

P.O. Box 968 Richland, Washington 99352-0968

September 16, 2003 GO2-03-147

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555-0001

# Subject: COLUMBIA GENERATING STATION, DOCKET NO. 50-397; INSERVICE INSPECTION SUMMARY REPORT FOR REFUELING OUTAGE R-16

Dear Sir or Madam:

The Columbia Generating Station Inservice Inspection Summary Report for the R-16 Maintenance and Refueling Outage is enclosed. This report is submitted in accordance with Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Article IWA-6240. Pursuant to ASME Code Section XI, Article IWA-6230, the NIS-1 Owner's Data Report for inservice inspection and NIS-2 Owner's Reports for repairs and replacements are included.

If you have any questions or desire additional information regarding this matter, please contact Ms. CL Perino at (509) 377-2075.

Respectfully,

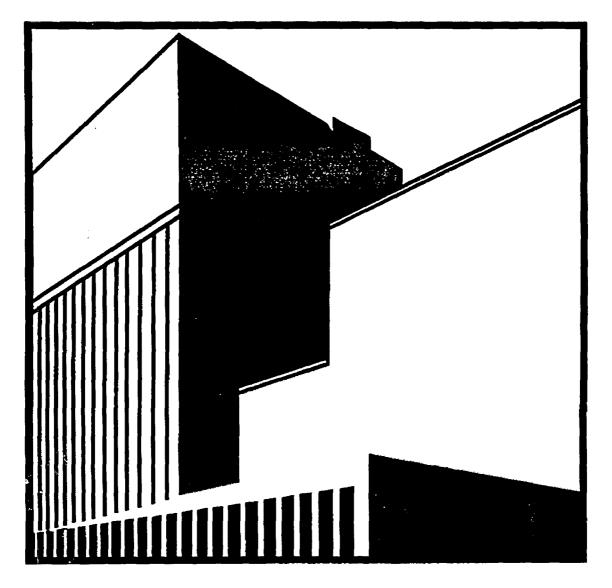
B.K. tilmon

DK Atkinson Vice President, Technical Services Mail Drop PE08

Enclosure

cc: TP Gwynn - NRC - RIV BJ Benney - NRC - NRR w/o NRC Sr. Resident Inspector - 988C RN Sherman - BPA/1399 w/o

A047



COLUMBIA GENERATING STATION INSERVICE INSPECTION SUMMARY REPORT FOR REFUELING OUTAGE R16

Spring, 2003



# INSERVICE INSPECTION SUMMARY REPORT FOR REFUELING OUTAGE R16

- OWNER: Energy Northwest Columbia Generating Station North Power Plant Loop Richland, Washington 99352
- PLANT: Columbia Generating Station North Power Plant Loop Richland, Washington 99352

COMMERCIAL SERVICE DATE: December 13, 1984

CAPACITY: 3486 Megawatts Thermal

REACTOR PRESSURE VESSEL:Manufacturer: CBINSerial Number: T-45State No.: 29936-84WNat'l Bd No.: 8

Prepared By:	DPRame	8/2/03
-	ISI Éngineer	Date
	Quildip Sames	8/21/03
	Repair Replacement Program Lead Engineer	Date'
Reviewed &	an Uluh	8/22/03
Concurred (	NDE Lead	Date
By:	Tom Curri	8/21/03
	ISI Engineer's Supervisor	Date
	4 MADSTO	8/112/03

Authorized Nuclear Inservice Inspector

<sup>2</sup> Date

ISI SUMMARY REPORT R16

## SUMMARY

Columbia Generating Station has completed American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME) Section XI examinations for the sixteenth (16) refueling outage. Examinations in accordance with Boiling Water Reactor Vessel Internals Project (BWRVIP) inspections and evaluation guides were also completed during this outage.

This report summarizes the results of inservice inspection (ISI) of ASME Section III, Code Class 1 and 2 components performed at Columbia Generating Station between July 3, 2001 and June 27, 2003. Both General Electric (GE) and Energy Northwest personnel performed the examinations. During this period, Columbia Generating Station completed its sixteenth scheduled refueling outage, R16. This outage is the seventh 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 Columbia Generating Station files (DIC 1100).

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

- RPV Feedwater sparger flow holes
- Certain BWRVIP inspections
- Control rod blades in accordance with GE RICSIL No. 084

### ASME SECTION XI EXAMINATIONS

The ASME Section XI examinations performed during the sixteenth refueling outage comply with the 1989 Edition with no Addenda, 1992 Edition through 1992 Addenda for subsection IWE, and 1995 Edition through 1996 Addenda for Appendix VIII.

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

# COMPONENTS RECEIVING LESS THAN 90% CODE COVERAGE

Identification No.	Description	Method	Percent Coverage	Existing Relief Request	Notes
MSH-29(W)	Component Support Attach. Weld	VT-3	65	No	
MSH-30(W)	Component Support Attach. Weld	VT-3	75	No	
MSH-42	Rigid Support	VT-3	80	No	
SW-123(W)	Component Support Attach. Weld	VT-3	50	2ISI-10	Meets relief request requirements
DA	Bottom Head Meridian Weld	UT	72	2ISI-01	Examined 44" of weld instead of 45"
DB	Bottom Head Meridian Weld	UT	72	2ISI-01	Examined 44" of weld instead of 45"
DC	Bottom Head Meridian Weld	UT	72	2ISI-01	Examined 44" of weld instead of 45"
DD	Bottom Head Meridian Weld	UT	72	2ISI-01	Examined 44" of weld instead of 45"
DE	Bottom Head Meridian Weld	UT	72	2ISI-01	Examined 44" of weld instead of 45"
DF	Bottom Head Meridian Weld	ហ	72	2ISI-01	Examined 44" of weld instead of 45"
DG	Bottom Head Dollar Weld	ហ	19	2ISI-01	Examined 22" same as R8
DR	Bottom Head Dollar Weld	UT	19	21SI-01	Examined 22" same as R8

The following components received less than 90% Code examination coverage.

# AUGMENTED EXAMINATIONS

# RPV Feedwater Nozzle Inner Radius (ISI Program Plan Section 6.2.3)

The feedwater sparger flow holes were visually examined. Small crack-like indications were found on several of the flow holes during the R13 refuel outage. They were re-inspected and mapped at R14 and R15. This examination mapped the cracks and determined if they have changed from what was reported in the previous examinations. Engineering evaluation concluded that the existing flow hole cracking will not have an adverse impact on the functional performance of the feedwater spargers, and continued operation for at least one fuel cycle is justified without re-inspection.

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

A visual examination of the core spray sparger and supply piping was performed per the requirements of BWRVIP-18. No unacceptable indications were observed.

# Snubber Testing (ISI Program Plan section 6.2.2)

An initial sample of thirty-seven (37) snubbers was selected from the Columbia Generating Station general population of 393 safety-related snubbers. These snubbers were randomly selected by computer subroutine that is part of the ISI System database. 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. All testing results were acceptable. The snubbers tested are listed on the NIS-1 Owner's Report of Inservice Inspection form in Appendix A.

# NON-REGULATORY AUGMENTED EXAMINATIONS

Additional Reactor Pressure Vessel (RPV) internal visual examinations were performed on jet pump adjusting screws, jet pump brackets, and control rod blades. These examinations were performed based on Energy Northwest internal review of the applicable BWRVIP documents and SILs and their application to Columbia Generating Station.

A re-inspection of the jet pump adjusting screws was performed to document any gaps between the setscrew and inlet mixer and any other abnormal conditions. Previous wear on wedges was examined along with adjusting screw to jet pump gaps. Engineering evaluation determined that all identified conditions were acceptable.

During R15 (2001) cracks were found in some Duralife control rod blades (CRB) that were near their end of life (EOL) exposure. Engineering analysis determined they were acceptable for continued operation until their EOL was reached. During R16 (2003) Duralife CRBs near EOL exposure and all blades with cracking observed in R15 (2001) were discharged from the core and examined per the guidance of GE RICSIL 084 dated May 12, 2001. No cracks were found that exceeded the acceptance criteria, which confirmed the analysis, performed at R15 (2001).

# **REPAIRS AND REPLACEMENTS**

Seven (7) significant ASME Section XI repair or replacement activities were performed during the R16 outage as listed below. A listing and NIS-2 Owner's Reports for these and other ASME Section XI repair or replacement work accomplished and closed out between July 3, 2001 and June 27, 2003 are provided in Appendix B.

1) Main Steam Relief Valves (MSRV's)

Modified five (5) spare nozzles. Refurbished five (5) main steam relief valves. These main steam relief valves were refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The refurbishment work was performed in accordance with NWS Technologies, LLC VR and NR programs. Replaced five (5) main steam relief valves.

2) Main Steam Isolation Valve (MSIV)

Replaced main disc, pilot disc and weld repaired the bore ID for valve MS-V-22A.

