1 of 3

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 5399 Nat'l Bd. No.

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi minimum.
(Brief description of service for which component was designed)

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date December 17 1974 Signed GE, BWRSD - REM (Manufacturer) By [signature]

Date of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 17 1974, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

FOR INFORMATION ONLY

Date December 17 1974

[signature] Inspector's Signature Commissions NC 723, PA. PC 1766, Ohio National Board, State, Province and No.

THIM No. [illegible]

[illegible] complete [illegible] of pressure vessels [illegible] heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| Location (Top, bottom, ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | |
| (b) | | | | | | | | |

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch.)

7. Jacket Closure: _____
(Describe as edges and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch.)

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(str. or U)

Items 11–14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (a) Top, bottom, ends | | | | | | | | |
| (b) Channel | | | | | | | | |

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure[2] _____ psi at _____ °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

[1] Stress Relieved.

# FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 5491 Nat'l Bd. No.

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi minimum.
(Brief description of service for which component was designed)

FOR INFORMATION ONLY

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date December 31 19 74 Signed GE, BWRSD - REM (Manufacturer) By [signature]

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 31 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date December 31 19 74

[signature] Inspector's Signature

Commissions NC 723, PA. NC 1766, Ohio
National Board, State, Province and No.

7X00367481

# FORM N-2 (back)

Items 4–8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material ____ (Kind & Spec. No.) ____ T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

   Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

| | Location (Top, bottom, ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used ____ (Material, Spec. No., T.S., Size, Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure[2] 1250 psi at 575 °F

   Drop Weight ____
   Charpy Impact ____ ft-lb at temp. of ____ °F

Items 9 and 10 to be completed for tube sections

FOR INSPECTION ONLY

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)

   Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ inches or gage Number ____ Type ____ (Str. or U)

Items 11–14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

    Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

14. Design pressure[2] ____ psi at ____ °F

    Drop Weight ____
    Charpy Impact ____ ft-lb at temp. of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
    Handholes, No. ____ Size ____ Location ____
    Threaded, No. ____ Size ____ Location ____

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18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with coincident temperature when applicable.

# FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

(a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 5982 Nat'l Bd. No.

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi minimum.
(Brief description of service for which component was designed)

FOR INFORMATION ONLY

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date November 11 19 74 Signed GE, BWRSD - REM By
(Manufacturer)

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on November 11 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date November 11 19 74

E R Shenill
Inspector's Signature

Commissions NC 723, PA. NC 1766, Ohio
National Board, State, Province and No.

ZX00367341

FORM N-2 (back)

Items 1–8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ (Kind & Spec. No.) T.S. _____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| Location (Top, bottom, ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | |
| (b) | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S., Size, Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight _____
Charpy Impact: _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

FOR INFORMATION ONLY

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. ____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11–14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ (Kind & Spec. No.) T.S. _____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (a) Top, bottom, ends | | | | | | | | |
| (b) Channel | | | | | | | | |

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

14. Design pressure[2] _____ psi at _____ °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size* | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with coincident temperature when applicable.

# FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 6299 Nat'l Bd. No.

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi minimum.
(Brief description of service for which component was designed)

FOR INFORMATION ONLY

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date October 28 19 74 Signed GE, BWRSD - REM By [signature]
(Manufacturer)

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on October 28 19 74, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date October 28 19 74

[signature] Commissions NC 723, PA. EC 1766, Ohio
Inspector's Signature National Board, State, Province and No.

ZX00367228

# FORM N-2 (back)

Items 4–8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location (Top, bottom, ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S., Size, Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, If bolted, describe or sketch)

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. ____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11–14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

14. Design pressure[2] _____ psi at _____ °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

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18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with coincident temperature when applicable.

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 6449 Nat'l Bd. No.

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi minimum.
(Brief description of service for which component was designed)

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

July 28 19 75 Signed GE, BWRSD - REM (Manufacturer) By [signature]

Certificate of Authorization Expires June 20, 1978 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on July 28 19 75, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

July 28 19 75

FOR INFORMATION ONLY

[signature]
Inspector's Signature

Commissions NC 723, PA. NC 1766, Ohio
National Board, State, Province and No.

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FORM N-2 (back)

Items 1–8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material ____ (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 ogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure[2] 1250 psi at 575 °F Drop Weight ____ Charpy Impact ____ ft-lb at temp. of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)

Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ Inches or gage. Number ____ Type ____ (Str. or U)

Items 11–14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

| Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc. |
|---|---|---|---|---|---|---|---|---|
| (a) Top, bottom, ends | | | | | | | | |
| (b) Channel | | | | | | | | |

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

14. Design pressure[2] ____ psi at ____ °F Drop Weight ____ Charpy Impact ____ ft-lb at temp. of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material and How Applied |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |

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FOR INFORMATION ONLY

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)

# FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California.
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 7047 Nat'l Bd. No.

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1620 psi
(Brief description of service for which component was designed)
minimum.

FOR INFORMATION ONLY

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date May 27 1975 Signed GE, BWRSD - REM (Manufacturer) By [signature]

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on May 27 1975, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date May 27 1975

E. L. Sherrill
Inspector's Signature

Commissions NC 723, PA. NC 1766, Ohio
National Board, State, Province and No.

ZX00367377

FORM No. 2 (back)

Items 1 to 3 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

| Location (Top, bottom, ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | |
| (b) | | | | | | | | |

If removable, bolts used ____ (Material, Spec. No., T.S., Size, Number) Other fastening ____ (Describe or attach sketch.)

7. Jacket Closure: ____
(Describe as ogee and weld, bar, etc. If bar give dimensions, If bolted, describe or sketch)

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted.)

Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ inches or gage. Number ____ Type ____ (Str. or U)

Items 11–14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %

Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

| Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (a) Top, bottom, ends | | | | | | | | |
| (b) Channel | | | | | | | | |

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

14. Design pressure[2] ____ psi at ____ °F

Drop Weight ____
Charpy Impact ____ ft-lb
at temp. of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

[1] If Postweld Heat-Treated.

# FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of Manufacturer of part)

(b) Manufactured for General Electric Company, San Jose, California
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 7200 Nat'l Bd. No. _____

(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144 C1

(c) Applicable ASME Code: Section III, Edition 1974, Addenda date S'74, Case No. _____ Class _____

3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi minimum
(Brief description of service for which component was designed)

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date January 13, 19 75 Signed GE, BWRSD - REM (Manufacturer) By [signature]

Certificate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462

## CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd. Wilmington

Stress analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington

Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on January 8, 19 75, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date January 13, 19 75

FOR INFORMATION ONLY

[signature]
Inspector's Signature

Commissions NC 779, PA, WC 2L60, Ohio
National Board, State, Province and No.

PROJECT NAME— HANFORD 2
CUSTOMER ORDER NUMBER— 3758-014
ITEM NUMBER— 1

Items 4–8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ (Kind & Spec. No.) T.S. _____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| Location (Top, bottom, ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | |
| (b) | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S., Size, Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure[2] 1250 psi at 575 °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. ____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11–14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ (Kind & Spec. No.) T.S. _____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Conv. or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (a) Top, bottom, ends | | | | | | | | |
| (b) Channel | | | | | | | | |

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

14. Design pressure[2] _____ psi at _____ °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with coincident temperature when applicable.

1. (a) Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)

(b) Manufactured for: WNP-2.
(Name and Address of N Certificate Holder for completed nuclear compone

2. Identification-Certificate Holders's S/N of Part: A8503 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peters

(b) Description of Part Inspected: CYLINDER TUBE & FLANGE

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. 1361-2 Class

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min. ~~MWC A 7 2723~~

*Sheet 1 of 2 Quality Engr 2/3/88

We certify that the statements in this report are correct and this vessel part or appurtenan as defined in the code conforms to the rules of construction of the ASME Code Section II (The applicable Designed Specification and Stress Report are not the responsibility of the N Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsibl for furnishing a separate Design Specification and Stress Report if the appurtenance is n included in the component Design Specification and Stress Report).

DATE: 11/10, 19 87 Signed GE-NEBG-NF&CH-QA By J. Ettrudemmie
(NPT Certificate Holder)

Certificate Of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-115

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

S[illegible] analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA
DC22[illegible]253 Rev. D
Design specification certified by BJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570
DC22A6254 Rev. D.
Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. M018646

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure [illegible]spectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this [illegible]rtial Data Report on 11-10 1987, and state that to the best of my knowledge [illegible]d belief, the NPT Certificate Holder has constructed this part in accordance with the ASME [illegible]de Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, [illegible]pressed or implied, concerning the part described in the Partial Data Report. Furthermore, [illegible]ither the Inspector nor his employer shall be liable in any manner for any personal injury [illegible] property damages or a loss of any kind arising from or connected with this inspection.

11-10, 1987 J. F. Thomas NC.779-PAWC 2260-OHIO
[illegible]TE Inspector's Signature National Board, State, Province and No.

[illegible]upplemental sheets in form of lists, sketches or drawing may be used provided (1) size is [illegible]1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) [illegible]ch sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

[illegible]7.1

VERIFIED & ACCEPTED D. J. Miller 1-5-88
R.I. Inspector Date

[illegible] T.S. ____ Thickness ___ in. Allowance ___ in Dia. ___ ft. ___ in. Length ___ ft. ___
(Kind & Spec.No) (Min.ofRange Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

S/N A 8503

6. Heads: (a) Material _____ T.S. _____ (b)Material _____ T.S. _____

| Location (Top Bottom, Ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pre (conv.or co |
|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | |
| (b) | | | | | | | | |

If removable, bolts used _____ Other fastening _____
(Material, Spec.No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or shet

8. Design Pressure[2] 1250 psi at 575 °F

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °f

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l. _____ Dia. _____ Thickness ___ in. Attachment _____
(Kind of Spec. No.) (Subj.to Press.) (Welded, Bolte

Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. ___ in. Thickness ___ inches or gage. Number ___ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

11. Shell: Material ___ T.S. ___ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in Length ___ ft. ___ in.
(Kind&Spec.No.) (Min.ofRange Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b)Material _____ T.S. _____

| Location | Ticnkess | Crown Radius | Knucle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Fat Diameter | Side to Pres (Conv.or Conc |
|---|---|---|---|---|---|---|---|---|
| (a)Top, Bottom, End | | | | | | | | |
| (b)Channel | | | | | | | | |

If removable, bolts used (a) ___ (b) ___ (c) ___ Other Fastening _____
(Describe or attach sketch

Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

14. Design pressure[2] _____ psi at _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet Outlet, Drain) | Number | Dia or Size | Type | Material | Thickness | Reinforcement Material | Attache |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings:
Manholes, No. _____ Size _____ Location _____
Handles, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Shirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where &

[1] If Postweld Heat-Treated.
[2] List other internal or external pressure with conincident temperature when applicalbe.

~~MWR AS 5329~~ VS
Rudolf Engs
5/19/90

**FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES***
As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)

(b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holders's S/N of Part: #A8562 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: CYLINDER TUBE & FLANGE

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75 Case No. 1361-2 Class 1

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

DATE: 12/31, 19 88 Signed GE-NEBG-NF&CM-QA By [signature]
(NPT Certificate Holder)

Certificate Of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151

**CERTIFICATION OF DESIGN FOR APPURTENANCE**

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA
DC22A6253 Rev. 0
Design specification certified by BJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570
DC22A6254 Rev. 0.
Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. M018646

**CERTIFICATION OF SHOP INSPECTION**

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 12-31 1988, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12-31, 1988 [signature] NC 779, PA WC2160, OHIO
DATE Inspector's Signature National Board, State, Province and No.

Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS"

(10/77)

VERIFIED & ACCEPTED [signature] 1-18-89
R.I. Inspector Date

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material_____ T.S._____ Nominal Thickness___in. Corrosion Allowance___in Dia.___ft.___in. Length___ft.___in.
(Kind & Spec.No) (Min.ofRange Specified)

5. Seams: Long_____ H.T.[1]_____ R.T._____ Efficiency_____%

Girth_____ H.T.[1]_____ R.T._____ No. of Courses_____

6. Heads: (a) Material_____ T.S._____ (b)Material_____ T.S._____

| Location (Top Bottom,Ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (conv.or conc.) |
|---|---|---|---|---|---|---|---|---|
| (a)_____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| (b)_____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

If removable, bolts used_____ Other fastening_____
(Material,Spec.No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure:_____
(Describe as ogee and weld,bar,etc. If bar give dimensions, if bolts, describe or sketch)

8. Design Pressure [2] 1250 psi at 575 °F Drop Weight_____ Charpy Impact_____ ft-lb at temp. of_____ °f

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l._____ Dia._____ Thickness___in. Attachment_____
(Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)
Floating. Material _____ Dia._____ Thickness___in. Attachment_____

10. Tubes: Material_____ O.D.___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.ofRange Specified)

12. Seams: Long_____ H.T.[1]_____ R.T._____ Efficiency_____%
Girth_____ H.T.[1]_____ R.T._____ No. of Courses_____

13. Heads (a) Material_____ T.S._____ (b)Material_____ T.S._____

| Location (a)Top, Bottom, End | Ticnkess | Crown Radius | Knucle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Fat Diameter | Side to Press (Conv.or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (b)Channel | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

If removable, bolts used (a)_____ (b)_____ (c)_____ Other Fastening_____
(Describe or attach sketch

14. Design pressure[2]_____ psi at_____ °F Drop Weight_____, Charpy Impact_____ ft-lb at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number_____ Size_____ Location_____

16. Nozzles:

| Purpose (Inlet Outlet, Drain) | Number | Dia or Size | Type | Material | Thickness | Reinforcement Material | Attached |
|---|---|---|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

17. Inspection Openings: Manholes, No._____ Size_____ Location_____
Handles, No._____ Size_____ Location_____
Threaded, No._____ Size_____ Location_____

18. Supports: Shirt_____ Lugs_____ Legs_____ Other_____ Attached_____
(Yes or No) (Number) (Number) (Describe) (Where & How)

[1] If Postweld Heat-Treated.

[2] List other internal or external pressure with conincident temperature when applicalbe.

MWR A-75558
Rudolf Rup 5
6/17/89

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured & Certified by: GE Company, 2117 Castle Hayne Rd., Wilmington, N.C. 28402
(Name and Address of NPT Certificate Holder)

(b) Manufactured for: WNP-2, RICHLAND, Wa. 99352
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holders's S/N of Part: A8659 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: CYLINDER TUBE & FLANGE

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75 Case No. 1361-2 Class 1

3. REMARKS: Sub-assembly of Control Rod Drive for use with reactor.
(Brief description of service for which component was designed)
Hydrostatically tested at 1825 psi. min.

*Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

DATE: 5/27, 19 88 Signed GE-NEBG-NF&CM-QA By [signature]
(NPT Certificate Holder)

Certificate Of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE

Design information on file at GE COMPANY, SAN JOSE, CALIFORNIA

Stress analysis report on file at GE COMPANY, SAN JOSE, CALIFORNIA

DC22A6253 Rev. 0
Design specification certified by BJORN HAABERG Prof. Eng. State CALIF. Reg. No. 15570

DC22A6254 Rev. 0.
Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALIF. Reg. No. M018646

CERTIFICATION OF SHOP INSPECTION

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on 5/27 19 88, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

5/27, 19 88 [signature] N.C. 723, PA.WC1766, OHIO

DATE Inspector's Signature National Board, State, Province and No.

* Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8½ X 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKSs"

(10/77)

S/N A 8027
Kuldip Gupta
11/21/88

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material_____ T.S._____ Nominal Thickness___in. Corrosion Allowance___in Dia.___ft.___in. Length___ft.___in.
(Kind & Spec.No) (Min.ofRange Specified)

5. Seams: Long_____ H.T.[1]_____ R.T._____ Efficiency_____%

Girth_____ H.T.[1]_____ R.T._____ No. of Courses_____

6. Heads: (a) Material_____ T.S._____ (b)Material_____ T.S._____

| Location (Top Bottom,Ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (conv.or conc.) |
|---|---|---|---|---|---|---|---|---|
| (a)_____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| (b)_____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

If removable, bolts used_____ Other fastening_____
(Material,Spec.No., T.S. Size Number) (Describe or attach sketch)

7. Jacket Closure:_____
(Describe as ogee and weld,bar,etc. If bar give dimensions, if bolts, describe or sketch)

8. Design Pressure [2] 1250 psi at 575 °F
Drop Weight_____
Charpy Impact_____ ft-lb
at temp. of_____ °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary Mat'l._____ Dia._____ Thickness___in. Attachment_____
(Kind of Spec. No.) (Subj.to Press.) (Welded, Bolted)
Floating. Material _____ Dia._____ Thickness___in. Attachment_____

10. Tubes: Material_____ O.D.___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.ofRange Specified)

12. Seams: Long_____ H.T.[1]_____ R.T._____ Efficiency_____%
Girth_____ H.T.[1]_____ R.T._____ No. of Courses_____

13. Heads (a) Material_____ T.S._____ (b)Material_____ T.S._____

| Location (a)Top, Bottom, End | Ticnkess | Crown Radius | Knucle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Fat Diameter | Side to Press (Conv.or Conc.) |
|---|---|---|---|---|---|---|---|---|
| (b)Channel | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

If removable, bolts used (a)_____ (b)_____ (c)_____ Other Fastening_____
(Describe or attach sketch

14. Design pressure[2]_____ psi at_____ °F
Drop Weight_____
Charpy Impact_____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number_____ Size_____ Location_____

16. Nozzles:

| Purpose (Inlet Outlet, Drain) | Number | Dia or Size | Type | Material | Thickness | Reinforcement Material | Attached |
|---|---|---|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

17. Inspection Openings: Manholes, No._____ Size_____ Location_____
Handles, No._____ Size_____ Location_____
Threaded, No._____ Size_____ Location_____

18. Supports: Shirt_____ Lugs_____ Legs_____ Other_____ Attached_____
(Yes or No) (Number) (Number) (Describe) (Where & How)

[1] If Postweld Heat-Treated.