3) Relief Valves

Replaced miscellaneous relief valves such as SLC-RV-29A, SLC-RV-29B, RHR-RV-25B, RCIC-RV-17, FPC-RV-117A, FPC-RV-117B, RCC-RV-34A, RCC-RV-34B, SW-RV-1A, SW-RV-1B, etc.

4) Valves

Replaced miscellaneous valves such as PI-V-X269, RCIC-PCV-15, RCIC-V-24, RCIC-V-25, RCIC-V-54, RRC-V-20, RFW-V-45B, MS-V-67A, MSLC-V-2D, etc.

5) Service Water (SW) System

Performed the following work on the Service Water (SW) System:

Repaired wasted surfaces for valves SW-V-12A and SW-V-12B. Replaced 18" pipe piece near valves SW-V-12A and SW-V-12B. Replaced 18" pipe piece near restricting orifice SW-RO-2A. Replaced SW supply and return piping to RHR-HX-2A. Replaced SW supply piping to CAC-HR-1B. Replaced SW return piping from CAC-HR-1A.

6) Control Rod Drive (CRD) Assemblies

Performed the following work on the Control Rod Drive (CRD) assemblies:

Overhauled eleven (11) Control Rod Drive (CRD) assemblies. Replaced fifteen (15) Control Rod Drive (CRD) assemblies with these overhauled ones plus 4 that had been previously overhauled. Installed replacement cap screws for all fifteen (15) Control Rod Drive (CRD) assemblies bolted flanged connections - Eight (8) cap screws for each bolted flanged connection.

7) Supports

Replaced three (3) snubbers. Replaced snubbers with rigid struts for twenty five (25) supports.

# APPENDIX A

NIS-1 Owner's Report for Inservice Inspection

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# Page 1 of 14

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

As required by the Provisions of the ASME Code Rules

- 1. Owner: Energy Northwest, Columbia Generating Station, North Power Plant Loop, Richland, Washington 99352
- 2. Plant: Columbia Generating Station, North Power Plant Loop, Richland, Washington
- 3. Plant Unit: Columbia Generating Station
- 4. Owner Certificate of Authorization: NA
- 5. Commercial Service Date: 12/13/84
- 6. National Board Number: NA
- 7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
RPV	CBIN Nuclear Company	T-45	29936-84W	CBIN-8
Large Bore Pipe	Bechtel - the piping examined is listed on pages 3-14 of this data report	NA	NA	NA
LPCS-P-1	Ingersal-Rand Co.	0573277	NA	39
RCIC-P-1	Bingham-Willamette Pump Co.	B-2-1061	NA	161
MS-V-22A	Rockwell International Flow Control	JV-2	NA	- 81
RWCU-V-4	Velan Valve Corporation	040	NA	40
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## FORM NIS-1 (back)

- 8. Examination Dates <u>7/3/01</u> to <u>6/27/03</u>
- 9. Inspection Period Identification <u>3</u> 10. Inspection Interval Identification <u>2</u>
- 11. Applicable Edition of Section XI \_\_\_\_\_\_ Addenda none\_\_\_\_\_
- 12. Date/Revision of Inspection Plan December 1994, Revision 0, change notices through 15
- 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 83% of the examinations required for this interval have been completed. See pages 3-14 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:
  - A number of ASME Code Class 3 Standby Service Water (SW) component supports around the SW spray
    ponds were found with various degrees of corrosion. The examination population was expanded to include
    all component supports around the spray ponds.
- 15. Abstract of Corrective Measures:
  - 1) An engineering evaluation was performed that determined that the corrosion did not affect the function or operability of the supports.

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

Certificate of Authorization	No. (if applicable) NA	_ Expiration Date_	NA	
Date 8/21/03 Signed	Energy Northwest Owner	By Tom (	Curin	

### **CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of <u>Washington</u> and employed by <u>Hartford Steam Boiler of Connecticut of Hartford, Connecticut</u> have inspected the components described in this Owner's Data Report during the period <u> $\frac{7/3}{01}$ </u> to <u> $\frac{6}{27}/03$ </u>, 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 of connected with this inspection.

Inspector's Signature Date

Commissions 7486W/7486 NINS National Board, State, Province, and Endorsements

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

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

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Snubber Functional Testing - IWF-5000

Snubber Mark Number	Position	Description	Serial 1	No. <u>Test D</u>	ate		
DE-2838-18	UA	PSA-1/4	434	5/21/0	3		
EDR-903N	SOUTH	PSA-1/2	4003	5/13/0			
FPC-908N	WEST	PSA-1	22348	5/13/0			
MS-1002N	SOUTH	PSA-10	9946	5/14/0			
MS-1368-13	UA	PSA-1/2	2470	5/17/0			
MSRV-1D-3	UA	PSA-10	10931	5/15/0			
MSRV-2A-2	UA	PSA-10	702	5/15/0			
MSRV-2B-3	UA	PSA-35	10729	5/19/0			
MSRV-4A-2	UA	PSA-10	694	5/19/0			
MS-SC-2	UA	PSA-100	607	5/19/0			
RCIC-1	UA	PSA-1	587	5/12/0			
RCIC-1490-13	UA	PSA-1/2	2523	5/12/0	3		
RCIC-1C-9	UA	PSA-10	7786	5/16/0	3		
RCIC-971N	UA	PSA-1	603	5/13/03			
RFW-151	UA	PSA-35	10732	5/16/03	3		
RHR-244	UA	PSA-35	12713	5/14/03	3		
RHR-274	UA	PSA-3	2590	5/13/03	3		
RHR-311	BAST	PSA-3	2367	5/12/03	1		
RHR-334	UA	PSA-1/4	6219	5/13/03	1		
RHR-357	UA	PSA-10	9951	5/13/03	1		
RHR-39	SOUTH	PSA-3	4429	5/12/03	1		
RHR-463	UA	PSA-3	2391	5/14/03			
RHR-465	NORTH	PSA-3	1069	5/14/03			
RHR-494	UA	PSA-10	13034	5/20/03			
RHR-551	WEST	PSA-3	3914	5/13/03			
RHR-901N	NORTH	PSA-3	265	5/20/03			
RHR-903N	UA	PSA-3	3926	5/14/03			
RHR-954N	WEST	PSA-1	125	5/12/03			
RHR-974N	UA	PSA-3	4457	5/21/03			
RHR-980N	UA	PSA-10	11850	5/13/03			
RHR-SA-52	UA	PSA-10	9852	5/17/03			
RHR-SA-53	UA	PSA-10	113	5/15/03			
RWCU-1C-17	SE	PSA-1	582	5/15/03			
RWCU-1C-8	UA	PSA-3	2587	5/17/03			
SGT-11	BOT	PSA-10	7787	5/12/03			
SW-124	NORTH	PSA-35	7037	5/13/03			
SW-29	NE	PSA-10	4869	5/12/03			
KEY							
BM Bottom N				theast	UA	Single	snubber
E Bast N			S Sou	ith	W	West	
N North S	W South		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.

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1. Owner: Energy Northwest, 3000 George Washington Way, PO Box 968, Richland, Washington 99352

2. Plant: Columbia Generating Station, Hanford Reservation, Benton County, Washington

- 3. Plant Unit: Columbia Generating Station
- 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.	Metho	d Report No.	Date	Rslts(1)
Examination Category B-A Item Number B1.21						
AJ	BOT HD DOL WELD	RPV-102	VOL	R16-105	5/24/03	A
DG	BOT HD DOL /270	RPV-102	VOL	R16-113	5/23/03	Α
DR	BOT HD DOL / 90	RPV-102	VOL	R16-120	5/23/03	A
Item Number B1.22						
DA	BOT HD MRD @272	RPV-102	VOL	R16-107	5/22/03	A
DB	BOT HD MRD @332	RPV-102	VOL	R16-108	5/22/03	Α
DC	BOT HD MRD @ 32	RPV-102	VOL	R16-109	5/23/03	A
DD	BOT HD MRD @ 92	RPV-102	VOL	R16-110	5/24/03	A
DE	BOT HD MRD @152	RPV-102	VOL	R16-111	5/24/03	A
DF DH	BOT HD MRD @212 TOP HD MRD @15	RPV-102 RPV-102	VOL VOL	R16-112 R16-114	5/25/03 5/21/03	A A
DI DJ	TOP HD MRD @75	RPV-102	VOL	R16-115	5/21/03	Â
DK	TOP HD MRD @135	RPV-102	VOL	R16-116	5/22/03	Â
DM	TOP HD MRD @195	RPV-102	VOL	R16-117	5/21/03	Â
DN	TOP HD MRD @255	RPV-102	VOL	R16-118	5/20/03	Â
DP	TOP HD MRD @315	RPV-102	VOL	R16-119	5/20/03	A
Item Number B1.40						
AG	TOP HD-FLG WELD	RPV-102	SUR	2RPM-009	5/21/03	A
AG	TOP HD-FLG WELD	RPV-102	VOL	R16-104	5/22/03	Â
Examination Category B-F Item Number B5.130						
12RHR(1)A-14	VALVE TO SE	RHR-105	SUR	2RHP-008	5/14/03	A
4RRC(4)B-12	SE TO VALVE	RRC-109	SUR	2RRP-016	5/20/03	Â
Examination Category B-G-1 Item Number B6.10						
RPV NUT 36-1-6A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	A
RPV NUT 36-1-6A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	A
<b>RPV NUT 36-1-6A</b>	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	A
RPV NUT 36-1-6A	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	Α
RPV NUT 36-1-13A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	Α
RPV NUT 36-1-13A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	A
RPV NUT 36-1-13A	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	A
RPV NUT 36-1-13A	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	A
RPV NUT 36-1-20A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	A
RPV NUT 36-1-20A		RPV-101	VOL	2RPU-014	5/15/03	Ą
RPV NUT 36-1-20A	RPV NUT RPV NUT	RPV-101 RPV-101	VOL	2RPU-012	5/16/03	A
RPV NUT 36-1-20A RPV NUT 36-1-27A	RPV NUT	RPV-101	VOL SUR	2RPU-013 2RPM-007	5/16/03 5/16/03	A A
RPV NUT 36-1-27A RPV NUT 36-1-27A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	A A
RPV NUT 36-1-27A	RPV NUT	RPV-101	VOL	2RPU-012 2RPU-013	5/16/03	A
RPV NUT 36-1-27A	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	Â
RPV NUT 36-1-34A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	Â
RPV NUT 36-1-34A	RPV NUT	RPV-101	VOL	2RPU-013	3/16/03	Â
RPV NUT 36-1-34A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	Ä
RPV NUT 36-1-34A	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	A
RPV NUT 36-1-41A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	Â

- 1. Owner: Energy Northwest, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
- 2. Plant: Columbia Generating Station, Hanford Reservation, Benton County, Washington
- 3. Plant Unit: Columbia Generating Station
- 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. P	g. Metho	d Report No.	Date	Rslts(1)
<b>RPV NUT 36-1-41A</b>	<b>RPV NUT</b>	RPV-101	VOL	2RPU-012	5/16/03	A
RPV NUT 36-1-41A	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	Â
RPV NUT 36-1-41A	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	Â
RPV NUT 36-1-48A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	Â
RPV NUT 36-1-48A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	Â
RPV NUT 36-1-48A	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	Â
<b>RPV NUT 36-1-48A</b>	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	Â
<b>RPV NUT 36-1-54A</b>	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	Ä
RPV NUT 36-1-54A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	A
RPV NUT 36-1-54A	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	A
RPV NUT 36-1-54A	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	A
RPV NUT 36-1-56A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	A
RPV NUT 36-1-56A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	Α
<b>RPV NUT 36-1-56A</b>	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	A
RPV NUT 36-1-56A	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	A
RPV NUT 36-1-61A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	A
RPV NUT 36-1-61A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	A
RPV NUT 36-1-61A	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	A
RPV NUT 36-1-61A		RPV-101	VOL	2RPU-014	5/16/03	A
RPV NUT 36-1-62A		RPV-101	SUR	2RPM-007	5/16/03	A
RPV NUT 36-1-62A		RPV-101 RPV-101	VOL	2RPU-012	5/16/03	A
RPV NUT 36-1-62A RPV NUT 36-1-62A	RPV NUT RPV NUT	RPV-101	VOL VOL	2RPU-013 2RPU-014	5/16/03	A
RPV NUT 36-1-62A RPV NUT 36-1-68A	RPV NUT	RPV-101	SUR	2RP0-014 2RPM-007	5/16/03	A
RPV NUT 36-1-68A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03 5/16/03	A A
RPV NUT 36-1-68A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	Â
RPV NUT 36-1-68A	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	Â
RPV NUT 36-1-69A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	Â
RPV NUT 36-1-69A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	Â
RPV NUT 36-1-69A	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	Â
<b>RPV NUT 36-1-69A</b>	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	Â
RPV NUT 36-1-75A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	Ä
RPV NUT 36-1-75A	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	Â
RPV NUT 36-1-75A	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	A
<b>RPV NUT 36-1-75A</b>	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	Α
RPV NUT 36-1-76A	RPV NUT	RPV-101	SUR	2RPM-007	5/16/03	Α
<b>RPV NUT 36-1-76A</b>	RPV NUT	RPV-101	VOL	2RPU-012	5/16/03	A
RPV NUT 36-1-76A	RPV NUT	RPV-101	VOL	2RPU-013	5/16/03	A
RPV NUT 36-1-76A	RPV NUT	RPV-101	VOL	2RPU-014	5/16/03	A
Item Number B6.210						
RRC-V-60B-BLT	VALVE STUD	RRC-102 02	VOL	R16-238	5/19/03	A
RRC-V-60B-BLT	VALVE STUD	RRC-102 02		2RRV-007	5/19/03	A
Item Number B6.230		•				
RRC-V-60B-NUT/WASH	VALVE NUTS, WASH	RRC-102	VT-1	2RRV-008	5/19/03	A
Item Number B6.30						
RPV STUD 35-1-6A	RPV STUD	RPV-101	VOL	R16-248	5/10/03	A
RPV STUD 35-1-7A	RPV STUD	RPV-101	VOL	R16-248	5/10/03	Â
RPV STUD 35-1-13A	RPV STUD	RPV-101	VOL	R16-248	5/10/03	Â
RPV STUD 35-1-14A	RPV STUD	RPV-101	VOL	R16-248	5/10/03	Ä
RPV STUD 35-1-20A	RPV STUD	RPV-101	VOL	R16-248	5/10/03	Ä
RPV STUD 35-1-21A	RPV STUD	RPV-101	VOL	R16-248	5/10/03	A

Notes are on page 14

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- 1. Owner: Energy Northwest, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
- 2. Plant: Columbia Generating Station, Hanford Reservation, Benton County, Washington
- 3. Plant Unit: Columbia Generating Station
- 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	o. Pg	. Metho	d Report No.	Date	Rslts(1)
RPV STUD 35-1-27A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	A
RPV STUD 35-1-28A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Â
RPV STUD 35-1-34A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Â
RPV STUD 35-1-35A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Â
RPV STUD 35-1-41A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Â
RPV STUD 35-1-42A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Â
RPV STUD 35-1-47A	RPV STUD	RPV-101		VÕL	R16-248	5/14/03	Â
RPV STUD 35-1-48A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Ä
RPV STUD 35-1-49A	RPV STUD	<b>RPV-101</b>		VÕL	R16-248	5/10/03	Ä
RPV STUD 35-1-54A	RPV STUD	<b>RPV-101</b>		VOL	R16-248	5/10/03	Ä
RPV STUD 35-1-55A	RPV STUD	<b>RPV-101</b>		SUR	2RPM-008	5/18/03	A
RPV STUD 35-1-55A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Â
RPV STUD 35-1-56A	RPV STUD	<b>RPV-101</b>		SUR	2RPM-008	5/18/03	Ā
RPV STUD 35-1-56A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Â
RPV STUD 35-1-61A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Ā
RPV STUD 35-1-62A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	A
RPV STUD 35-1-63A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	A
RPV STUD 35-1-68A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Ä
RPV STUD 35-1-69A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	A
RPV STUD 35-1-70A	RPV STUD	RPV-101		VOL	R16-248	5/15/03	Â
RPV STUD 35-1-75A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Ä
RPV STUD 35-1-76A	RPV STUD	RPV-101		VOL	R16-248	5/10/03	Ä
Item Number B6.50							
RPV WASHER 35-1-6A	<b>RPV WASHER</b>	RPV-101		VT-1	2RPV-019	5/16/03	A
RPV WASHER 35-1-13A	<b>RPV WASHER</b>	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Â
<b>RPV WASHER 35-1-20A</b>	<b>RPV WASHER</b>	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Ä
RPV WASHER 35-1-27A	<b>RPV WASHER</b>	RPV-101		VT-1	2RPV-019	5/16/03	A
RPV WASHER 35-1-34A	<b>RPV WASHER</b>	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Â
<b>RPV WASHER 35-1-41A</b>	<b>RPV WASHER</b>	RPV-101		VT-1	2RPV-019	5/16/03	Â
RPV WASHER 35-1-47A	RPV WASHER	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Ä
RPV WASHER 35-1-48A	<b>RPV WASHER</b>	RPV-101		VT-1	2RPV-019	5/16/03	Â
RPV WASHER 35-1-54A	<b>RPV WASHER</b>	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Â
RPV WASHER 35-1-55A	<b>RPV WASHER</b>	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Â
RPV WASHER 35-1-61A	RPV WASHER	RPV-101		VT-1	2RPV-019	5/16/03	Â
RPV WASHER 35-1-62A	<b>RPV WASHER</b>	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Ā
RPV WASHER 35-1-68A	<b>RPV WASHER</b>	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Ä
RPV WASHER 35-1-69A	<b>RPV WASHER</b>	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Ä
RPV WASHER 35-1-75A	RPV WASHER	<b>RPV-101</b>		VT-1	2RPV-019	5/16/03	Â
RPV WASHER 35-1-76A	RPV WASHER	RPV-101		VT-1	2RPV-019	5/16/03	Â
Examination Category B-G-2 Item Number B7.50							
4RWCU(3)-4BD	FLANGE BOLTING	RWCU-101	02	VT-1	2RTV-005	5/23/03	A
4RWCU(3)-10BD	FLANGE BOLTING	RWCU-101	02	VT-1	2RTV-007	5/23/03	A
Item Number B7.70							
MS-V-22B-BLT	VALVE BOLTING	MS-102	02	VT-1	2MSV-142	5/15/03	Α
MS-V-28B-BLT	VALVE BOLTING	MS-102	02	VT-1	2MSV-147	5/26/03	Â
MS-V-22C-BLT	VALVE BOLTING	MS-103	02	VT-1	2MSV-143	5/15/03	Â
MS-V-28C-BLT	VALVE BOLTING	MS-103	02	VT-1	2MSV-148	5/26/03	Â
RCIC-V-63-BLT	VALVE BOLTING	RCIC-101	01	VT-1	2RIV-011	5/12/03	Â
RHR-V-112A-BLT	VALVE BOLTING	RHR-105		VT-1	2RHV-023	5/15/03	Â
RHR-V-112B-BLT	VALVE BOLTING	RHR-106		VT-1	2RHV-023	5/15/03	Â
		1411/-144		VI-1		3/10/03	~