[2] List other internal or external pressure with coninicident temperature when applicalbe.

# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9128 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
( Brief description of service for which component was designed )

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).

Date: 01/28/93 Signed GE - NEBG - NF & CM - QA By
( NPT Certificate Holder ) ( QC QA Representive )

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

## Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

## Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 1/25, 1993, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

1/28, 1993 — Date
Inspector's Signature
NC 1231, Ohio, WC 3686 PA — National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

# FORM N-2 ( back )

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location ( Top Bottom, Ends ) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolte
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. ___ in. Thickness _____ Inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (W

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIF ATE HOLDERS' DATA REPORT FOR NU EAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Rudolph Smith 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9128 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1 .

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
( Brief description of service for which component was designed )

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

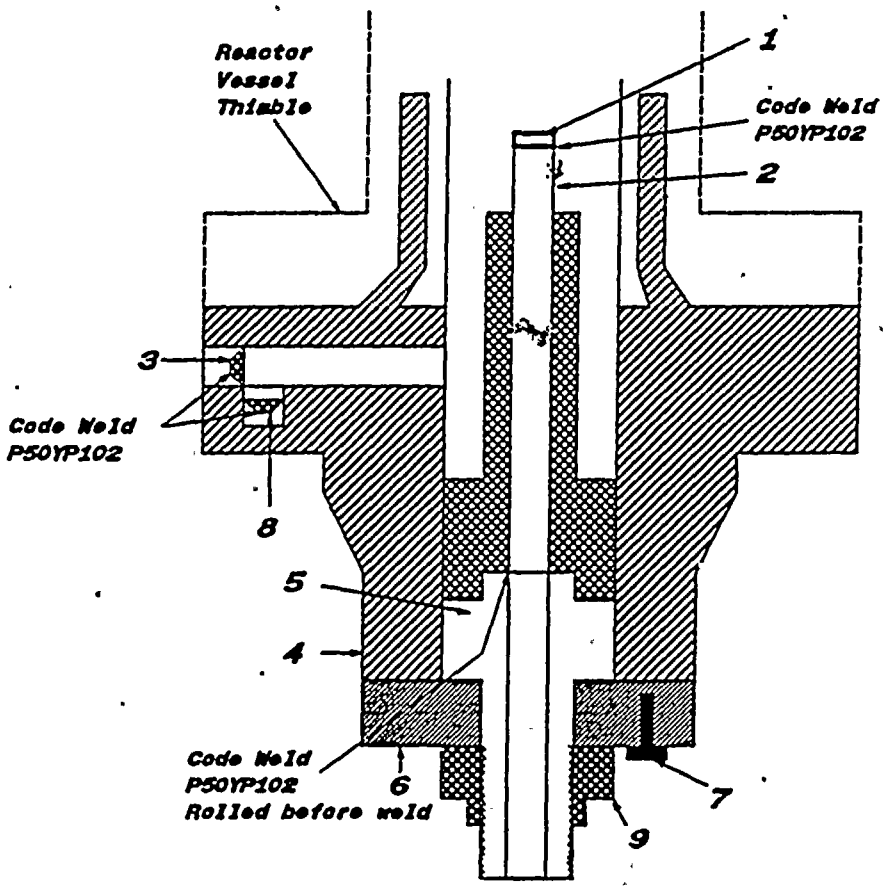
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Kulvir Singh 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9159 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
( Brief description of service for which component was designed )

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).

Date: 12/22/92 Signed GE - NEBG - NF & CM - QA By
( NPT Certificate Holder ) ( ASC QA Representive )

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

## Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

## Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/16, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12/22, 1992 Jerome P Evans NC 1231, Ohio, WC 3686 PA
Date/ Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

# FORM N-2 ( back )

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location ( Top Bottom, Ends ) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (When

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFIC E HOLDERS' DATA REPORT FOR NUCL R PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Rudolph Smith 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9159 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
( Brief description of service for which component was designed )

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

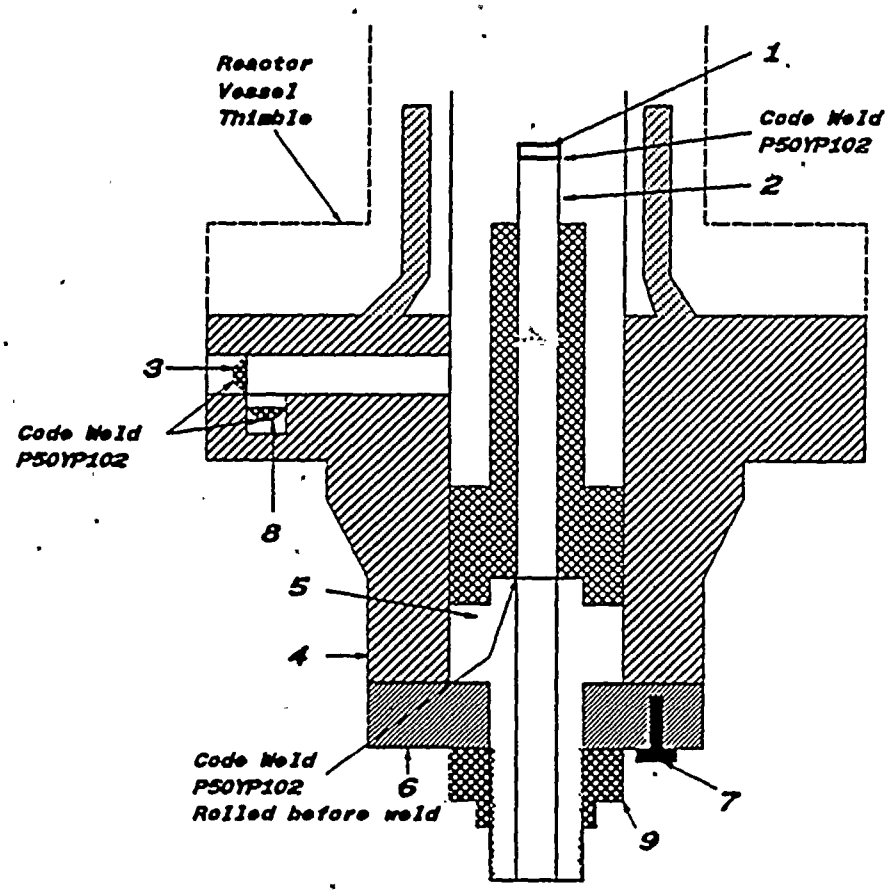
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Philip Smith
8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9172 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
( Brief description of service for which component was designed )

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).

Date: 12/22/92 Signed GE - NEBG - NF & CM - QA By
( NPT Certificate Holder ) ( QC QA Representive )

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

## Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Biorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

## Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/16, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

12/22, 1992 Jerome P Eyre NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/96)

# FORM N-2 ( back )

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location ( Top Bottom, Ends ) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] _____1250_____ psi at _____575_____ °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ Inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a)_____(b)_____(c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing ( GE NF & CM )
2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9172 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
( Brief description of service for which component was designed )



1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 ( 719E474 )
SA182 - F304
3.37" thick x 9 5/8" OD

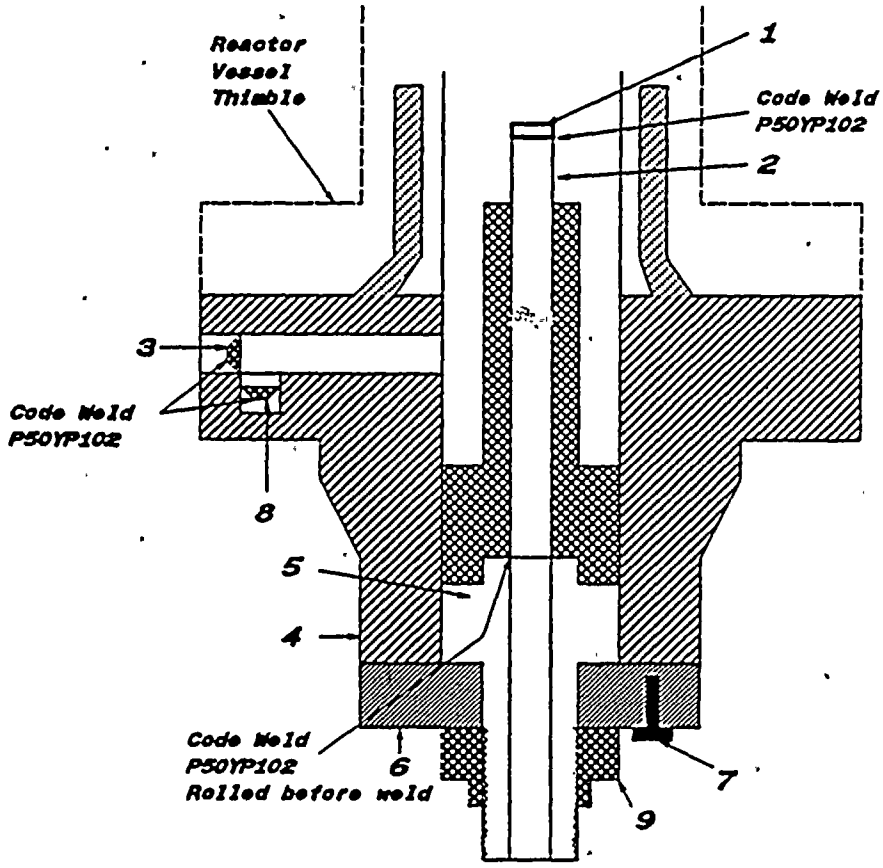
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. I

Rudolph Gurb 8/12/96

Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing ( GE NF & CM )

2117 Castle Hayne Road, Wilmington, North Carolina 28401

( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352

( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9280 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

( Brief description of service for which component was designed )

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).

Date: 06/27/95 Signed GE - NEBG - NF & CM - QA By

( NPT Certificate Holder ) ( SC QA Representive )

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N - 1151

## Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

## Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/16, 1995, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

| 6/27, 1995 | Jerome P Emerson | NC 1231, Ohio, WC 3686 PA |
|---|---|---|
| Date | Inspector's Signature | National Board, State, Province And No. |

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

# FORM N-2 ( back )

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location ( Top Bottom, Ends ) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with concident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Rudolph Swift 8/12/96

Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9280 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
( Brief description of service for which component was designed )

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

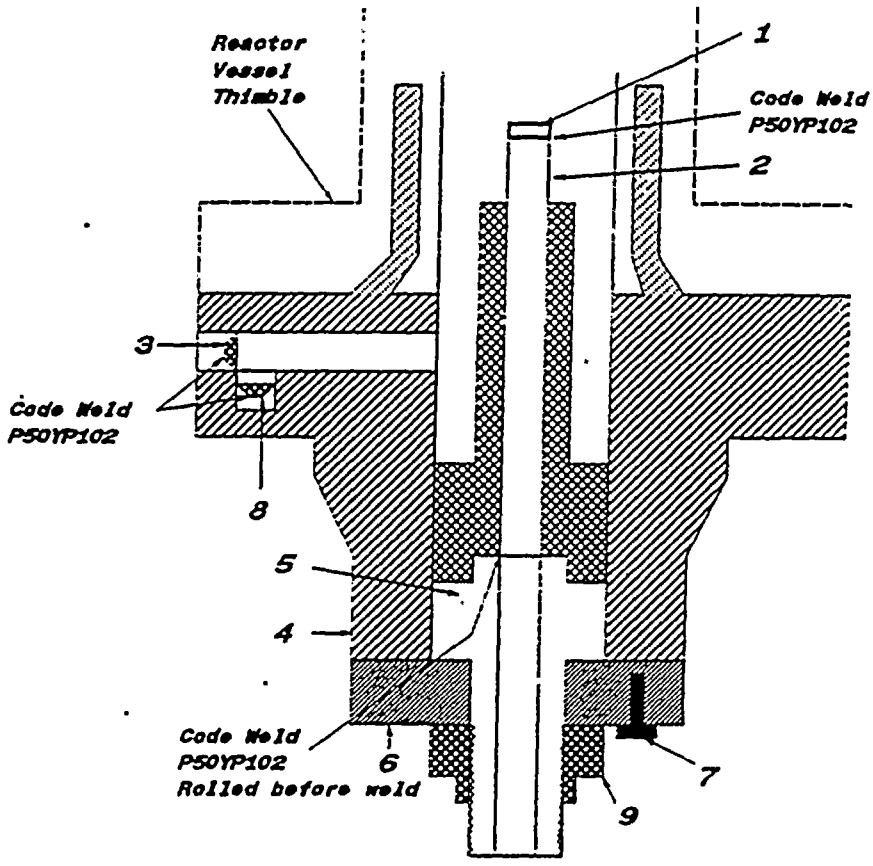
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.



# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. I

8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

   2117 Castle Hayne Road, Wilmington, North Carolina 28401

   ( Name and Address of NPT Certificate Holder )

   (b) Manufactured for : WNP 2 Richland, Washington 99352

   ( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9348 Nat'l Bd. No. N/A

   (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

   (b) Description of Part Inspected: Cylinder Tube & Flange

   (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.

   ( Brief description of service for which component was designed )

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).

Date: 01/28/93 Signed GE - NEBG - NF & CM - QA By

( NPT Certificate Holder ) ( SC QA Representive )

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

## Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev I
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

## Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 1/25, 1993, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

| 1/28, 1993 | Jerome P. Evans | NC 1231, Ohio, WC 3686 PA |
|---|---|---|
| Date | Inspector's Signature | National Board, State, Province And No. |

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

# FORM N-2 ( back )

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location ( Top Bottom, Ends ) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where a

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with concident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Philip Sup 5
8/12/96

Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9348 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1 .

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
( Brief description of service for which component was designed )



1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

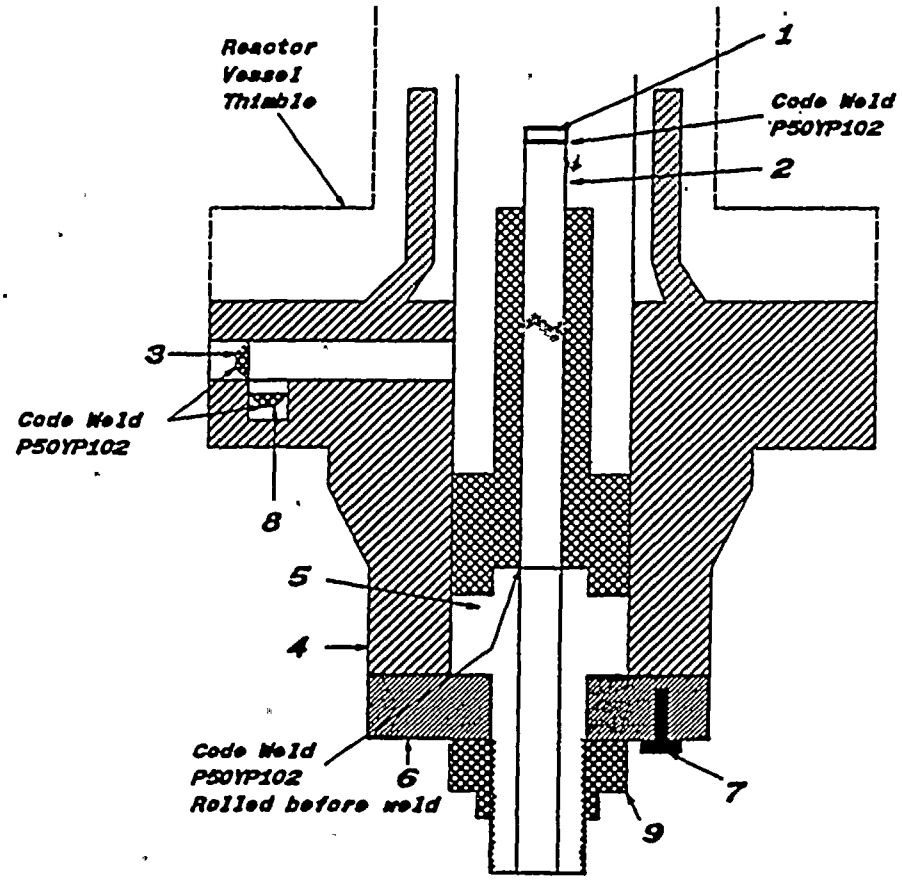
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. I

Philip Smith 5/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352

( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9350 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

( Brief description of service for which component was designed )

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).

Date: 01/28/93 Signed GE - NEBG - NF & CM - QA By [signature]

( NPT Certificate Holder ) ( SC QA Representive )

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

## Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

## Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 1/28, 1993, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

| 1/28, 1993 | Jerome P Ewers | NC 1231, Ohio, WC 3686 PA |
|---|---|---|
| Date | Inspector's Signature | National Board, State, Province And No. |

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

# FORM N-2 ( back )

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location ( Top Bottom, Ends ) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ____ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ Inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Welded)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Rudolph Smith 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing ( GE NF & CM )
2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9350 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
( Brief description of service for which component was designed )



1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 ( 719E474 )
SA182 - F304
3.37" thick x 9 5/8" OD

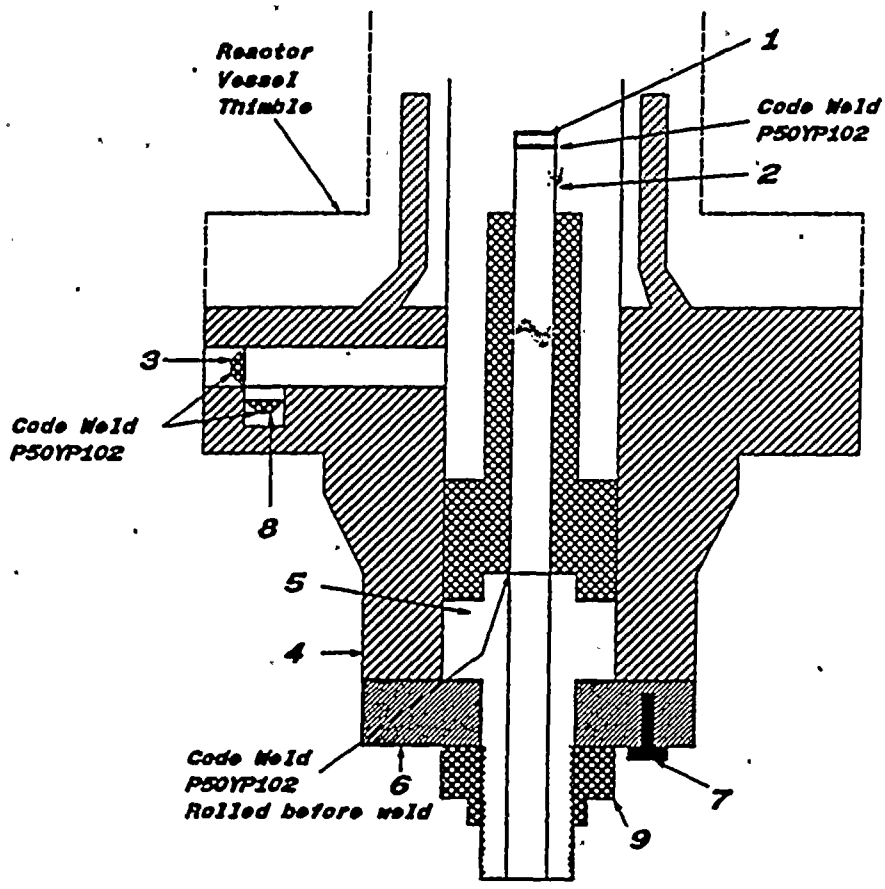
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



~~CUD No. N-1 B 3~~

# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. I

Rudolf Rueb 8/12/96

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing ( GE NF & CM )

2117 Castle Hayne Road, Wilmington, North Carolina 28401

( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352

( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9420 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

( Brief description of service for which component was designed )

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).

Date: 06/27/95 Signed GE - NEBG - NF & CM - QA By

( NPT Certificate Holder ) ( GE QA Representive )

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N - 1151

## Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

0C22A6253 Rev. 1
Design specification certified by Biorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

0C22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

## Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/16, 1995, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

6/27, 1995 Jerome P Ewers NC 1231, Ohio, WC 3686 PA

Date Inspector's Signature National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3. "REMARKS".*

(07/90)

# FORM N-2 ( back )

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location ( Top Bottom, Ends ) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with concident temperature when applicable.

~~WO NO.~~

# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. I

Rudolph Sue 5 9/12/96

Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing ( GE NF & CM )

2117 Castle Hayne Road, Wilmington, North Carolina 28401

( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352

( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9420 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

( Brief description of service for which component was designed )



1. Cap 166B9274P001
   SA182 - F316
   3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
   SA312 - TP316
   3/4" sch 40 - seamless pipe
   0.113" wall thickness
   1.065" max. dia.

3. Plug 159A1176P001
   SA182 - F304
   1/4" thick x 0.812" OD

4. Flange 919D610P001 ( 719E474 )
   SA182 - F304
   3.37" thick x 9 5/8" OD

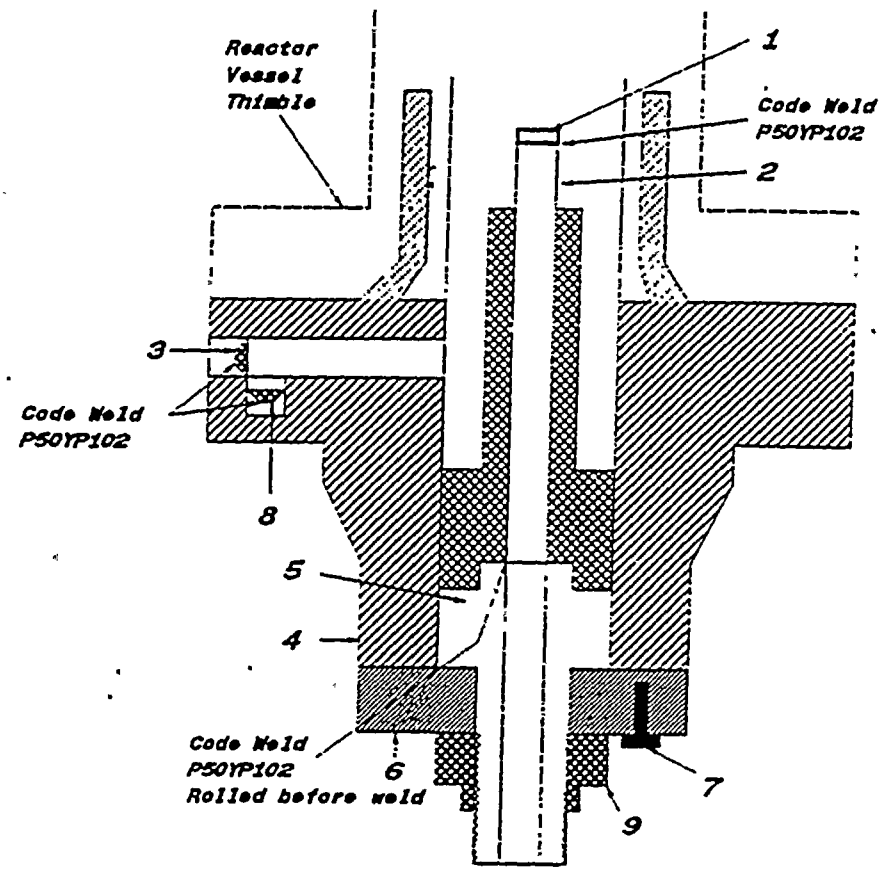
5. Head 129B3539P005
   SA182 - F304
   7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
   SA182 - F304
   1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
   SA193 - B6
   6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
   SA182 - F304
   0.38" thick x 1.307" dia.

9. Nut 114B5460P001
   XM - 19 SA479
   1.30" thick x 2.62" dia.



# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. I

Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing ( GE NF & CM )

2117 Castle Hayne Road, Wilmington, North Carolina 28401

( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352

( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9447 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.

( Brief description of service for which component was designed )

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).

Date: 06/27/95 Signed GE - NEBG - NF & CM - QA By

( NPT Certificate Holder ) ( ASC QA Representive )

Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPT N - 1151

## Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

## Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/16, 1995, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

6/27, 1995 Inspector's Signature NC 1231, Ohio, WC 3686 PA

Date National Board, State, Province And No.

*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

# FORM N-2 ( back )

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location ( Top Bottom, Ends ) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)
Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Concial Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. ( conv. or conc. ) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | | | | | | | | |
| (b) | Channel | | | | | | | | |

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)
Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PARTS AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

Kuldip Singh 8/12/96

1. (a) Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b) Manufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9447 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 18 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Cylinder Tube & Flange

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
( Brief description of service for which component was designed )



1. Cap 166B9274P001
SA182 - F316
3/8" thick x 1 1/16" OD

2. Indicator Tube 167B4908P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

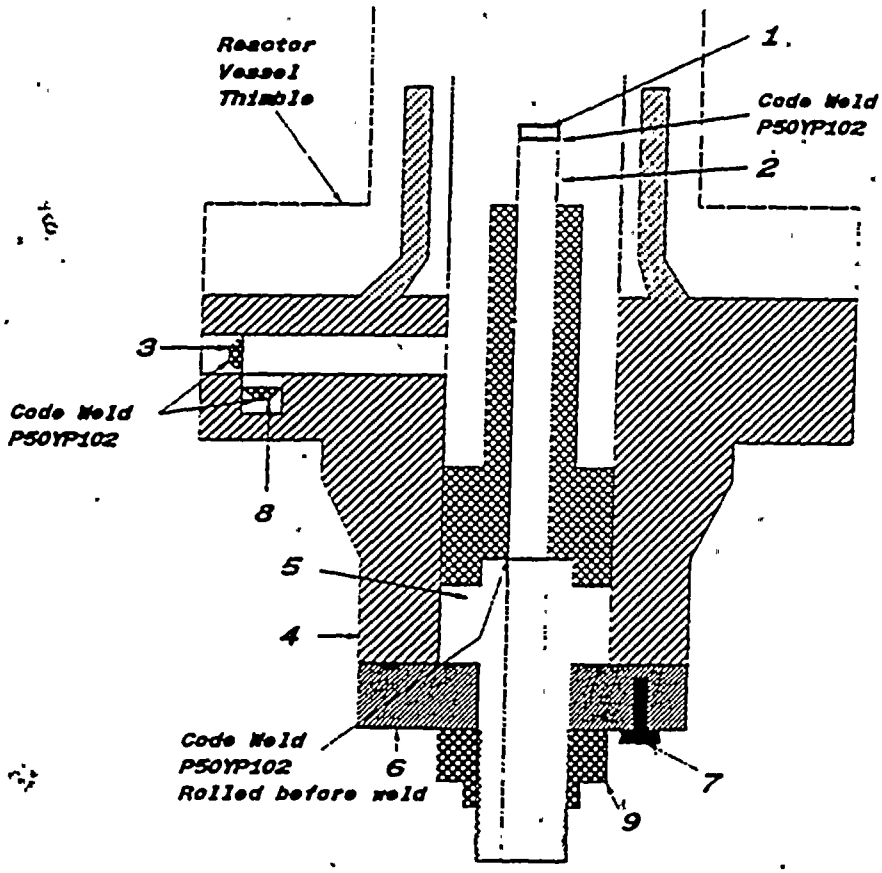
5. Head 129B3539P005
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 114B5460P001
XM - 19 SA479
1.30" thick x 2.62" dia.



Enclosure 2

# WASHINGTON PUBLIC POWER SUPPLY SYSTEM

## PRESENTATION SLIDES

# Management Oversight Team Meeting

November 6,1997

1:30 PM to 4: 30 PM

Walkley Room, MPF

Richland, Washington

# Agenda

| | |
|---|---|
| • 1:30-Introductions | Jim Dyer (NRC)/ Rod Webring |
| • 1:45-1997 Self-Assessment | Rod Webring |
| -Leadership Assessment | Paul Bemis |
| -Internal Self-Assessment | Dale Atkinson |
| • 2:30-Corrective Action | Greg Smith |
| • 3:00-Human Performance | GregSmith |
| • 3:15-Radiation Protection | Dave Hillyer |
| • 3:45-Engineering | John Swailes |
| • 4:15-Plant Review | Pat Gwynn (NRC) |
| • 4:30-Closing Remarks | Jim Dyer (NRC)/ Paul Bemis |

# Introductions

- NRC — Jim Dyer
- Supply System — Rod Webring
  - Introductions
  - Organizations Changes
  - Meeting Agenda

# 1997 Self Assessment

Rod Webring

VP- Operational Support

# 1997 PSA - Schedule

| | |
|---|---|
| • Assessment Period | August 96 - October 97 |
| • PSA Conducted | October 6 - October 31 |
| • Review with Mgt. | November 1997 |
| • Review with Employees | December 1997 |
| • Finalize Report & Develop Action Plans | January 1998 |
| • Release Report | January 1998 |

# Preliminary Results

- Licensee Control
  - Strengths
    - Operations Event Reports
    - Commitment to Nuclear Safety
  - Challenges
    - Self-Assessment Program
    - Corrective Action - Root Cause

# Preliminary Results

- Engineering
  - Improvements
    - System Engineering Support
    - Back Log Reduction
    - Safety System Availability
  - Challenges
    - Personnel Turnover
    - Process Inefficiencies
    - Inconsistencies in Work Product Quality

# Preliminary Results

- Operations
  - Improvements
    - Control Room Command and Control
    - Problem Identification
    - Reduction in Workarounds
  - Challenges
    - Clearance Errors
    - Internal Self-Assessments
    - Questioning Attitude

# Preliminary Results

- Maintenance
  - Improvements
    - Reduction in Personnel Dose
    - Material Condition
    - Quality of Maintenance Work
  - Challenges
    - Work Control and Management
    - Backlog

# Plant Support - Summary Overview

- Security
  - Close to world Class
- Quality & Chemistry
  - No Discernible Improvement

# Plant Support - Summary Overview cont.

- Licensing
  - Over-rated during last assessment
  - Needs Programmatic Improvement
- Health Physics & Emergency Preparedness
  - Needs Programmatic improvement

# Plant Support - Summary Overview cont.

- Work Control
  - Significant Weaknesses Exist in Work Process
  - FIN & WIN Teams Show Success Outside 'Normal' Work Process
  - Work Process Needs Restructuring

# REGULATORY INTERFACE

- Supply System Senior Management workshop with external members of the Corporate Nuclear Safety Review Board - September 4, 1997
- CEO "Corner Office Video" addressed to all employees - September 18, 1997
- Workshop with Managers and Supervisors to be held November 17, 1997
- Fostering further recognition and understanding of the regulatory interface down to the working level through department meetings
- Currently evaluating various improvements and measurement standards

# Leadership Self-Assessment Efforts

**Paul Bemis**

**VP- Nuclear Operations**

# Leadership Self-Assessment Efforts

- VPNO Surveys
- Leadership Self-Assessment
- Eckerd College Value Gap Analysis
- Culture Survey

# VPNO Surveys

- Started under Vic Parrish
- 5 completed to date
  - Most recent survey 1st quarter 1997
- Questionnaire used to address various topics
  - *e.g.*, communications, teamwork and organizational change
- Follow-up meetings with interested employees

# VPNO Leadership Self-Assessment

- Conducted July 27 through August 1, 1997
- Characteristics most important to interviewees:
  - **Integrity**
  - **Effective Communication**
  - **Respect**
- No indication that Personnel had reservations to raise safety concerns

# Eckerd College Value Gap Analysis

- Conducted June through August 1997
- Based, in part, on long-term evaluation of Supply System Personnel
- Findings of Self-Assessment and VPNO Surveys Were Confirmed by Value Gap Analysis

# Culture Survey

- Based on INPO Criteria Provided in "*Safety Focus During Changing Times*"
- Conducted in October 1997
- Purpose: to determine safety culture *perceptions* at WNP-2
- Methodology: "*Option Finder*" System
- Findings Consistent with Prior Efforts

# Key Positive Findings

- Recognized Improved Plant Performance
- High Regard for Public Health and Safety
- Remaining Staff are Solid Performers

# Composite of Themes Identified

- Teamwork
- Trust
- Communications
- Workload
- Job Security
- Company Vision
- Personnel Retention
- Distractions
- Leadership Skills
- Empowerment
- Change Management
- Positive Reinforcement
- Time Management
- Bargaining Unit
- Impatience

# Actions Items

- Actions Proposed for Short-Term, Mid-Term & Long-Term
- Short-Term Actions *Include*:
  - Communicate Leadership Assessment Findings To Personnel
  - Develop Model for Consistent Application of Leadership Principles
  - Promptly Re-address "Downsizing" Issue
  - Senior Management Should Allocate Sufficient Time for Leadership Activities

# Actions Items - - continued

- **Mid-Term Actions Include:**
  - Use of Employee Focus Groups
  - Development of Standards for Communicating Significant Policy Changes
  - Senior Management Teamwork Building
- **Long-Term Actions Include:**
  - Fully Integrate Leadership-Related Activities
  - Establish Organization Responsible for Leadership
  - Comprehensive Management Training

# Internal Self-Assessments Program

Dale Atkinson

Manager, Quality

# Accomplishments

- Self Assessment Program
  - Program coordinator position
  - Annual schedule for self-assessments
  - Assessment central storage facility
  - Desk-top instruction
  - 33 self-assessments completed, ~40 by end-of-year

# Self Assessment Methodology

- Standardized implementation
- Institutionalize as a valuable tool
- Maximize participation via flexibility - first year
- Offer Self-Assessment Program Coordinator assistance to groups performing self-assessments

# Future plans

- Conduct formal self-assessment training for all managers/supervisors
- Be more critical of completed assessments
- Enforce requirement for placing self-assessment corrective actions in the plant tracking log (SASMT)
- Develop monthly report for tracking PTL items