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

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

Identification No.	Description	Diagram No	. Pg.	Method	l Report No.	Date	Rslts(1)
RRC-V-23B-BLT RWCU-V-100-BLT RWCU-V-4-BLT	VALVE BOLTING VALVE BOLTING VALVE BOLTING	RRC-102 RWCU-101 RWCU-101	01 02 05	VT-1 VT-1 VT-1	2RRV-009 2RTV-006 2RTV-009	5/21/03 5/23/03 6/4/03	A A A
Examination Category B-H Item Number B8.10							
CG CG	SKIRT KNUCKLE SKIRT KNUCKLE	RPV-101 RPV-101		SUR SUR	2RPM-010 2RPM-011	5/21/03 5/22/03	A A
Examination Category B-J Item Number B9.11							
12HPCS(1)-19 26MS(1)B-16 26MS(1)C-16 10RCIC(12)-10 10RCIC(12)-10 10RCIC(12)-10 10RCIC(12)-12 10RCIC(12)-13 10RCIC(12)-14 5RFW(1)A-2 12RFW(1)A-7 12RFW(1)A-7 12RFW(1)A-7 12RFW(1)A-7 12RHR(1)A-7 12RHR(1)A-3 12RHR(1)A-4 12RHR(1)A-5 12RHR(1)A-5 12RHR(1)A-5 12RHR(1)A-6 12RHR(1)A-13 12RHR(1)B-12 12RHR(1)B-13 24RRC(2)B-7 24RRC(2)B-8 24RRC(2)B-9 24RRC(2)B-10 24RRC(1)B-11 24RRC(1)B-15 24RRC(1)B-15 24RRC(1)B-16 24RRC(1)B-17 6RWCU(3)-22 Item Number B9.31	PIPE TO ELL PIPE TO VALVE PIPE TO VALVE PIPE TO ELL ELL TO PIPE TEE TO PIPE PIPE TO ELL ELL TO PIPE SLEEVE TO WOL ELL TO PIPE SLEEVE TO WOL ELL TO PIPE PIPE TO ELL ELL TO PIPE PIPE TO ELL ELL TO PIPE PIPE TO ELL ELL TO PIPE PIPE TO VALVE ELL TO PIPE PIPE TO VALVE VALVE TO PIPE PIPE TO VALVE VALVE TO PIPE PIPE TO VALVE ELL TO PIPE PIPE TO VALVE VALVE TO PIPE PIPE TO VALVE VALVE TO PIPE PIPE TO VALVE VALVE TO PIPE PIPE TO VALVE VALVE TO PIPE PIPE TO VALVE	HPCS-101 MS-102 MS-103 RCIC-101 RCIC-101 RCIC-101 RCIC-101 RCIC-101 RCIC-101 RFW-101 RFW-101 RFW-101 RFW-101 RFW-101 RFW-105 RHR-105 RHR-105 RHR-105 RHR-105 RHR-105 RHR-105 RHR-106 RHR-106 RHR-102 RRC-102	02 02 01 01 01 01 01 01 01 01 01 01 01 01 01	VOL VOL VOL VOL VOL VOL VOL VOL VOL VOL	R16-012 R16-070 R16-073 R16-011 R16-001 R16-002 R16-004 R16-005 R16-005 R16-015 R16-016 R16-013 R16-018 R16-018 R16-018 R16-018 R16-020 R16-022 R16-023 R16-024 R16-025 R16-025 R16-026 R16-065 R16-065 R16-066 R16-065 R16-066 R16-067 R16-061 R16-062 R16-063 R16-063 R16-097 R16-098 R16-099 R16-099	5/13/03 5/16/03 5/14/03 5/12/03 5/12/03 5/12/03 5/12/03 5/12/03 5/12/03 5/12/03 5/12/03 5/5/03 5/5/03 5/5/03 5/5/03 5/5/03 5/5/03 5/5/03 5/5/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/14/03 5/21/03 5/21/03 5/21/03 5/21/03 5/21/03 5/21/03 5/21/03 5/21/03 5/21/03 5/21/03 5/21/03 5/23/03	~~~~~~~~~~~~~~~~~~~~~~~~~
24RRC(2)B-8/4RRC(8)-4S 24RRC(2)B-8/4RRC(4)-4S 24RRC(1)B-11/4RRC(8)-4S	PIPE TO SWL PIPE TO SWL PIPE TO SWL	RRC-102 RRC-102 RRC-102	01 01 02	VOL VOL VOL	R16-068 R16-067 R16-058	5/21/03 5/21/03 5/19/03	A A A
Item Number B9.40							
5RFW(11)A-1	SLEEVE-SLEEVE	RFW-101	01	SUR	2FWM-018	5/26/03	A

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- 1. Owner: Energy Northwest, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
- 2. Plant: Columbia Generating Station, Hanford Reservation, Benton County, Washington
- 3. Plant Unit: Columbia Generating Station
- 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	l Report No.	Date	Rslts(1)
Examination Category B-K-1 Item Number B10.10							
LPCS-13(W)	4 WELDED LUGS	LPCS-101	01	SUR	2LPM-013	4/29/03	A
Examination Category B-M-2 Item Number B12.50							
MS-V-22A-BDY RWCU-V-4-BDY	VALVE BODY VALVE BODY	MS-101 RWCU-101	02 05	VT-3 VT-3	2MSV-149 2RTV-008	6/19/03 6/3/03	A A
Examination Category B-P Item Number B15.10							
RPV-PB-101(L) RPV-PB-102(L)	LK PRES BNDRY LK PRES BNDRY	RPV-101 RPV-102		VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801		A A
item Number B15.50					·		
HPCS-PB-101(L) LPCS-PB-101(L) MS-PB-102(L) MS-PB-103(L) MS-PB-103(L) MS-PB-104(L) MS-PB-106(L) RCIC-PB-101(L) RCIC-PB-102(L) RFW-PB-101(L)	LK PRES BNDRY LK PRES BNDRY	HPCS-101 LPCS-101 MS-101 MS-102 MS-103 MS-104 MS-105 MS-106 RCIC-101 RCIC-102 RFW-101		VT-2 VT-2 VT-2 VT-2 VT-2 VT-2 VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801	6/11/03 6/11/03 6/11/03 6/11/03 6/11/03 6/11/03 6/11/03 6/11/03 6/11/03	A A A A A A A A A A A A A A A A A A A
RFW-PB-102(L) RHR-PB-101(L) RHR-PB-102(L)	LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY	RFW-102 RHR-101 RHR-102 RHR-103		VT-2 VT-2 VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801	6/11/03 6/11/03 6/11/03	А А А А
RHR-PB-103(L) RHR-PB-104(L) RHR-PB-105(L) RHR-PB-106(L)	LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY	RHR-104 RHR-105 RHR-106		VT-2 VT-2 VT-2 VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801	6/11/03 6/11/03 6/11/03	A A A
RRC-PB-101(L) RRC-PB-102(L) RRC-PB-104(L) RRC-PB-105(L) RRC-PB-106(L)	LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY	RRC-101 RRC-102 RRC-104 RRC-105 RRC-106		VT-2 VT-2 VT-2 VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801	6/11/03 6/11/03 6/11/03	A A A A
RRC-PB-107(L) RRC-PB-108(L) RRC-PB-109(L) RRC-PB-110(L)	LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY	RRC-107 RRC-108 RRC-109 RRC-110		VT-2 VT-2 VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801	6/11/03 6/11/03	A A A A
RRC-PB-111(L) RWCU-PB-101(L) SLC-PB-101(L)	LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY	RRC-111 RWCU-101 SLC-101		VT-2 VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801 OSP-RPV-R801	6/11/03 6/11/03	A A A
Item Number B15.60							
RRC-P-1A-BDY(L) RRC-P-1B-BDY(L)	LK PRES BNDRY LK PRES BNDRY	RRC-103 RRC-103		VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801		A A