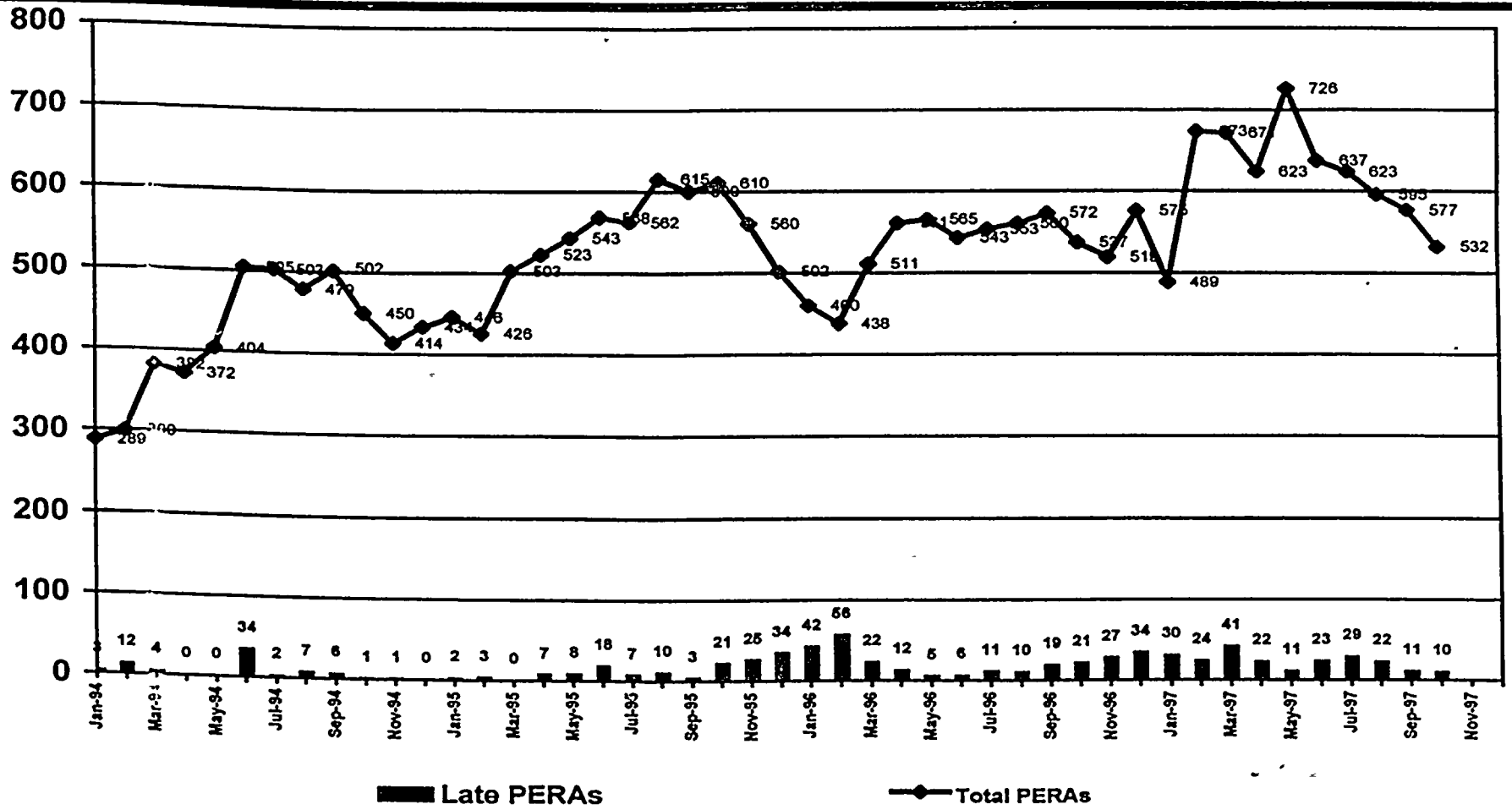
# Corrective Actions

Greg O. Smith

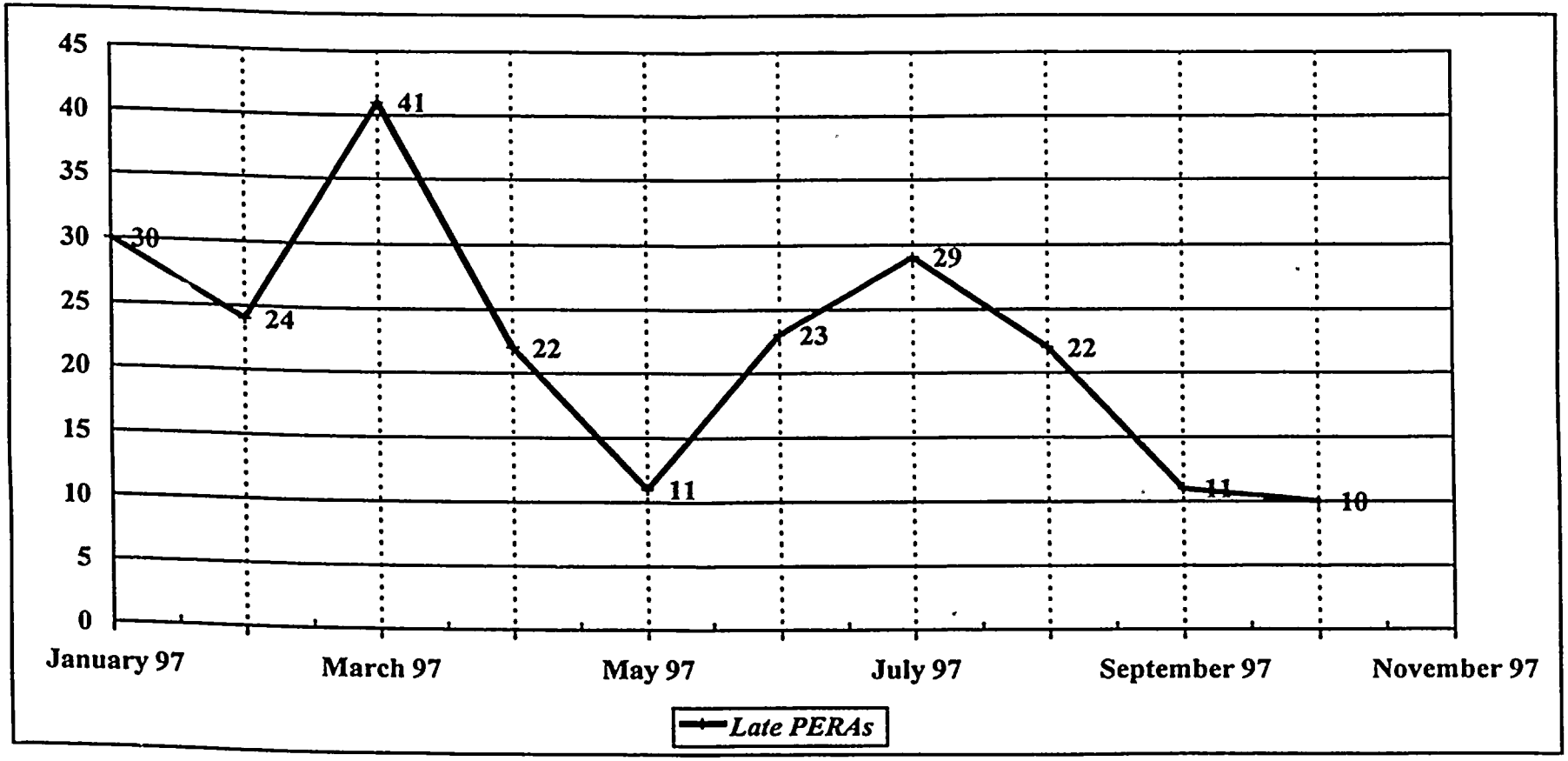
Plant General Manager

# Total PER Actions vs Late PER Actions

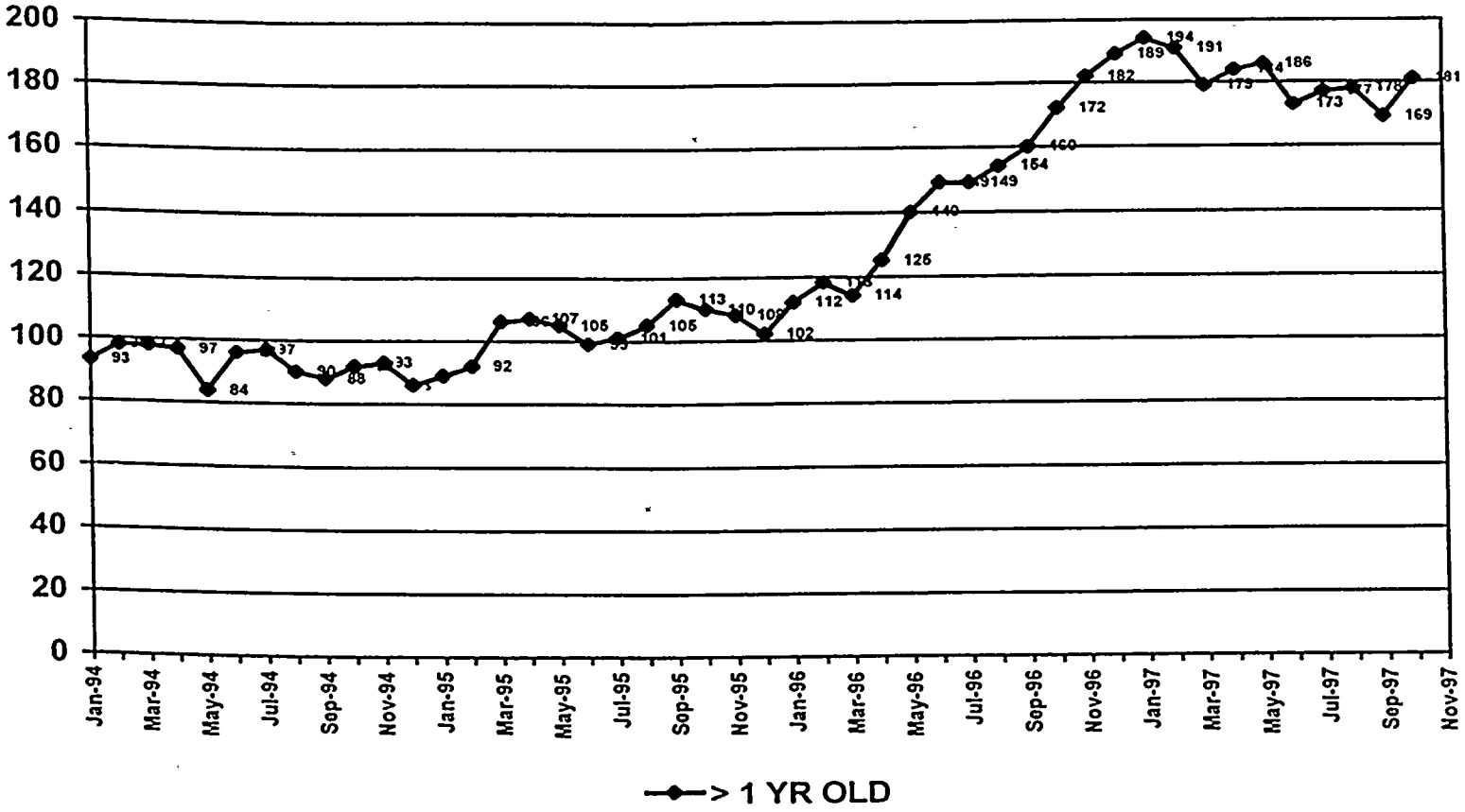
As of November 1, 1997



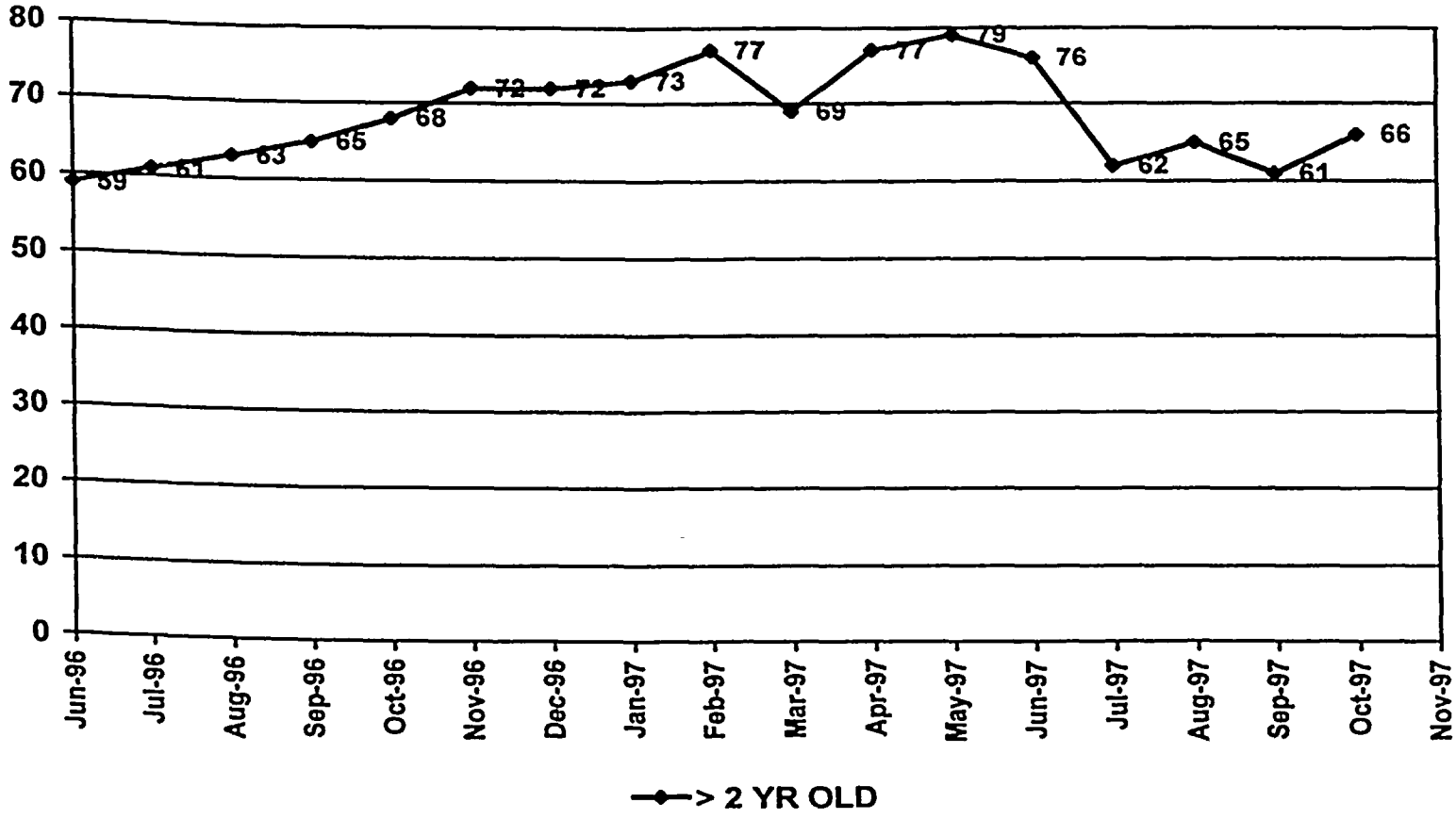
# Late PER Actions



# Total Plant Actions >1 Year Old



# Total Plant Actions >2 Year Old

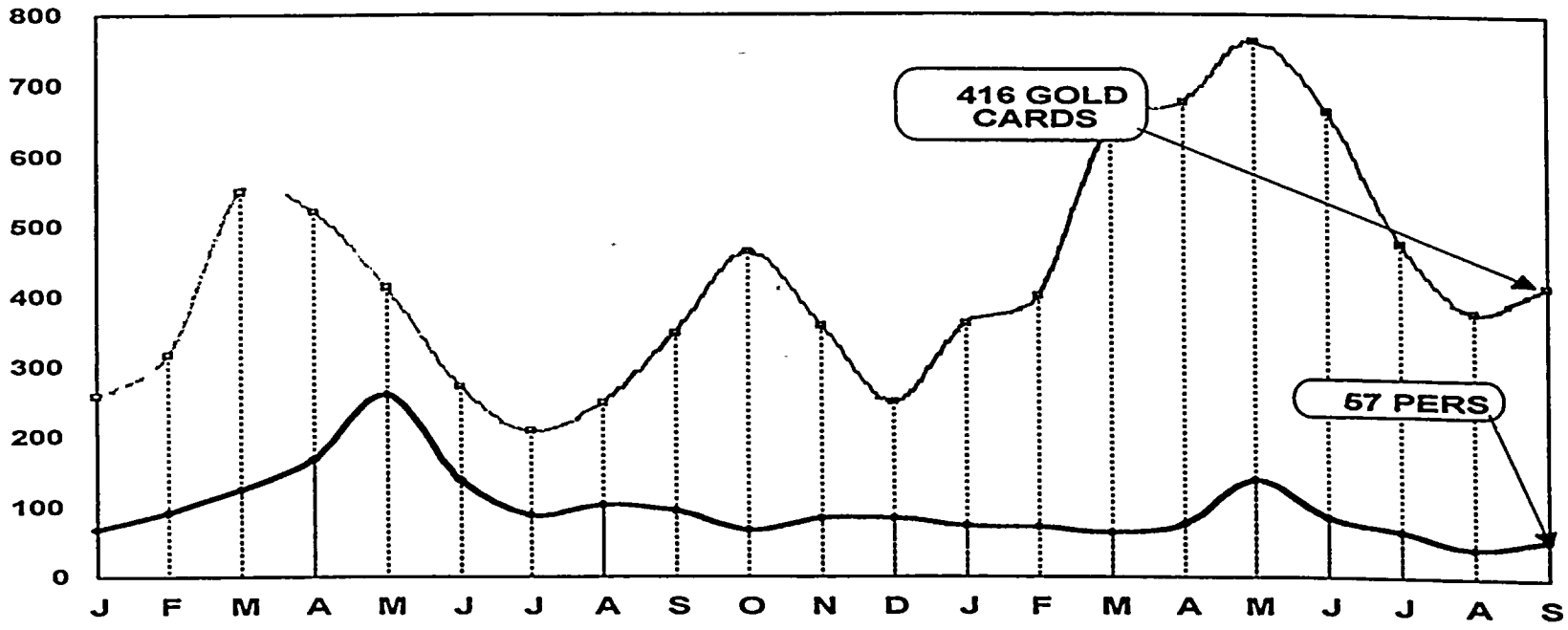


# CORRECTIVE ACTIONS

- Currently at a Crossroad
  - Need to determine how to achieve next level of performance
    - Threshold for PERs
    - Quality of corrective actions

# Gold Cards vs. PERs

Comparison of the Number of Gold Cards Written Each Month
to the Number of PERs Written Each Month - January 1996 to Present

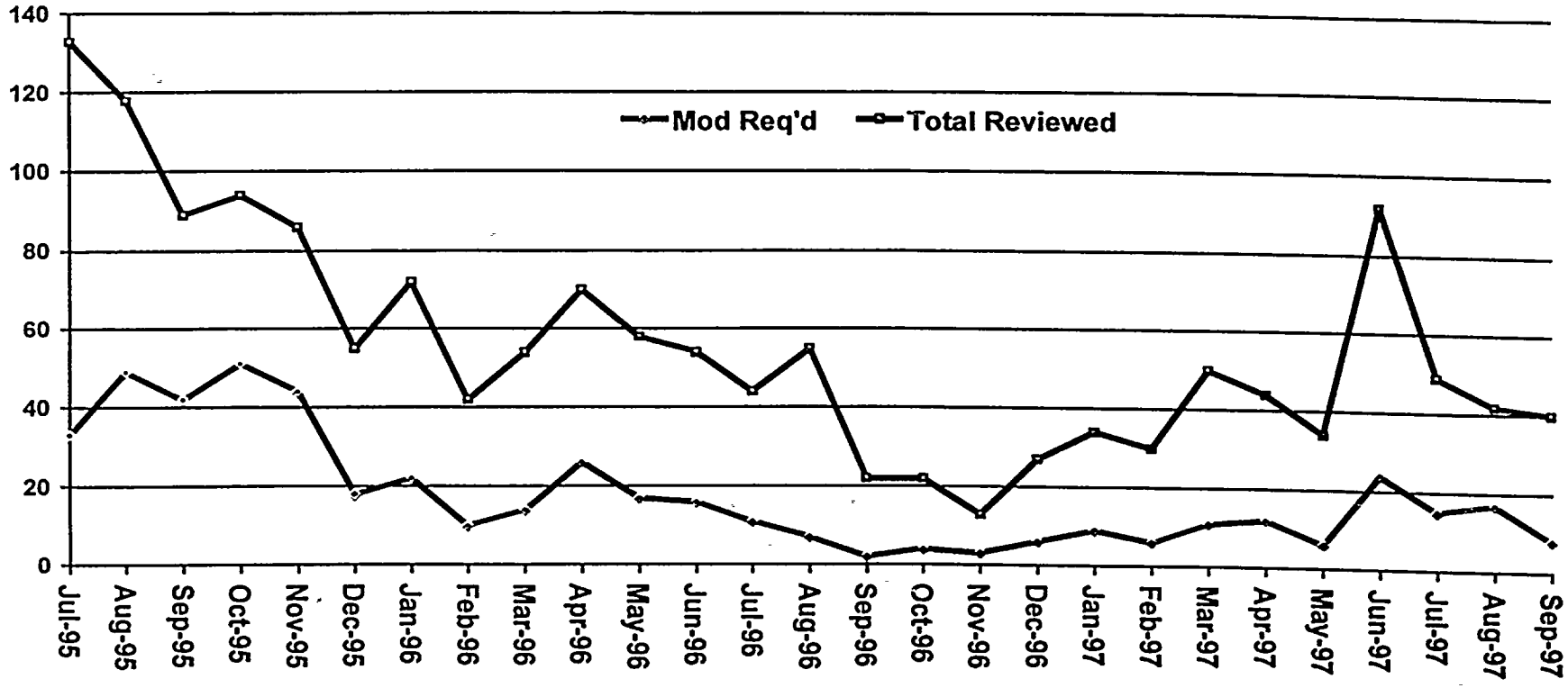



13

# Corrective Actions

- Recent PER on Failure to Write PER
  - Lack of clear understanding for tracking and trending data
  - Failure of management to reinforce the need to write and follow through in the writing of PERs

# Quality of PER Dispositions




Not all PERs are reviewed by Quality, only those that are related to: human performance, Quality initiated PERs, PERs determined to be safety-related, significant, and any others selected through management's discretion.

# CORRECTIVE ACTIONS

- Enhancement Initiatives
  - Responsibility for corrective action reviews
  - Root Cause Analysis (RCA)
    - Population of ~20 people selected to be trained for in-depth Root Cause Analysis
    - Training conducted October 13-16, 1997 with a RCA specialist
    - Performance Improvement Plan (PIP) created to monitor and improve the quality of Peers and their associated RCAs

# Human Performance

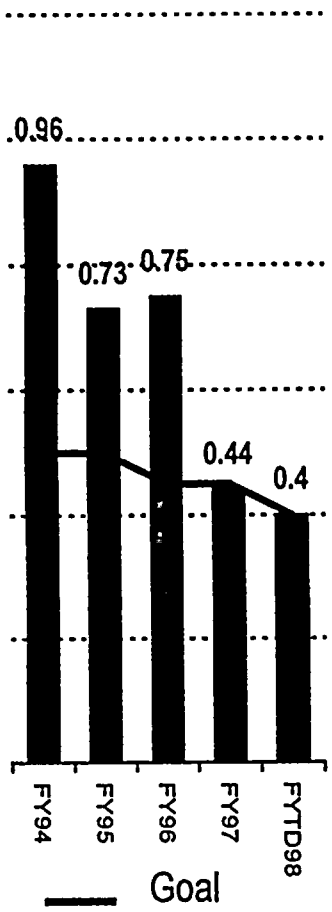
Greg O. Smith

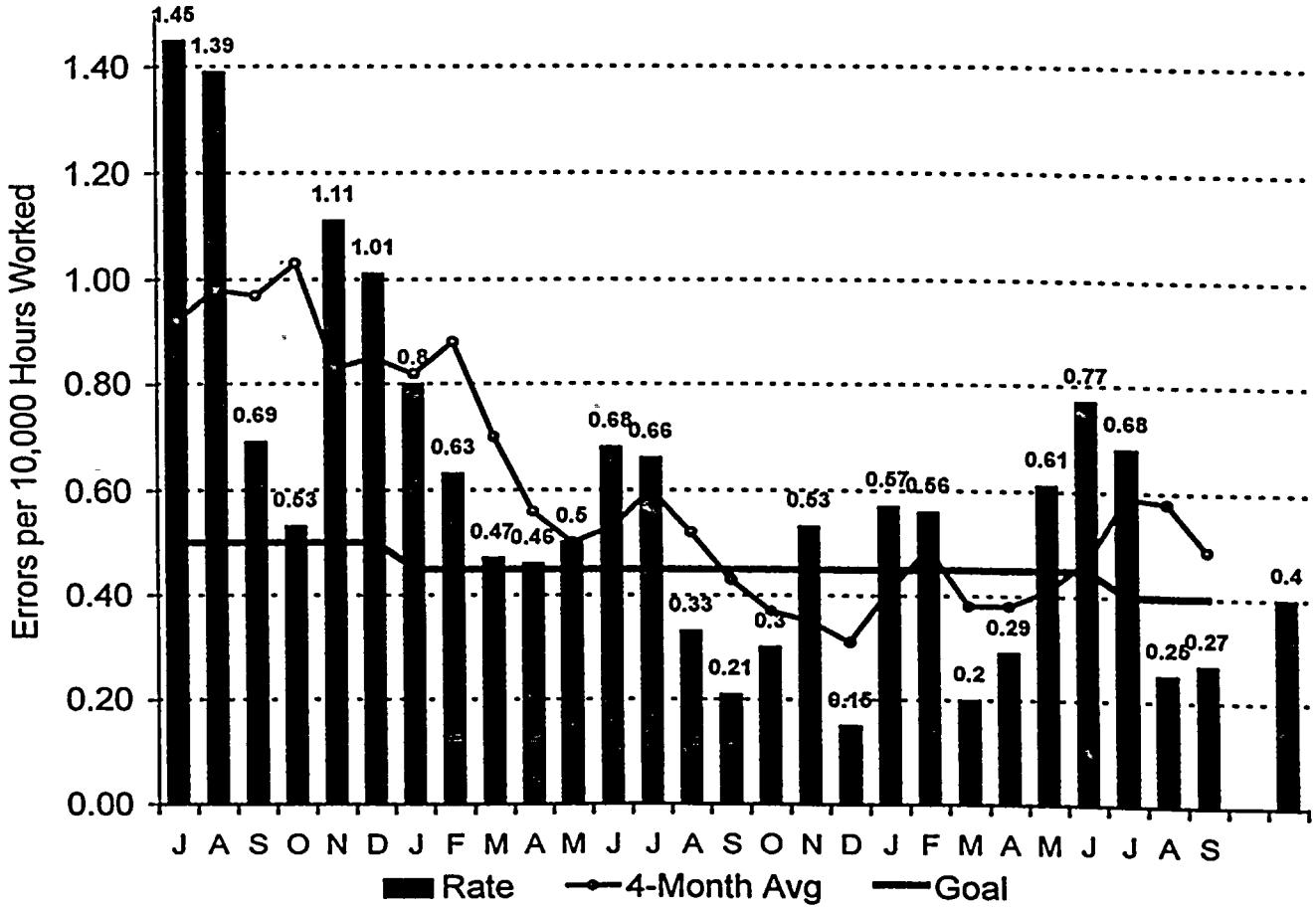
Plant General Manager

# Human Performance

- Business Plan Action HP-03-00, Human Performance Improvement
  - Demonstrate an initiative resulting in the reduction of the overall human performance error rate and a reduction in the significance of errors that continue to occur.
  - The end result would be the establishment of a self-supporting continuous improvement in both individual and group performance leading to the operation of WNP-2.

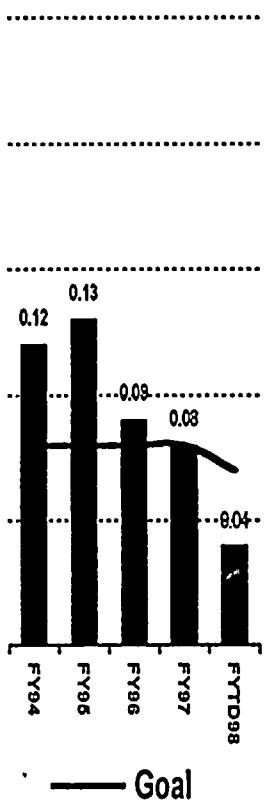
# WNP-2 Personnel Error Rate

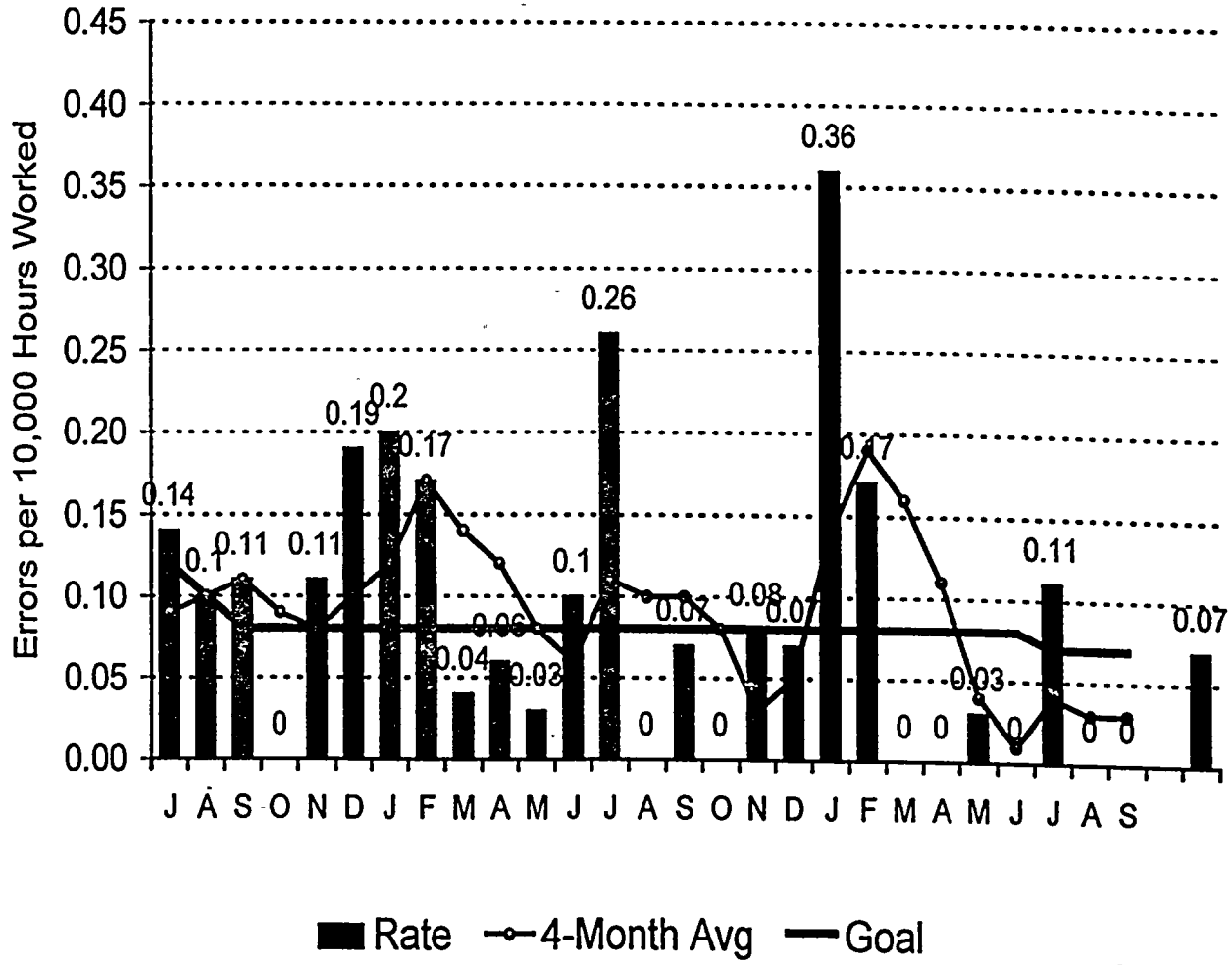



Rate for the Quarter

# WNP-2 Significant Personnel Error Rate




Rolling 12-Month Average

# Human Performance

- Enhancement Initiatives
  - Increased emphasis on behaviors
    - Identified expected leadership, organizational and individual behaviors
    - Measured performance to the expected behaviors
  - Continued performance
    - OJE, OJT, and management observations
    - Pre-job briefings

# Human Performance

- Enhancement Initiatives
  - Improved communications with plant staff
  - Planning a "Human Performance Day"
  - Implementing initiatives to improve issues identified through Leadership Self Assessments

# September 1997 Human Performance Annunciator Panel

**September 1997 Human Performance Annunciator Panel**
**Errors per 10,000 Man-Hours Worked**

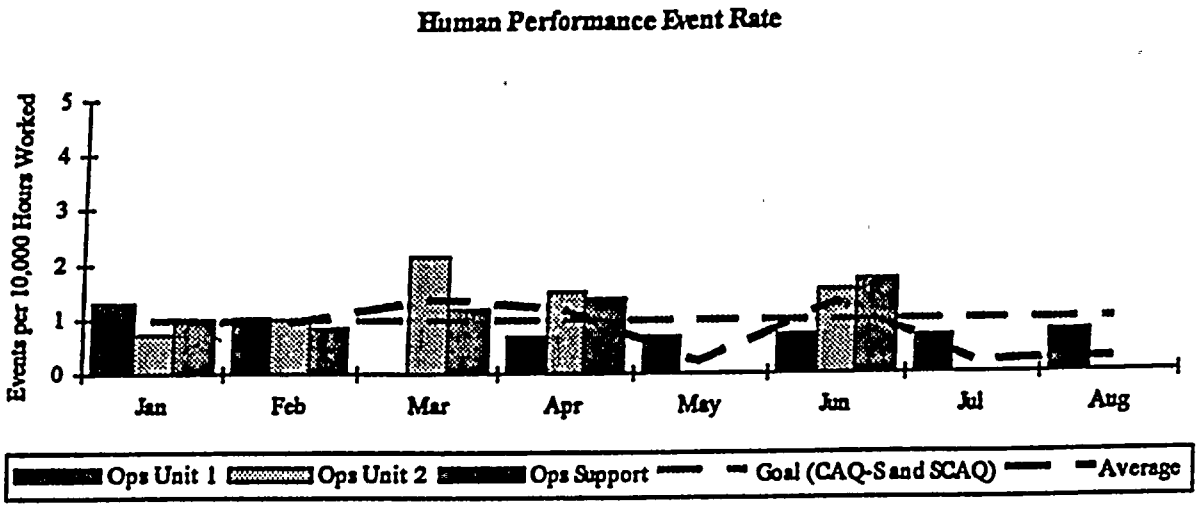
| | | |
|---|---|---|
| Positive Performance | Exceeds Monthly Expectations | ≤ 0.40 Error Rate |
| Satisfactory Performance | Meets Monthly Expectations | > 0.40 Error Rate |
| Improvement Needed | Less Than Monthly Expectations | > 0.55 Error Rate |
| Adverse Performance | Negative Monthly Swing | > 0.75 Error Rate |

| Plant Department | Mar97 | Apr97 | May97 | Jun97 | Jul 97 | Aug 97 | Sept 97 |
|---|---|---|---|---|---|---|---|
| 1- Operations | | | | | | | |
| 2- Maintenance | | | | | 1 | | |
| 3- Rad Protection (note) | 0 | 1 | 2 | 1 | 2 | 1 | |
| 4- Chemistry (note) | 0 | 0 | 1 | 1 | 0 | 0 | |
| 5- Plan/Scheduling/Outage | | | | | | | |
| 6- Engineering | | | | | | | |
| 7- Training | | | | | | | |
| 8- Regulatory Affairs | | | | | | | |
| 9- Security | | | | | | | |
| 10-Procurement | | | | | | | |
| 11- Administrative Services | | | | | | | |
| 12-Quality | | | | | | | |
| 13-Raytheon | 1 | 2 | 3 | 2 | 1 | | |