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

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

Identification No.	Description	Diagram No	. Pg.	Metho	d Report No.	Date	Rslts(1)
Item Number B15.70							
HPCS-V-4-BDY(L)	LK PRES TEST	HPCS-101	01	VT-2	OSP-RPV-R801	6/11/03	A
HPCS-V-5-BDY(L)	LK PRES TEST	HPCS-101	02	VT-2	OSP-RPV-R801		Ä
HPCS-V-51-BDY(L)	LK PRES TEST	HPCS-101	02	VT-2	OSP-RPV-R801		Ä
LPCS-V-5-BDY(L)	LK PRES TEST	LPCS-101	01	VT-2	OSP-RPV-R801	6/11/03	Ä
LPCS-V-6-BDY(L)	LK PRES TEST	LPCS-101	02	VT-2	OSP-RPV-R801	6/11/03	A
LPCS-V-51-BDY(L)	LK PRES TEST	LPCS-101	02	VT-2	OSP-RPV-R801	6/11/03	A
MS-RV-4A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	OSP-RPV-R801		A
MS-RV-3A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	OSP-RPV-R801		A
MS-RV-2A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	OSP-RPV-R801		A
MS-RV-1A-BDY(L)	LK PRES TEST	MS-101	01	VT-2	OSP-RPV-R801		A
MS-V-22A-BDY(L) MS-V-28A-BDY(L)	LK PRES TEST	MS-101	02	VT-2	OSP-RPV-R801		A
MS-RV-5B-BDY(L)	LK PRES TEST LK PRES TEST	MS-101 MS-102	02 01	VT-2	OSP-RPV-R801		A
MS-RV-4B-BDY(L)	LK PRES TEST	MS-102 MS-102	01	VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801		A A
MS-RV-3B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	OSP-RPV-R801		Ă
MS-RV-2B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	OSP-RPV-R801		Â
MS-RV-1B-BDY(L)	LK PRES TEST	MS-102	01	VT-2	OSP-RPV-R801		Â
MS-V-22B-BDY(L)	LK PRES TEST	MS-102	02	VT-2	OSP-RPV-R801		Â
MS-V-28B-BDY(L)	LK PRES TEST	MS-102	02	VT-2	OSP-RPV-R801		Â
MS-RV-5C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	OSP-RPV-R801		Ä
MS-RV-4C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	OSP-RPV-R801		Ä
MS-RV-3C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	OSP-RPV-R801		Â
MS-RV-2C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	OSP-RPV-R801	6/11/03	Ä
MS-RV-1C-BDY(L)	LK PRES TEST	MS-103	01	VT-2	OSP-RPV-R801	6/11/03	Α
MS-V-22C-BDY(L)	LK PRES TEST	MS-103	02	VT-2	OSP-RPV-R801	6/11/03	A
MS-V-28C-BDY(L)	LK PRES TEST	MS-103	02	VT-2	OSP-RPV-R801		Α
MS-RV-4D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	OSP-RPV-R801		Α
MS-RV-3D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	OSP-RPV-R801		A
MS-RV-2D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	OSP-RPV-R801		A
MS-RV-1D-BDY(L)	LK PRES TEST	MS-104	01	VT-2	OSP-RPV-R801		A
MS-V-22D-BDY(L)	LK PRES TEST	MS-104	02	VT-2	OSP-RPV-R801		A
MS-V-28D-BDY(L) RCIC-V-63-BDY(L)	LK PRES TEST	MS-104	02	VT-2	OSP-RPV-R801		A
RCIC-V-64-BDY(L)	LK PRES TEST LK PRES TEST	RCIC-101 RCIC-101	01 01	VT-2	OSP-RPV-R801		R
RHR-V-23-BDY(L)	LK PRES TEST	RCIC-101	01	VT-2 VT-2	OSP-RPV-R801		A
RHR-V-19-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	OSP-RPV-R801 OSP-RPV-R801		A
RCIC-V-13-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	OSP-RPV-R801		A A
RCIC-V-65-BDY(L)	LK PRES TEST	RCIC-102	01	VT-2	OSP-RPV-R801		Â
RCIC-V-66-BDY(L)	LK PRES TEST	RCIC-102	03	VT-2	OSP-RPV-R801		Â
RFW-V-65A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	OSP-RPV-R801		Â
RFW-V-32A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	OSP-RPV-R801		Ä
RFW-V-10A-BDY(L)	LK PRES TEST	<b>RFW-101</b>	01	VT-2	OSP-RPV-R801		Ä
RFW-V-11A-BDY(L)	LK PRES TEST	RFW-101	01	VT-2	OSP-RPV-R801		A
RFW-V-65B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	OSP-RPV-R801		Â
RFW-V-32B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	OSP-RPV-R801	<b></b>	R
RFW-V-10B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	OSP-RPV-R801	6/11/03	A
RFW-V-11B-BDY(L)	LK PRES TEST	RFW-102	01	VT-2	OSP-RPV-R801		A
RWCU-V-40-BDY(L)	LK PRES TEST	RFW-103		VT-2	OSP-RPV-R801	6/11/03	Α
RHR-V-42A-BDY(L)	LK PRES TEST	RHR-101		VT-2	OSP-RPV-R801		A
RHR-V-41A-BDY(L)	LK PRES TEST	RHR-101		VT-2	OSP-RPV-R801		Α
RHR-V-111A-BDY(L)	LK PRES TEST	RHR-101		VT-2	OSP-RPV-R801	6/11/03	Α
RHR-V-42B-BDY(L)	LK PRES TEST	RHR-102		VT-2	OSP-RPV-R801	6/11/03	Α
RHR-V-41B-BDY(L)	LK PRES TEST	RHR-102		VT-2	OSP-RPV-R801	6/11/03	Α
RHR-V-111B-BDY(L)	LK PRES TEST	RHR-102		VT-2	OSP-RPV-R801	6/11/03	Α
RHR-V-42C-BDY(L)	LK PRES TEST	RHR-103		VT-2	OSP-RPV-R801	6/11/03	A

- 1. Owner: Energy Northwest, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
- 2. Plant: Columbia Generating Station, Hanford Reservation, Benton County, Washington
- 3. Plant Unit: Columbia Generating Station
- 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	Rslts(1)
RHR-V-41C-BDY(L)	LK PRES TEST	RHR-103		VT-2	OSP-RPV-R80	1 6/11/03	A
RHR-V-111C-BDY(L)	LK PRES TEST	RHR-103		VT-2	OSP-RPV-R80	6/11/03	Ä
RHR-V-113-BDY(L)	LK PRES TEST	RHR-104		VT-2	OSP-RPV-R801		A
RHR-V-9-BDY(L)	LK PRES TEST	RHR-104		VT-2	OSP-RPV-R801		A
RHR-V-8-BDY(L)	LK PRES TEST	RHR-104		VT-2	OSP-RPV-R801		A
RHR-V-53A-BDY(L)	LK PRES TEST	RHR-105		VT-2	OSP-RPV-R801		A
RHR-V-50A-BDY(L)	LK PRES TEST	RHR-105		VT-2	OSP-RPV-R801		A
RHR-V-112A-BDY(L)	LK PRES TEST	RHR-105		VT-2	OSP-RPV-R801		A
RHR-V-50B-8DY(L) RHR-V-112B-8DY(L)	LK PRES TEST LK PRES TEST	RHR-106 RHR-106		VT-2 VT-2	OSP-RPV-R801 OSP-RPV-R801		A A
RRC-V-23A-BDY(L)	LK PRES TEST	RRC-101	01	VT-2	OSP-RPV-R801		A .
RRC-V-60A-BDY(L)	LK PRES TEST	RRC-101	02	VT-2	OSP-RPV-R801		Â
RRC-V-67A-BDY(L)	LK PRES TEST	RRC-101	02	VT-2	OSP-RPV-R801		Â
RRC-V-23B-BDY(L)	LK PRES TEST	RRC-102	01	VT-2	OSP-RPV-R801		A
RRC-V-60B-BDY(L)	LK PRES TEST	RRC-102	02	VT-2	OSP-RPV-R801	6/11/03	A
RRC-V-67B-8DY(L)	LK PRES TEST	RRC-102	02	VT-2	OSP-RPV-R801		A
RWCU-V-102-BDY(L)	LK PRES TEST	RWCU-101	02	VT-2	OSP-RPV-R801		A
RWCU-V-1-BDY(L)	LK PRES TEST	RWCU-101	04	VT-2	OSP-RPV-R801		A
RWCU-V-4-BDY(L)	LK PRES TEST	RWCU-101	05	VT-2	OSP-RPV-R801	6/11/03	A
Examination Category C-C Item Number C3.20							
RHR-188(W)	4 WELDED LUGS	RHR-201	02	SUR	2RHM-067	4/21/03	A
RHR-420(W)	<b>4 WELDED LUGS</b>	RHR-203	03	SUR	2RHM-063	4/16/03	Â
RHR-918N(W)	8 WELDED LUGS	RHR-207	01	SUR	2RHM-059	4/15/03	Ä
Examination Category C-F-2 Item Number C5.51							
16HPCS(1)-42	ELL TO PIPE	HPCS-202	05	SUR	2HPM-012	4/22/03	A
16HPCS(1)-42	ELL TO PIPE	HPCS-202	05	VOL	R16-028	4/22/03	Α
16HPCS(1)-50	PIPE TO RED	HPCS-202	06	SUR	2HPM-013	4/22/03	A
16HPCS(1)-50	PIPE TO RED	HPCS-202	06	VOL	R16-029	4/22/03	A
24LPCS(2)-8		LPCS-201	02	SUR	2LPM-014	4/29/03	A
24LPCS(2)-8 24LPCS(2)-16	PIPE TO ELL PIPE TO NOZZLE	LPCS-201 LPCS-201	02 02	VOL SUR	R16-049 2LPM-015	4/30/03 5/1/03	A A
24LPCS(2)-16	PIPE TO NOZZLE	LPCS-201	02	VOL	R16-048	5/1/03	Â
30MS(1)A-7	PIPE TO ELL	MS-201	02	SUR	2MSM-048	5/20/03	Â
30MS(1)A-7	PIPE TO ELL	MS-201	02	VOL	R16-078	5/20/03	Â
30MS(1)A-16	ELL TO PIPE	MS-201	02	SUR	2MSM-049	5/20/03	A
30MS(1)A-16	ELL TO PIPE	MS-201	02	VOL	R16-077	5/20/03	Α
18MS(1)A-3	ELL TO PIPE	MS-201	03	SUR	2MSM-046	5/20/03	Α
18MS(1)A-3	ELL TO PIPE	MS-201	03	VOL	R16-032	5/20/03	A
18MS(1)A-8	PIPE TO ELL	MS-201	03	SUR	2MSM-046	5/20/03	A
18MS(1)A-8	PIPE TO ELL	MS-201	03	VOL	R16-033	5/20/03	A
18MS(1)A-9	ELL TO PIPE ELL TO PIPE	MS-201 MS-201	03	SUR	2MSM-046	5/20/03	A
18MS(1)A-9	PIPE TO VALVE	MS-201 MS-205	03	VOL SUR	R16-034 2MSM-047	5/20/03 5/20/03	A
24MS(1)-2 24MS(1)-2	PIPE TO VALVE	MS-205 MS-205		VOL	R16-050	5/20/03	A A
6RCIC(1)-54	ELL TO PIPE	RCIC-205	01	SUR	2RIM-017	4/28/03	Â
6RCIC(1)-54	ELL TO PIPE	RCIC-205	01	VOL		4/28/03	Â
6RCIC(1)-65	PIPE TO TEE	RCIC-205	02	SUR		4/28/03	Â
6RCIC(1)-65	PIPE TO TEE	RCIC-205	02	VOL		4/28/03	Â
6RCIC(6)-1	TEE TO PIPE	RCIC-205	03	SUR		4/28/03	A
6RCIC(6)-1	TEE TO PIPE	RCIC-205	03	VOL		4/28/03	Α
6RCIC(6)-2	PIPE TO ELL	RCIC-205	03	SUR	2RIM-020	4/28/03	Α

1. A. A. B.

1. Owner: Energy Northwest, 3000 George Washington Way, PO Box 968, Richland, Washington 99352

2. Plant: Columbia Generating Station, Hanford Reservation, Benton County, Washington

3. Plant Unit: Columbia Generating Station

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.	. Metho	d Report No.	Date	Rslts(1)
LPCS-P-1N-3 RCIC-P-1D	PMP NOZZLE WELD PMP NOZZLE WELD	LPCS-208 RCIC-205	01 01	sur Sur	2LPM-012 2RIM-016	4/29/03 4/28/03	A A
Examination Category D-A Item Number D1.20							
MSH-29(W) MSH-30(W)	ATTACH WELD ATTACH WELD	MS-210 MS-210	01 02	VT-3 VT-3	2MSV-145 2MSV-146	5/20/03 5/20/03	A A
Item Number D1.40							
MS-289(W)	WELDED ATTACH	MS-308	02	VT-3	2MSV-141	5/15/03	A
Examination Category D-B Item Number D2.10							
CCH-PB-304(L) CCH-PB-305(L) CCH-PB-306(L) SW-PB-302(L) SW-PB-302(L) SW-PB-303(L) SW-PB-305(L) SW-PB-306(L) SW-PB-306(L) SW-PB-308(L) SW-PB-308(L) SW-PB-309(L) SW-PB-310(L) SW-PB-311(L) SW-PB-311(L) SW-59(W) SW-436(W) SW-436(W) SW-123(W) SW-81(W) SW-13(W)	LK PRES BNDRY LK PRES BNDRY	CCH-304 CCH-305 CCH-306 SW-301 SW-302 SW-303 SW-304 SW-305 SW-306 SW-306 SW-307 SW-308 SW-309 SW-310 SW-301 SW-301 SW-301 SW-301 SW-307 SW-309	02 02 06 01	VVV222222222222222222222333 VVVVVV22222222	2CCV-004 2CCV-004 2SWV-022 2SWV-019 2SWV-019 2SWV-021 2SWV-022 2SWV-020 2SWV-020 2SWV-020 2SWV-021 2SWV-023 2SWV-023 2SWV-023 2SWV-023 2SWV-023 2SWV-023 2SWV-023	4/9/02 4/9/02 11/14/02 2/12/03 2/12/03 11/14/02 2/12/03 2/12/03 2/12/03 2/12/03 11/14/02 11/14/02 11/14/02 11/14/02 11/14/02 11/14/02 11/14/02 11/14/02 11/14/02 11/14/02 11/14/02 11/14/03 4/22/03 4/22/03	****
Item Number D2.40		<b>614/ 005</b>					
SW-22(W) Examination Category D-C Item Number D3.10	WELDED ATTACH	SW-305	04	VT-3	2SWV-026	4/15/03	A
FPC-PB-301(L) FPC-PB-302(L) FPC-PB-303(L) FPC-PB-304(L) FPC-PB-305(L) Examination Category F-A	LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY LK PRES BNDRY	FPC-301 FPC-302 FPC-303 FPC-304 FPC-305		VT-2 VT-2 VT-2 VT-2 VT-2	2FPC-002 2FPV-002 2FPC-002 2FPC-002 2FPC-002	2/11/03 2/11/03 2/11/03 2/11/03 2/11/03 2/11/03	A A A A A
Item Number F1.10A MS-SD-1 MS-SD-2 RWCU-1C-1	STRUT STRUT STRUT	MS-104 MS-104 RWCU-101	02 02 04	VT-3 VT-3 VT-3	2HV-354 2HV-356 2HV-372	5/15/03 5/15/03 5/23/03	A A A
	U 1101		<b>U</b> -1	¥ 1-J	7014-012	3/23/03	~