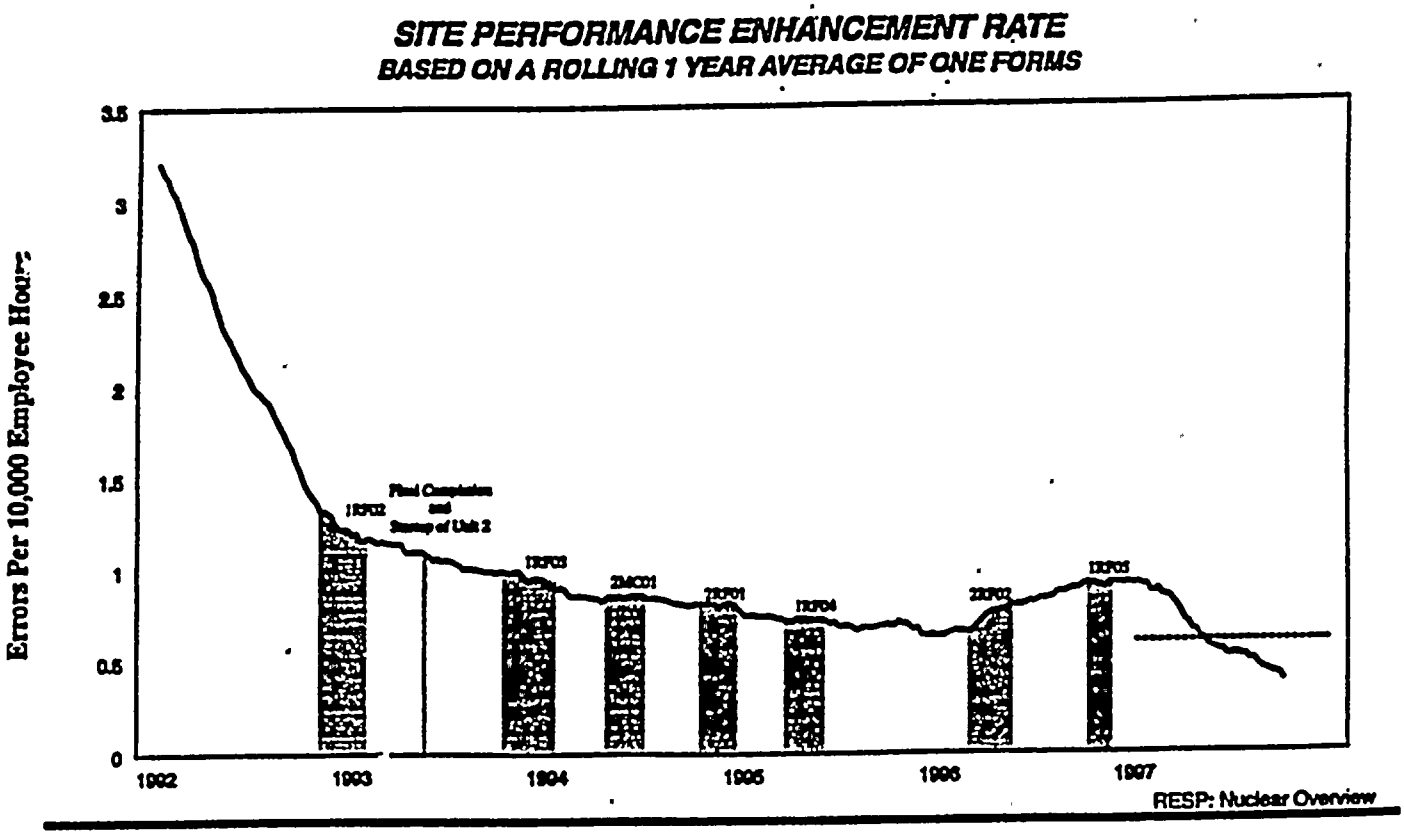
10

NOTE: Gray area indicates 8/97 split of the Plant Support Services organization. Manhour data not calculated for previous timeframe.

STAND ALONE CHART




Operations error rate graph for 1997. Threshold is very low for these



# Human Performance Event Rate

- See stand alone chart

# Site Performance Enhancement Rate

- See stand alone chart

# HUMAN PERFORMANCE

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# HUMAN PERFORMANCE

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# Health Physics

Dave Hillyer

Manager, Radiation Protection

# Overview of Discussion

- Area for improvement
- Radiation Protection Improvement Plan
- Strengths -- Exposure reduction

# Areas for Improvement

- Performance Issues
  - Radiological controls
  - Radioactive material control
  - Instrumentation
  - Survey and Release of Material
  - Timeliness of corrective actions

# Radiological Controls

- Adverse trend over last year
- 98 PERs associated with radiological controls
  - 13 associated with posting
  - 7 associated with surveys
  - 5 associated with RWPs
  - 6 significant
  - ~ 50% human performance

# Radioactive Material Control

- Radioactive materials improperly labeled
- Improper storage of Radioactive materials in the plant
- Lack of a tool control program

# Instrumentation

- Marginal availability
  - Repair or calibration worked as low priority
- MG electronic dosimeter availability
- Thermoluminescent dosimeters (TLDs)

# Survey and Release of Material

- Inconsistent requirements
- Inefficient process
  - Duplicate surveys
  - PSF activities

# Areas for Improvement

- Management Issues
  - Standards and expectations
  - Communications
  - Work management
  - Change management

# R P Improvement Plan

- Radiological Controls
- Moved supervisors to access point
- Placed supervisors on shift
- Required all work to check in with health physics
- Started weekly walkdowns of plant

# R P Improvement Plan

- Radioactive Material Control
  - Comprehensive walkdown of plant
- Initiated team to develop tool control program
- Inventory materials in RAM storage areas
- Minimize RAM storage areas

# R P Improvement Plan

- Instrumentation
- Assigned a program manager
- Move HP activities into plant from PSF
- Establish contract for MG repair
- Detail requirements for vendor to meet all NVLAP criteria

# R P Improvement Plan

- Survey and Release of Materials
- Develop clear, consistent guidelines for frisking practices
- Train HP technicians and workforce
- Establish passive monitoring

# R P Improvement Plan

- Management Issues
- Clarify expectations at all levels
- Develop performance measures
  - behaviors
  - consequences

# R P Improvement Plan

- Management Issues
- Initiate formal department meetings
  - training crew
  - staff
  - technicians
- Increase focus on scheduled work
  - use of schedule
  - early review of scheduled work

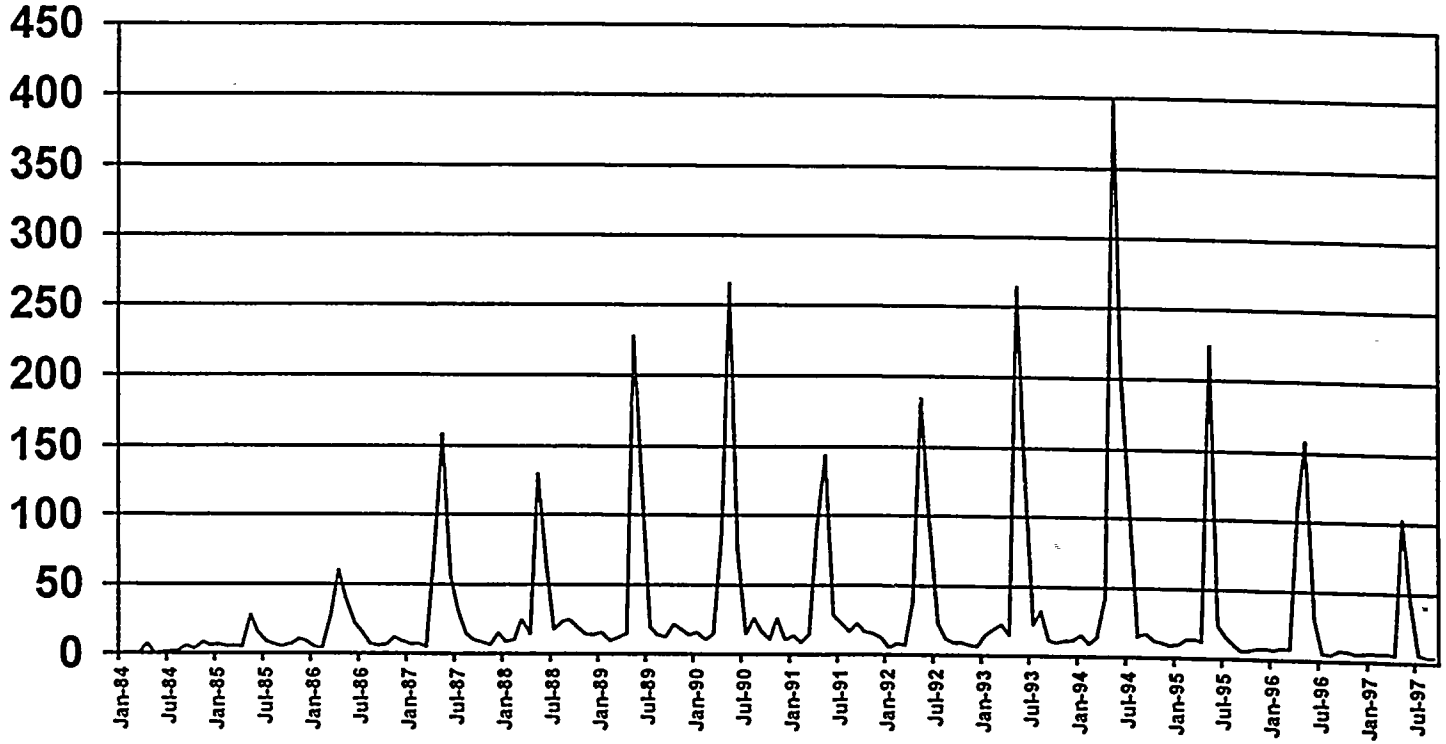
# R P Improvement Plan

- Management Issues
- Retained mentor "coaches" for front line supervisors
- Additional supervisory assistance while paperwork aspects of front-line supervisor's job are minimized
- Increase technician responsibility and ownership

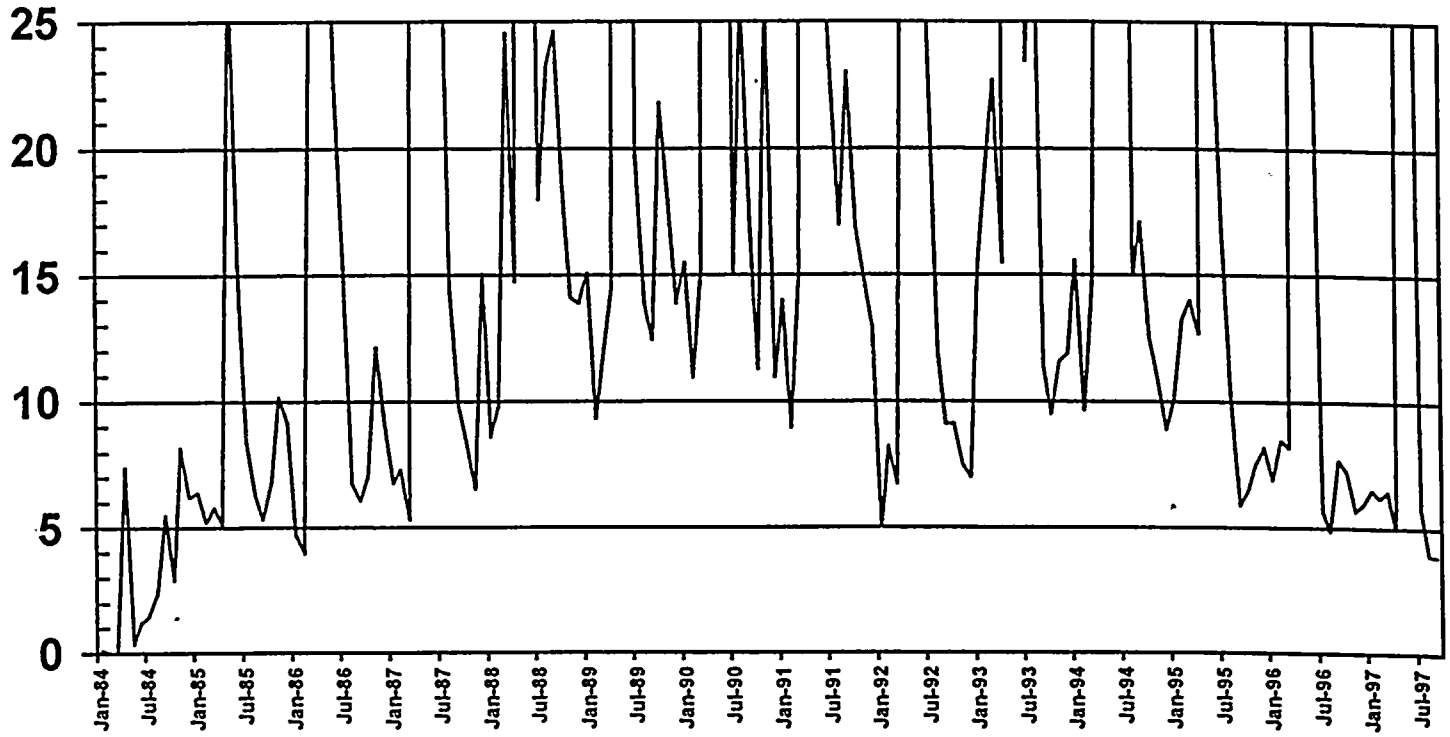
# Strengths

- Reduction of Station Collective Exposure
- Experienced New Manager in Place
- Properly Self-Assessed

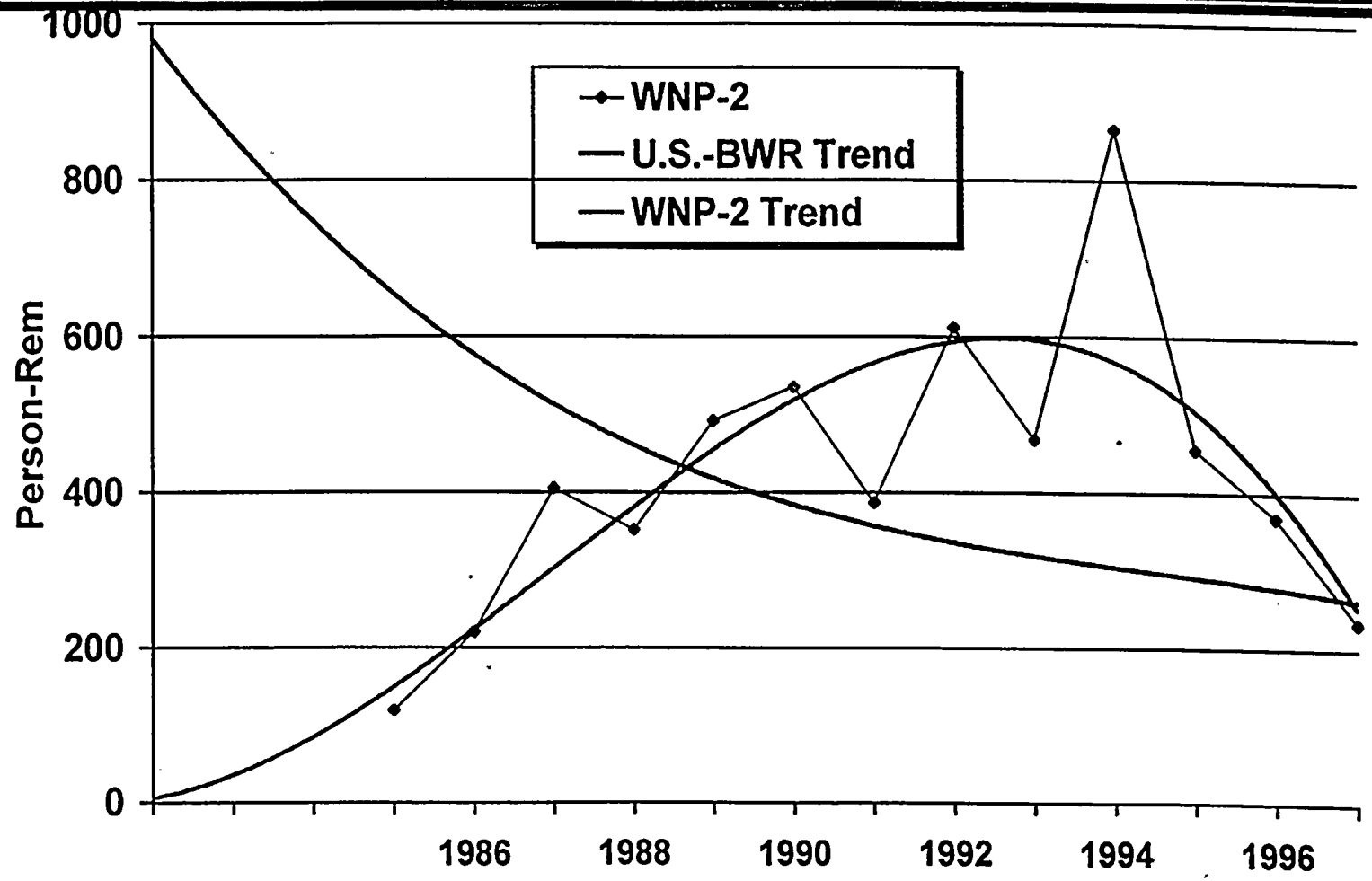
# WNP-2 Collective Dose Per Month Since Startup