Item Number F1.10B

Notes are on page 14

- 1. Owner: Energy Northwest, 3000 George Washington Way, PO Box 968, Richland, Washington 99352
- 2. Plant: Columbia Generating Station, Hanford Reservation, Benton County, Washington
- 3. Plant Unit: Columbia Generating Station
- 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	Rslts(1)
6RCIC(6)-2	PIPE TO ELL	RCIC-205	03	VOL	R16-095	4/28/03	٨
6RCIC(1)-72	ELL TO PIPE	RCIC-205	04	SUR	2RIM-021	4/28/03	A A
6RCIC(1)-72	ELL TO PIPE	RCIC-205	04	VOL	R16-093	4/28/03	Â
18RHR(1)A-4	PIPE TO ELL	RHR-201	01	SUR	2RHM-068	4/21/03	Â
18RHR(1)A-4	PIPE TO ELL	RHR-201	01	VOL	R16-036	4/21/03	Â
18RHR(1)A-5	ELL TO PIPE	RHR-201	01	SUR	2RHM-069	4/21/03	Â
18RHR(1)A-5	ELL TO PIPE	RHR-201	01	VOL	R16-037	4/21/03	Â
18RHR(1)A-6	PIPE TO ELL	RHR-201	01	SUR	2RHM-070	4/21/03	Â
18RHR(1)A-6	PIPE TO ELL	RHR-201	01	VOL	R16-038	4/21/03	Â
18RHR(1)A-21	PIPE TO TEE	RHR-201	02	SUR	2RHM-076	4/22/03	Â
18RHR(1)A-21	PIPE TO TEE	RHR-201	02	VOL	R16-035	4/23/03	Â
12RHR(1)A-1C	FLANGE TO PIPE	RHR-201	11	SUR	2RHM-077	4/24/03	Â
12RHR(1)A-1C	FLANGE TO PIPE	RHR-201	11	VOL	R16-017	4/24/03	Â
12RHR(1)A-3A	PIPE TO ELL	RHR-201	11	SUR	2RHM-078	4/24/03	Â
12RHR(1)A-3A	PIPE TO ELL	RHR-201	11	VOL	R16-021	4/24/03	Â
16RHR(5)A-3	ELL TO PIPE	RHR-202	01	SUR	2RHM-083	5/22/03	Ä
16RHR(5)A-3	ELL TO PIPE	RHR-202	01	VOL	R16-030	5/22/03	Â
18RHR(4)A-23	ELL TO PIPE	RHR-203	02	SUR	2RHM-073	4/22/03	A
18RHR(4)A-23	ELL TO PIPE	RHR-203	02	VOL	R16-042	4/22/03	A
18RHR(4)A-25	PIPE TO ELL	RHR-203	02	SUR	2RHM-074	4/22/03	A
18RHR(4)A-25	PIPE TO ELL	RHR-203	02	VOL	R16-043	4/22/03	Â
18RHR(2)A-1	REDUCER TO PIPE	RHR-205	02	SUR	2RHM-061	4/16/03	A
18RHR(2)A-1	REDUCER TO PIPE	RHR-205	02	VOL	R16-039	4/17/03	A
18RHR(2)A-2	PIPE TO TEE	RHR-205	02	SUR	2RHM-062	4/16/03	Α
18RHR(2)A-2	PIPE TO TEE	RHR-205	02	VOL	R16-041	4/17/03	Α
18RHR(2)A-12	PIPE TO TEE	RHR-205	03	SUR	2RHM-072	4/21/03	Α
18RHR(2)A-12	PIPE TO TEE	RHR-205	03	VOL	R16-040	4/21/03	A
24RHR(2)A-2	TEE TO PIPE	RHR-205	03	SUR	2RHM-071	4/21/03	A
24RHR(2)A-2	TEE TO PIPE	RHR-205	03	VOL	R16-051	4/21/03	A
24RHR(2)A-6	FLANGE TO ELL	RHR-205	03	SUR	2RHM-064	4/17/03	A
24RHR(2)A-6	FLANGE TO ELL	RHR-205	03	VOL	R16-052	4/17/03	A
24RHR(3)A-10	ELL TO TEE	RHR-205	04	SUR	2RHM-065	4/17/03	A
24RHR(3)A-10		RHR-205	04	VOL	R16-056	4/17/03	A
20RHR(8)A-1B 20RHR(8)A-1B	FLANGE TO PIPE	RHR-206 RHR-206	01	SUR	2RHM-068	4/17/03	A
20RHR(8)A-17	ELL TO PIPE	RHR-206	01 03	VOL	R16-046	4/17/03	A
20RHR(8)A-17	ELL TO PIPE	RHR-206	03	SUR VOL	2RHM-075	4/23/03	A
16RHR(5)B-6	PIPE TO VALVE	RHR-207	14	SUR	R16-045 2RHM-058	4/23/03	A
16RHR(5)B-6	PIPE TO VALVE	RHR-207	14	VOL	R16-031	4/15/03	A
14RHR(1)C-1	RED TO PIPE	RHR-210	04	SUR	2RHM-079	4/16/03	A
14RHR(1)C-1	RED TO PIPE	RHR-210	04	VOL	R16-027	5/1/03 5/1/03	A
24RHR(3)-2	VALVE TO PIPE	RHR-211	01	SUR	2RHM-080	5/2/03	A
24RHR(3)-2	VALVE TO PIPE	RHR-211	01	VOL	R16-053	5/5/03	A A
24RHR(3)-6	ELL TO PIPE	RHR-211	01	SUR	2RHM-081	5/2/03	Â
24RHR(3)-6	ELL TO PIPE	RHR-211	01	VOL	R16-054	5/5/03	Â
24RHR(3)-8	ELL TO PIPE	RHR-211	01	SUR	2RHM-082	5/2/03	Â
24RHR(3)-8	ELL TO PIPE	RHR-211	01	VOL	R16-055	5/5/03	â
Item Number C8.81				VOL			~
20RHR(2)A-11/10RHR(2)-2	PIPE TO WOL	RHR-205	02	SUR	2RHM-060	4/16/03	A
Examination Category C-G Item Number C6.10							
LPCS-P-1C-4 LPCS-P-1C-5	PMP CAS/CIR WLD PMP CAS/CIR WLD		01 01		2LPM-010 2LPM-011	4/29/03 4/29/03	A A

Owner: Energy Northwest, 3000 George Washington Way, PO Box 968, Richland, Washington 99352 1.

Columbia Generating Station, Hanford Reservation, Benton County, Washington 2. Plant:

Plant Unit: Columbia Generating Station 3.

**Owner Certificate of Authorization:** NA 4.

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**Commercial Service Date: 12/13/84** 5.

National Board Number: NA 6.

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

Identification No.	Description	Diagram No.	. Pg.	Method	Report No.	Date	Rslts(1)
RRC-6	SPRING	RRC-109		VT-3	2HV-361	5/19/03	A
Item Number F1.10C							
LPCS-13	SPRING	LPCS-101	01	VT-3	2HV-320	4/29/03	A
MS-1368-11	SPRING	MS-105	02	VT-3	2HV-357	5/15/03	A
RCIC-74	SPRING	RCIC-101	01	VT-3	2HV-352	5/12/03	A
RCIC-59	SPRING	RCIC-101	03	VT-3	2HV-351	5/12/03	A
RWCU-146	SPRING	RWCU-101	02	VT-3	2HV-371	5/23/03	A
Item Number F1.10D							
MS-1368-12	PSA-1/2 SNUBBER	MS-105	02	VT-3	2HV-376	5/27/03	A
RHR-SA-38	PSA-10 SNUBBER	RHR-105		VT-3	2HV-360	5/15/03	A
RWCU-1C-8	PSA-3 SNUBBER	RWCU-101	03	VT-3	2HV-377	6/3/03	A
Item Number F1.20A							
LPCS-3	ANCHOR	LPCS-201	01	VT-3	2HV-321	4/29/03	A
LPCS-1	RIGID	LPCS-201	02	VT-3	2HV-349	4/29/03	Â
MS-98	STRUT	MS-201	03	VT-3	2HV-364	5/19/03	A
MS-997N	STRUT	MS-202	02	VT-3	2HV-363	5/19/03	A
MS-1010N	STRUT	MS-204	02	VT-3	2HV-366	5/19/03	Α
RCIC-8	STRUT	RCIC-205	03	VT-3	2HV-319	4/28/03	A
RHR-412	STRUT	RHR-203	02	VT-3	2HV-308	4/22/03	Α
RHR-415	STRUT	RHR-203	02	VT-3	2HV-311	4/22/03	Α
RHR-132	ANCHOR	RHR-206	03	VT-3	2HV-317	4/24/03	A
RHR-916N	RIGID	RHR-206	03	VT-3	2HV-318	4/24/03	A
RHR-557	STRUT	RHR-207	06	VT-3	2HV-298	4/15/03	A
RHR-184	STRUT	RHR-207	16	VT-3	2HV-299	4/16/03	A
RHR-98	STRUT	RHR-210	05	VT-3	2HV-374	5/27/03	A
RHR-97	BOX	RHR-210	05	VT-3	2HV-373	5/27/03	A
RHR-905N	STRUT	RHR-211	01	VT-3	2HV-350	5/2/03	A
RHR-900N	STRUT	RHR-211	01	VT-3	2HV-346	5/2/03	A
RHR-46	BOX	RHR-211	01	VT-3	2HV-347	5/2/03	A
RHR-966N	ANCHOR	RHR-211	01	VT-3	2HV-348	5/2/03	A
Item Number F1.20C							
MS-121	SPRING	MS-201	02	VT-3	2HV-365	5/19/03	A
MS-97	SPRING	MS-201	03	VT-3	2HV-368	5/19/03	Α
MS-171	SPRING	MS-202	02	VT-3	2HV-362	5/19/03	Α
RHR-161	SPRING	RHR-201	01	VT-3	2HV-307	4/21/03	Α
RHR-188	SPRING	RHR-201	02	VT-3	2HV-306	4/21/03	Α
RHR-420	SPRING	RHR-203	03	VT-3	2HV-305	4/17/03	A
Item Number F1.20D							
MS-96	PSA-10 SNUBBER	MS-201	03	VT-3	2HV-367	5/19/03	Α
MS-50 MS-177	PSA-3 SNUBBER	MS-202	03	VT-3	2HV-369	5/19/03	Ä
RHR-414	STRUT	RHR-203	02	VT-3	2HV-309	4/22/03	Ā
RHR-416	PSA-10 SNUBBER	RHR-203	02	VT-3	2HV-310	4/22/03	Â
RHR-419	PSA-3 SNUBBER	RHR-203	03	VT-3	2HV-304	4/17/03	Â
RHR-59	PSA-10 SNUBBER	RHR-205	02	VT-3	2HV-301	4/16/03	Â
RHR-61	PSA-10 SNUBBER	RHR-205	02	VT-3	2HV-303	4/16/03	Â
RHR-60	PSA-3 SNUBBER	RHR-205	02	VT-3	2HV-302	4/16/03	Ä