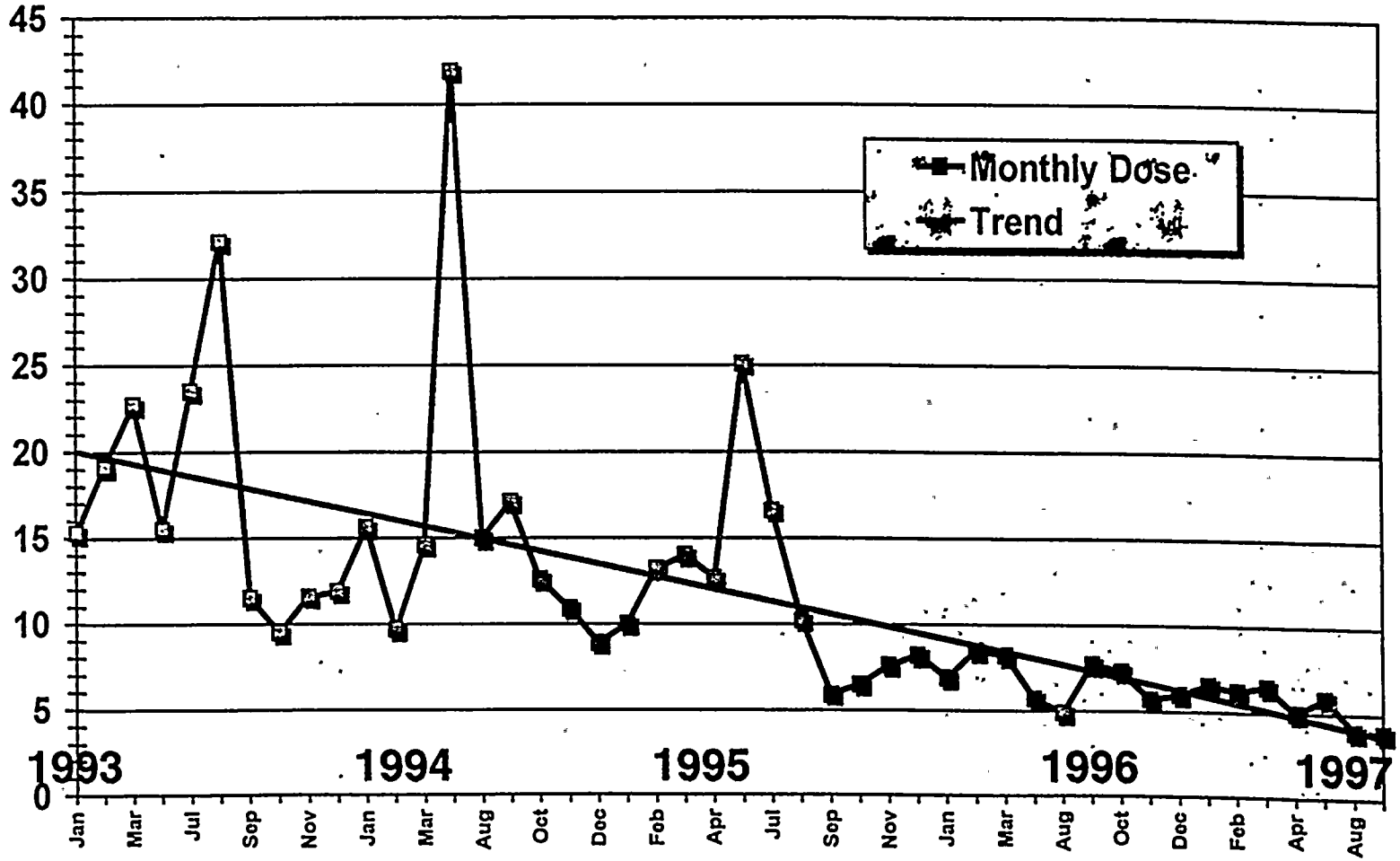
# WNP-2 Collective Dose Per Month Since Startup



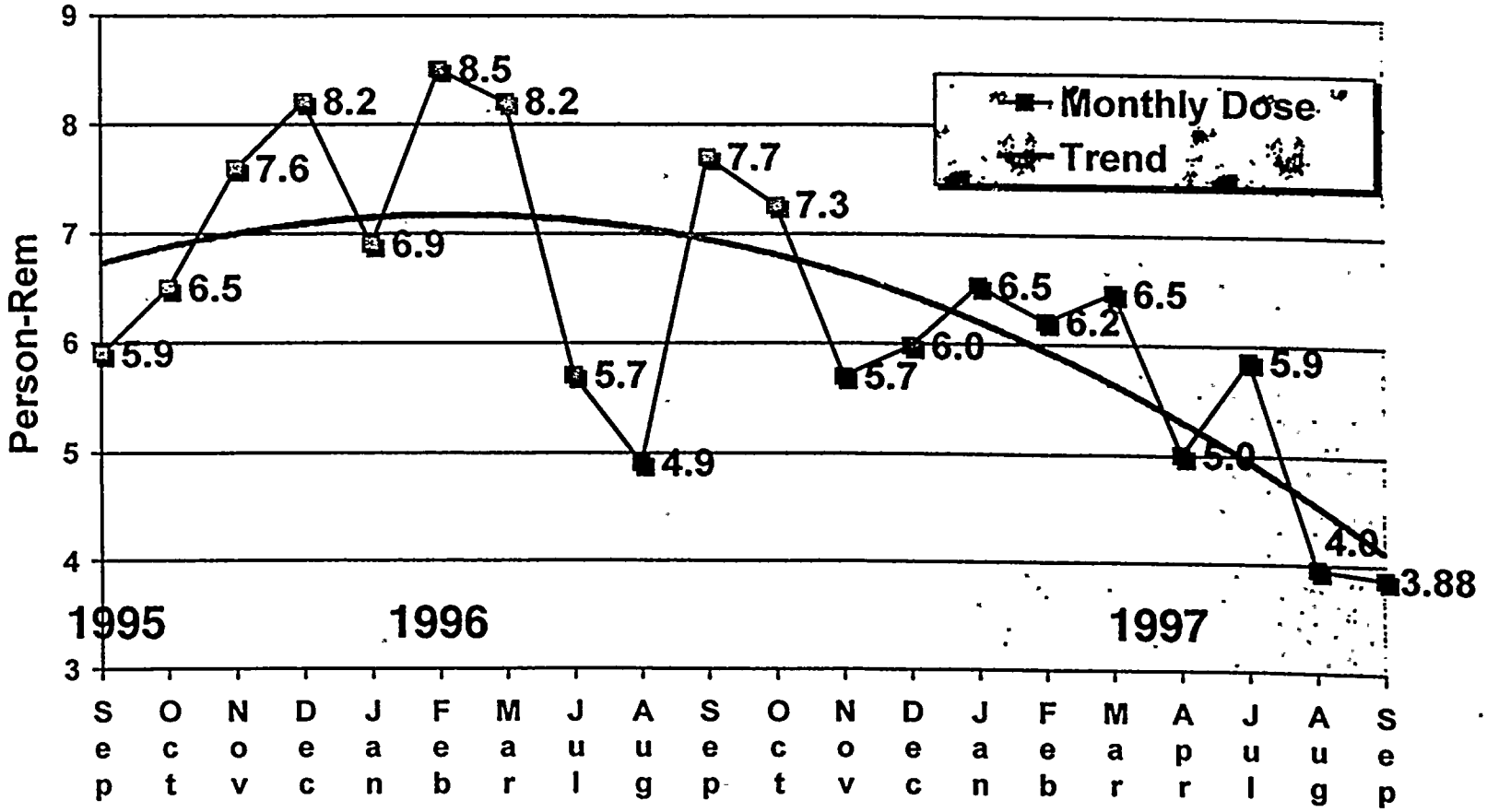
# WNP-2 Annual Collective-Dose Compared with the U.S. BWR Median



# Non-Outage Collective Dose



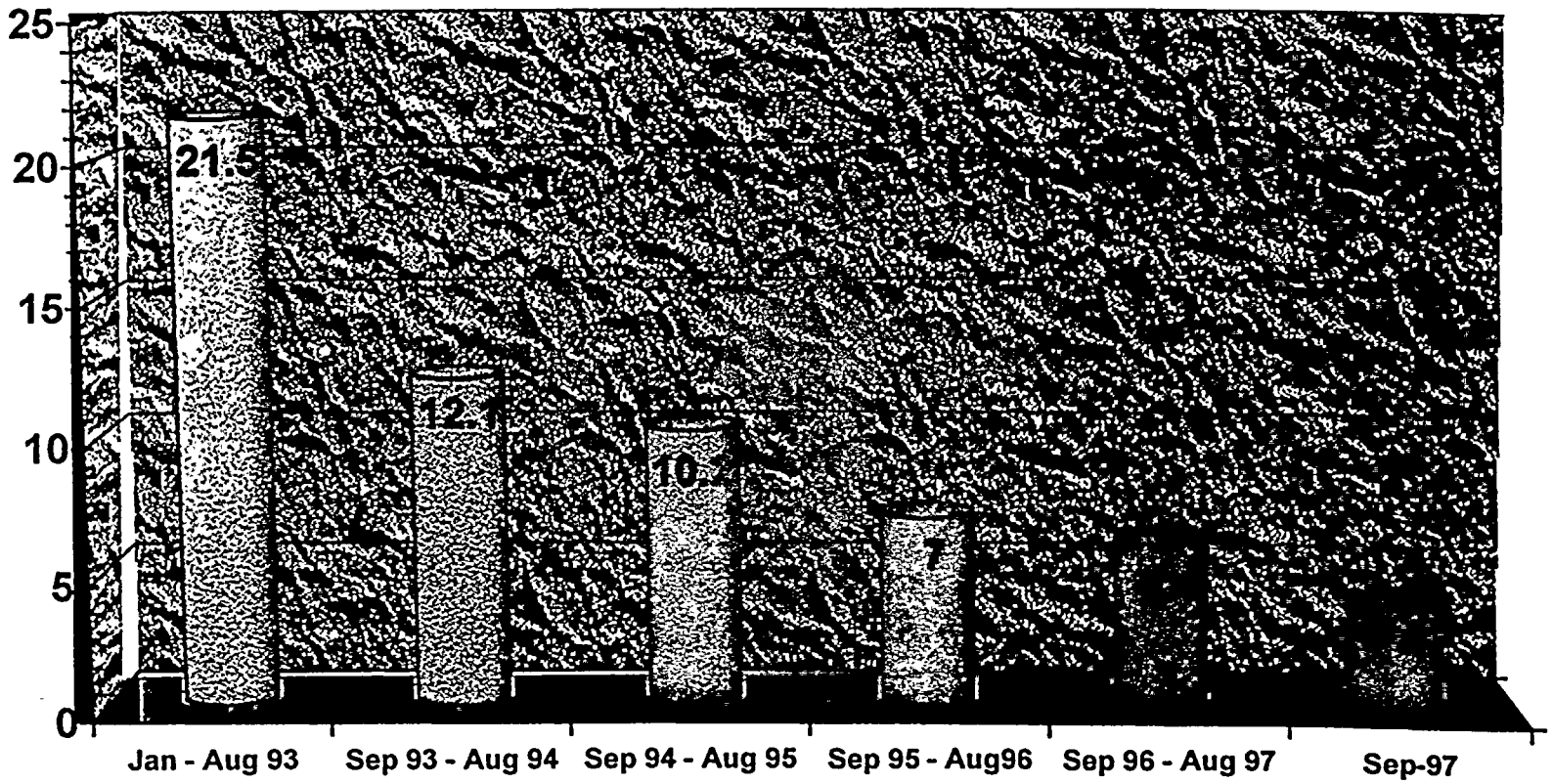
# WNP-2 Non-Outage Collective Dose Trend



# WNP-2 Non-Outage Mean Monthly Dose

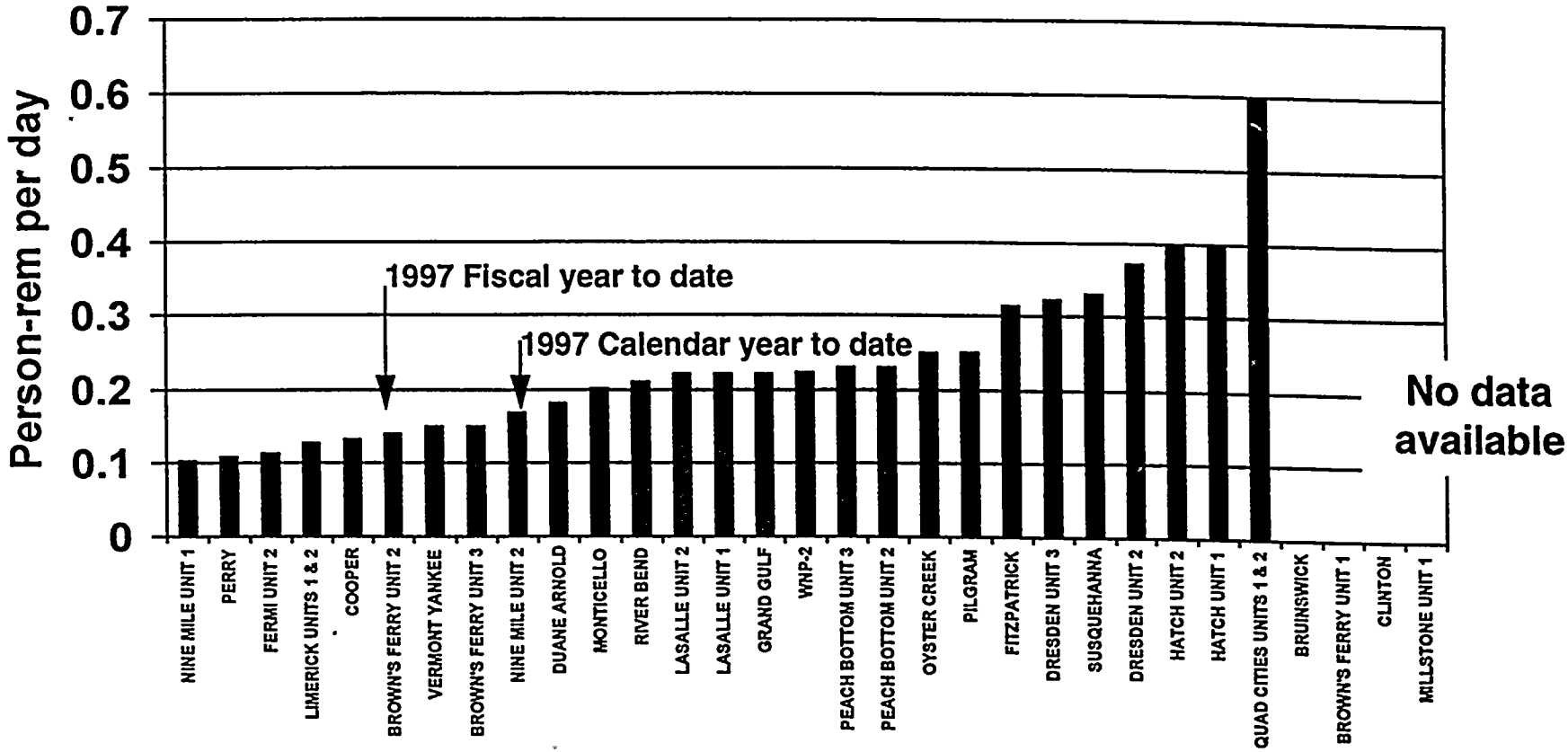
Person-rem

Current Industry Mean = 7.2

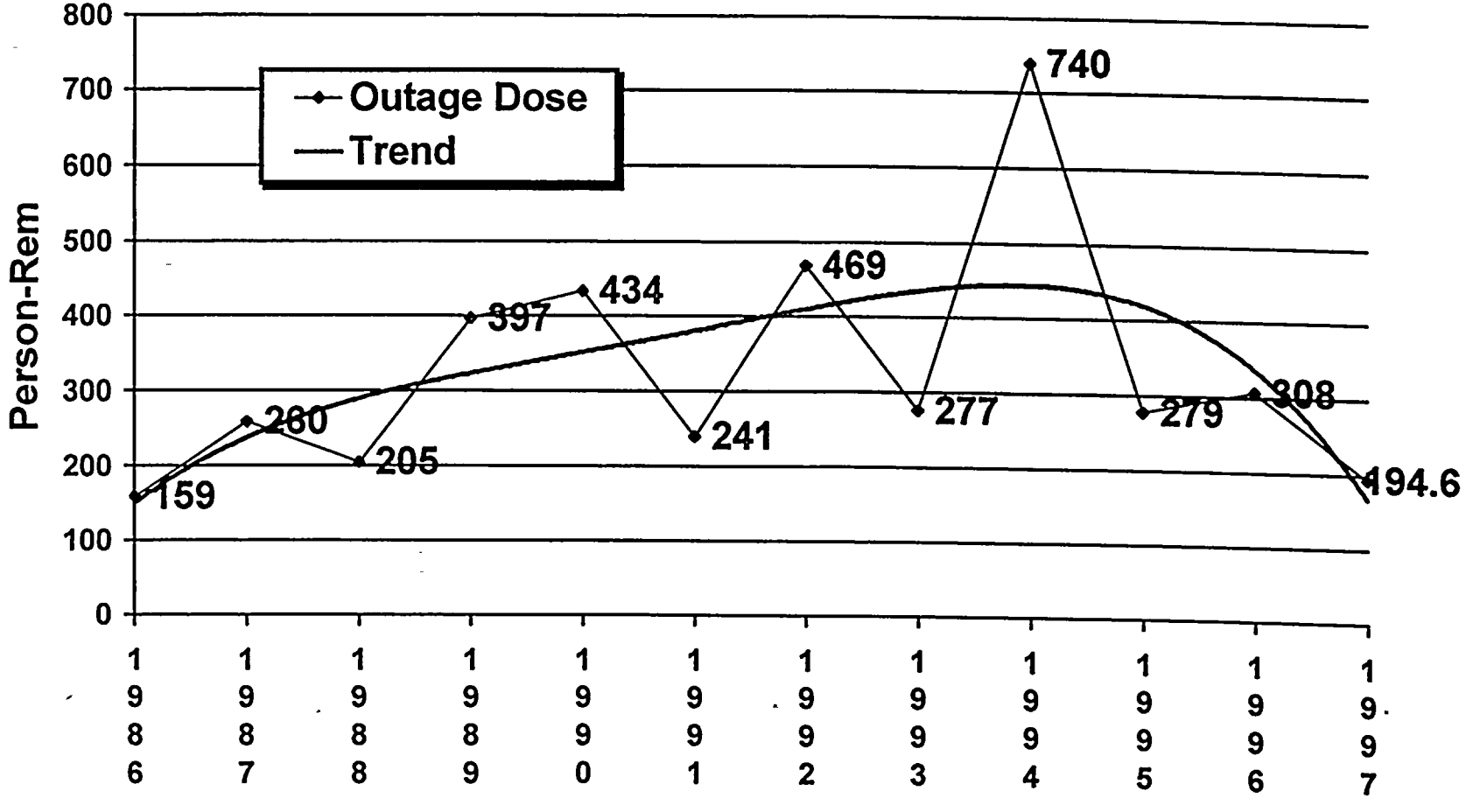


# AVERAGE NON - OUTAGE DAILY EXPOSURE

BWR Fleet Averages for 1996 (BWR Owner's Group Meeting)



# WNP-2 Outage Collective-Dose Trend



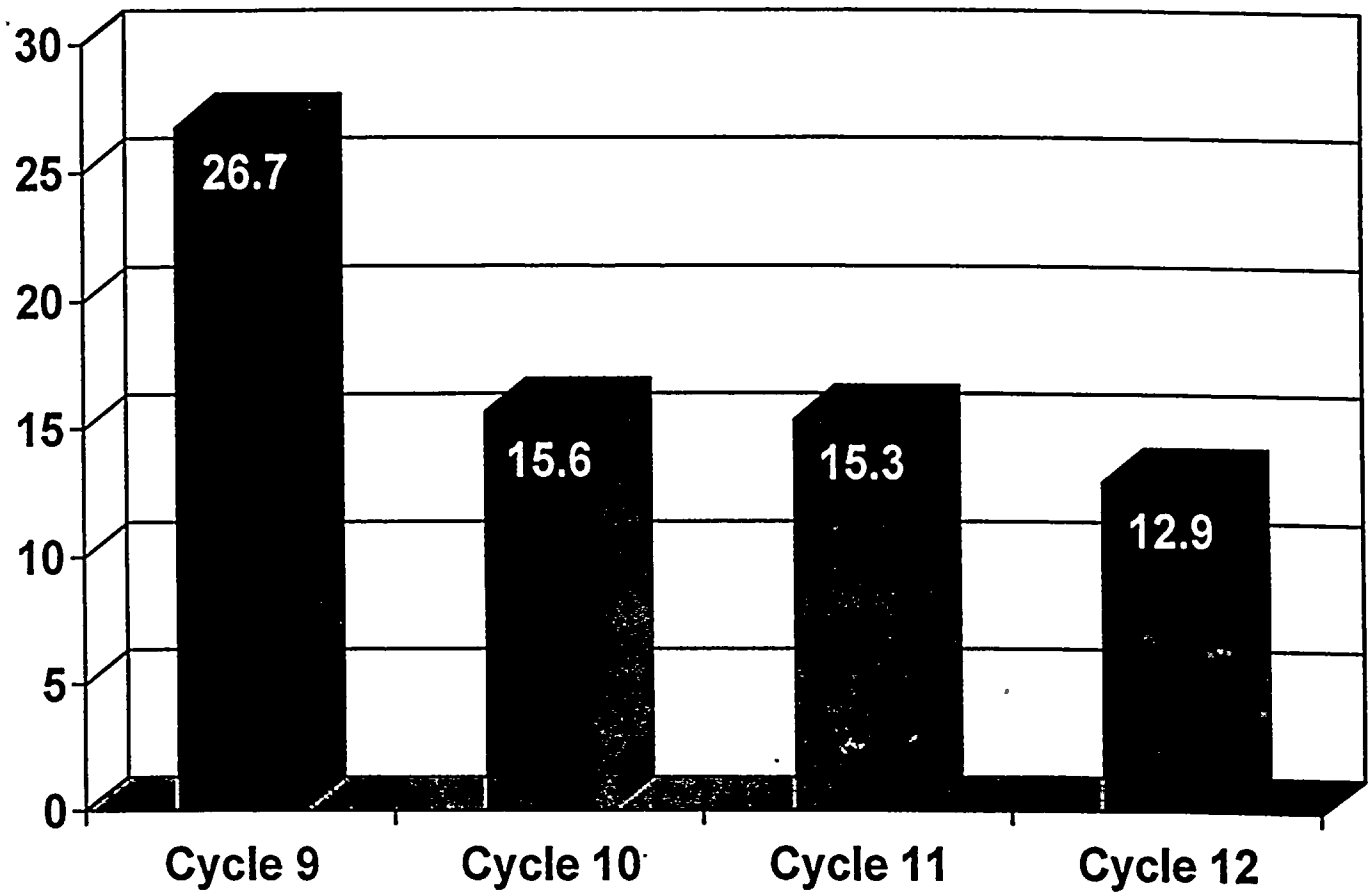
# Challenges

- Keep exposure low as additional maintenance is performed in normal operations
- Meet the outage goal of 210 Person-Rem

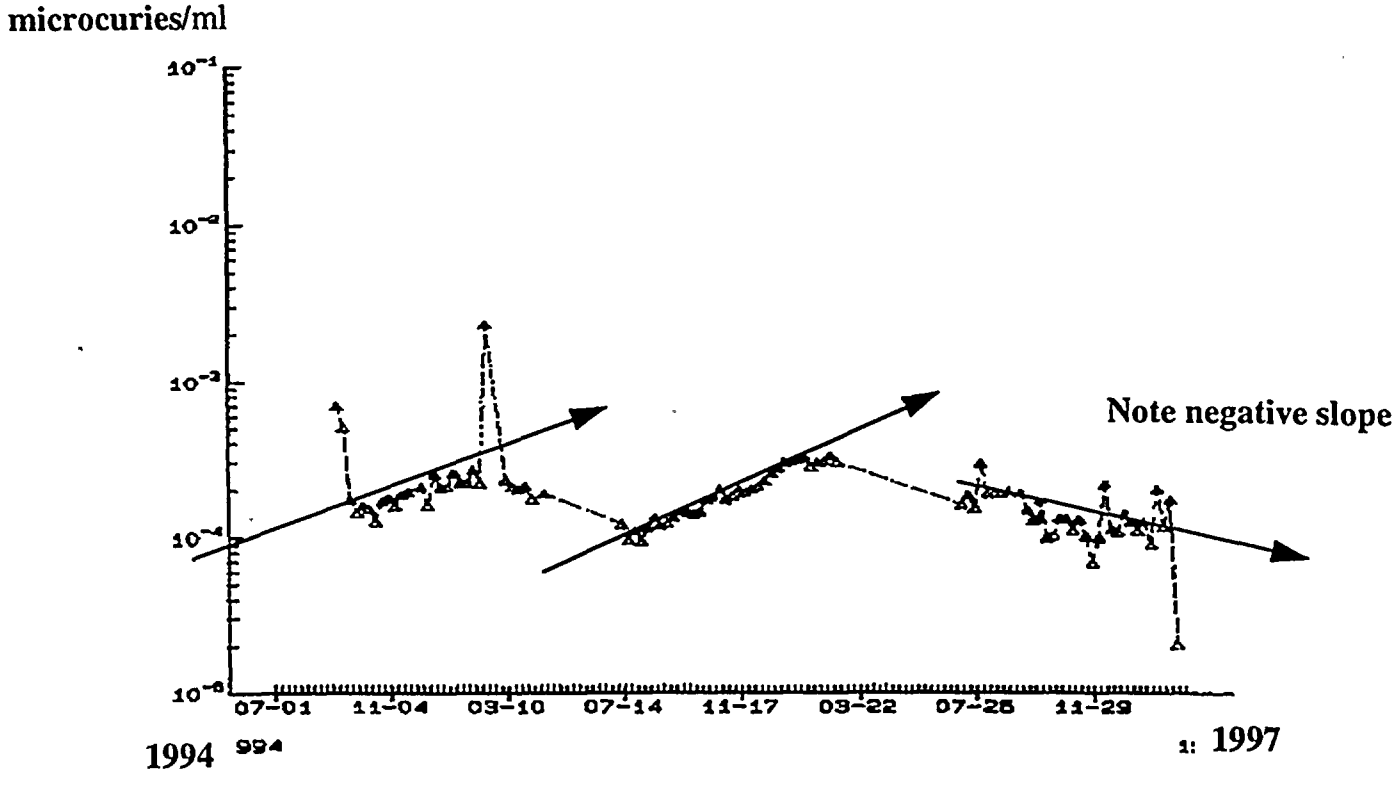
# Actions taken for next outage

- Chemical decon of recirculation piping
- Staff assignments for outage

# Cobalt-60 Reduction (microCi/cm$^2$)



# Soluble Cobalt Reduction



# Engineering

John Swailes

General Manager, Engineering

# ENGINEERING

- Period of intense evaluation and self-assessment...
  - Engineering Indicators
  - Performance Self-Assessment
  - NRC Engineering Inspection
  - SSFI AE Design Inspection
  - Reactor Feedwater Pump Trip Special NRC Insp
  - INPO Review of SOER 96-02
  - BWROG PSA Certification
  - Self-Assessment of Calculation
  - Leadership Assessment

# ENGINEERING

- CONCLUSIONS
  - Critical Self-Evaluation
  - Consistency of Product
  - Pro-active Performance Monitoring
  - Develop Leadership Culture through Mentoring and Modeling
- LOOK-AHEAD
  - R-13 Outage Preparation
  - FY'98 Safety & Regulatory Significant Projects
  - Sustaining Qualified Staffing

# Engineering Performance Indicators

## Annunciator Panel

### COST COMPETITIVENESS

**ENGR BUDGET**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | | |

**BACKLOG**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | | |

**BACKLOG > 1 YR.**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | | |

**DRAWING BKLG**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| 1811 | 1549 | |

**CMR BACKLOG**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | 45 | 44 |

97 Qtr 3
45

**PMRs NOT CLOSED**

| | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | | No Data |

### MATERIAL CONDITION

**WORK AROUNDS**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| 9 | 9 | 6 |

97 Qtr 3
9

**TMRs**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| 10 | | 6 |

97 Qtr 3
6

**SYSTEM STATUS**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | | NA |

# Engineering Performance Indicators

## Annunciator Panel

### NUCLEAR SAFETY

**ALARA**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| 101% | | |

97 Qtr 3
96%

**OER BACKLOG**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | | |

**QUALIFICATION MGMT**

| | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | | |

### HUMAN PERFORMANCE

**HUMAN PERF**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| 4 | 5 | |

**QA SPERs**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| 1 | 1 | |

**EXTERNAL SPERs**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | 1 | |

**50.59 ERRORS**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| 2 | | 2 |

**FAO ERRORS**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| 1 | | |

97 Qtr 3
1

**FCRs**

| 96 Qtr 4 | 97 Qtr 1 | 97 Qtr 2 |
|---|---|---|
| | | |

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# NRC Engineering Inspection and Follow-up

- 4 Violations
- *Violations Included*:
  - Failure to follow modification and scaffolding procedures
  - Failure to maintain plant design basis
  - Failure to implement adequate and timely corrective actions
  - Failure to implement a Nuclear Safety Assurance Division procedure

- 1 Unresolved Issue
- *Unresolved Issue:*
  - Safety-related status of the Reactor Core Isolation Cooling System (RCIC)

# Corrective Actions Completed

- Improved screening process for Equivalent Changes
- Management approval of Equivalent Changes
- Improved tracking of changes recorded against design documents
- Enhanced scaffold procedure relative to 50.59 evaluations
- Reclassified RCIC back to Safety Related status

# SSFI AE Design Inspection (RHR, SSW, ADS)

- 16 findings identified and categorized resulting in:
  - 1 potential violation, 14 ready for closure (documentation weaknesses ), 1 open item
- Potential violation involves failure to keep FSAR current (5 instances)
  - inconsistencies, lack of timeliness in updating, errors
- Open item involves ADS compliance with Reg. Guide 1.62 (seal-in carry function through completion of action after manual initiation)
- No operability issues

# NRC Special Inspection
# Reactor Feedwater Pump Trip Test

- Inspection resulted in two violations:
  - Temperature differential cavitation setpoint was not in accordance with the analyzed value
  - Safety evaluations did not provide sufficient basis to determine if an unreviewed safety question was involved
- Cause: Design control process did not assure integrated plant response was appropriately evaluated
- Strength: Operator preparations and response was noted as a strength

# INPO Review of SOER 96-02

## Design and Operating Consideration for Reactor Core

- Strengths
  - Maintaining in-depth, in-house experienced staff
  - Participation of Reactor Engineering in Design Review Board
- Recommendations
  - Institutionalize current processes
  - Expand training of SOER 96-02
  - Management approval of significant changes

# BWROG Probabilistic Safety Assessment Peer Review Certification

- Model Structure is robust and extensive
- Software is useful
- Documentation framework and structure is excellent
- Fully supportive of currently identified applications (State of Technology)
- Operations Review and Plant Specific data enhancements recommended

# Self-Assessment of Calculation Process

- Recommendations for Improvement:
  - Combine design databases
  - Retrieval of records from file system
  - Procedures need to enhance technical requirements for content and reduce administrative requirements
  - Use of and closure of CMRs
  - Relationship between licensing basis documents and engineering calculations

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# R-13 Outage Prep Engineering Status

## (as of October 20, 1997)

- DESIGNS Completed
- Milestone: Complete by 10/15**
  - TER Equivalent Changes — 5 of 12 Approved
  - PMR packages per LRP — 9 of 13 Complete
- WORK ORDERS Written
- Milestone: Complete by November 13**
  - Major Maintenance — 15%
  - Short Range Plan Projects — Complete
  - TER Equivalent Changes — 17%
  - PMR per LRP — 39%
- MATERIAL ORDERED
- Milestone: Complete by December 1**
- (Tracking with Work Orders)

# FY'98 Safety & Regulatory Significant Projects

- Thermolag Upgrade..significant reanalysis, and reroute of essential cables - complete in December, 1999

- ECCS Suction Strainers..procure and install 10 strainers - complete in June, 1998

- Modify RHR-V-42a and HPCS-V-15 with bypass..to prevent pressure locking - complete in June, 1999

# FY'98 Safety & Regulatory Significant Projects (continued)

- ASD Miscellaneous Modifications.. change Delta T protection, UPS scheme, drive monitoring relay alarm and motor voltage and current monitoring - complete in June, 1998

- Onsite Spent Fuel Dry Cask Storage.. commence ISFI design and licensing effort. ISFI operational date is December, 2000

# FY'98 Safety & Regulatory Significant Projects (continued)

- Modify Vent/Drain/Test connections for LPCS-V-83, HPCS-V-102, RHR-V-606, 631..to minimize potential for fatigue failures inside containment - complete in June, 1998

- Core Stability Monitor..design and procurement. Project will be installed by June, 2000

# FY'98 Safety & Regulatory Significant Projects (continued)

- Deletion of Main Steam Leakage Control System..design complete and licensing submittal in June 1998 - complete in June 2000
- Relief around RCC-V-40..to prevent overpressurization of penetration following post-LOCA heatup - complete in June 1998
- FSAR Upgrade - submit to NRC in 1998
- Chemical Decontamination of Reactor Recirculation System - complete in June, 1998

# SUSTAINING QUALIFIED STAFFING

- Market Place Pressures
  - 3 -10 year experience are easily lost
  - Supply System employees are attractive to other nuclear utilities and other industries
  - High technology sector of industry short of technical professional
  - Nuclear power is tough and future is not certain

# SUSTAINING QUALIFIED STAFFING

- Specific Challenges
  - Fuels, Reactor Engineering, STAs, Electrical Engineers
  - Turnover rate ~15% average; ~50% specific areas; ~5% desired
  - Performance indicator being developed

# RETAINING QUALIFIED STAFFING

- Recruiting
  - Recruiting and hiring about 15 people
  - Focus is on excellent talent
  - Search focused on PNW connections and high academic and job performance
- Retention Efforts
  - Aggressively refilling positions to ensure equalized workload
  - Career Development Plans
  - Salary structure must remain competitive
  - Evaluating effects on overtime, vacation, benefits, career potential, and job satisfaction
  - Technical Professional entry level talent initiative

# SUMMARY

- Completed a period of intense external evaluation and internal self-assessments
- Many improvements in Engineering support of the Plant, work product quality and overall reduction in backlog
- Opportunities for continued improvement in consistent organization performance, consistency of work products, further reduction in backlogs and implementation of process improvements
- Looking ahead, focus is on outage preparation implementing significant projects and sustaining qualified staffing

# Plant Performance Review Feedback

Pat Gwynn

Director, Division of Reactor Projects

# Closing Remarks

- NRC — Jim Dyer
- Supply System — Paul Bemis