1. Owner: Energy Northwest, 3000 George Washington Way, PO Box 968, Richland, Washington 99352

NA

- 2. Plant: Columbia Generating Station, Hanford Reservation, Benton County, Washington
- 3. Plant Unit: Columbia Generating Station
- 4. Owner Certificate of Authorization:
- 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	l Report No.	Date	Rslts(1)
RHR-495	PSA-35 SNUBBER	RHR-207	13	VT-3	2HV-355	5/15/03	A
Item Number F1.30A							
FPC-126	STRUT	FPC-306		VT-3	2HV-292	4/14/03	A
FPC-123	BOX	FPC-306		VT-3	2HV-291	4/14/03	Ā
MSH-42	RIGID	MS-215	02	VT-3	2HV-370	5/20/03	Â
SW-59	BOX	SW-301	02	VT-3	2HV-312	4/22/03	Ä
SW-436	STRUT	SW-301	02	VT-3	2HV-313	4/22/03	Â
SW-123	RIGID	SW-301	06	VT-3	2HV-316	4/22/03	A
SW-941N	BOX	SW-303	08	VT-3	2HV-342	5/1/03	Ă
SW-940N	BOX	SW-303	08	VT-3	2HV-343	5/1/03	Â
SW-939N	BOX	SW-303	08	VT-3	2HV-344	5/1/03	Â
SW-938N	BOX	SW-303	08	VT-3	2HV-314	4/22/03	Â
SW-936N	BOX	SW-303	08	VT-3	2HV-345	5/1/03	Â
SW-80	BOX	SW-307	01	VT-3	2HV-296	4/15/03	Â
SW-81	BOX	SW-307	01	VT-3	2HV-297	4/15/03	Ä
SW-914N	STRUT	SW-307	01	VT-3	2HV-300	4/16/03	Ă
SW-919N	BOX	SW-307	05	VT-3	2HV-332	4/29/03	Ä
SW-920N	BOX	SW-307	05	VT-3	2HV-333	4/29/03	A
SW-921N	BOX	SW-307	05	VT-3	2HV-293	4/15/03	Â
SW-922N	BOX	SW-307	05	VT-3	2HV-334	4/29/03	A
SW-923N	BOX	SW-307	05	VT-3	2HV-335	4/29/03	Â
SW-924N	BOX	SW-307	05	VT-3	2HV-336	4/29/03	Â
SW-925N	BOX	SW-307	05	VT-3	2HV-329	5/1/03	Â
SW-926N	BOX	SW-307	05	VT-3	2HV-328	5/1/03	Â
SW-927N	BOX	SW-307	05	VT-3	2HV-327	5/1/03	Â
SW-928N	BOX	SW-307	05	VT-3	2HV-326	5/1/03	Â
SW-929N	BOX	SW-307	05	VT-3	2HV-337	4/30/03	Â
SW-930N	BOX	SW-307	05	VT-3	2HV-338	4/30/03	Â
SW-931N	BOX	SW-307	05	VT-3	2HV-330	5/1/03	Â
SW-932N	BOX	SW-307	05	VT-3	2HV-331	5/1/03	Â
SW-933N	BOX	SW-307	05	VT-3	2HV-339	5/1/03	Â
SW-934N	BOX	SW-307	05	VT-3	2HV-340	4/30/03	Â
SW-935N	BOX	SW-307	05	VT-3	2HV-341	5/1/03	Â
SW-13	BOX	SW-309	00	VT-3	2HV-315	4/22/03	Â
	20/1	011 000		11-0	2114-010	4122103	^
Item Number F1.30C							
MS-289	SPRING	MS-308	02	VT-3	2HV-353	5/15/03	A
MS-300	SPRING	MS-312	01	VT-3	2HV-358	5/15/03	A
MS-324	SPRING	MS-314	01	VT-3	2HV-359	5/15/03	Â
SW-22	SPRING	SW-305	04	VT-3	2HV-294	4/15/03	
		U11-UUU	<b>v</b> +	6-1 V	2178-234	-10/03	A
Item Number F1.30D							
SW-29	PSA-10 SNUBBER	SW-305	03	VT-3	2HV-295	4/15/03	Α

Notes to section 13 "Abstract of Examinations and Tests" (1) A = Acceptable R = Rejectable

- END OF REPORT-

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# **NIS-2 OWNER'S REPORTS**

This appendix summarizes ASME Section XI repair or replacement work performed between July 3, 2001 and June 27, 2003. The status of the NIS-2 Owner's Report is stated for each repair and replacement work performed.

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#### ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR COLUMBIA GENERATING STATION REFUELING OUTAGE R16

8/20/2003

PLAN NO	WOT NO	COMPONENT NUMBER AND WORK DESCRIPTION	CODE COMPONE
2-1613	01035797 01	Task wolded who husbing to began for yolds EBC V 102	Maha
		Tack welded yoke bushing to bonnet for valve FPC-V-123 Replaced base for relief when RCC RV 24A See Plan No. 2, 1740	Valve Relief Velve
2-1672	01031539 01	Replaced base for relief valve RCC-RV-34A - See Plan No 2-1740	Relief Valve
2-1681 *	01034197 04	Prefabricated - Modified vent connection with valve RHR-V-632	Piping
2-1681 *	01034197 01	Installed - Modified vent connection with valve RHR-V-632	Piping
2-1682 *	01033599 02	Prefabricated - Modified vent connection with valve RHR-V-739	Piping
2-1682 *	01033599 01	Installed - Modified vent connection with valve RHR-V-739	Piping
2-1683	01033519 01	Replaced rupture disc for CAC-RD-1A	Piping
2-1724	01009558 01	Replaced relief valve FPC-RV-117A	Piping
2-1725	01009559 01	Replaced relief valve FPC-RV-117B	Piping
2-1740	01009560 01	Replaced relief valve RCC-RV-34A - See Plan No 2-1672	Piping
2-1748	01009561 01	Replaced relief valve RCC-RV-34B	Piping
2-1768 *	01029526 01	Performed on-line leak seal (Furmanite) for packing leak for valve MS-V-706A	Valve
2-1769	01029596 01	Replaced mechanical seal for pump RRC-P-1B	Pump
2-1770 *	01029527 01	Replaced valve MS-V-706A	Piping
2-1771 *	01032504 03	Replaced U bolts and jam nuts for supports in Diesel Oil (DO) system	Piping
2-1772 *	01032504 03	Replaced U bolt and jam nuts for support in Service Water (SW) system	Piping
2-1773	01046655 01	Prefabricated 18" Service Water (SW) pipe piece near valve SW-V-12B	Piping
2-1774	01046655 05	Replaced 18" Service Water (SW) pipe piece near valve SW-V-12B	Piping
2-1775	01046655 07	Repaired wasted surfaces for valve SW-V-12B	Vaive
2-1776	01033203 01	Replaced pipe nipple associated with valve CCH-V-28B	Piping
2-1777 *	01036220 01	Prefabricated - Piping work associated with valve PI-V-X269 replacement	Piping
2-1777 *	01036220 02	Prefabricated - Support work associated with valve PI-V-X269 replacement	Support
2-1777 *	01036219 01	Installed - Replaced valve PI-V-X269 - Third Replacement	Piping
2-1778 *	01036219 13	Replaced tubing associated with valve PI-V-X269 - See Plan No 2-1777	Tubing
2-1779	01033452 01	Modified used spare nozzles for Main Steam Relief Valves (MSRV's)	Relief Valves
2-1780	01044667 01	Replaced relief valve SLC-RV-29A	Piping
2-1781	01044666 01	Replaced relief valve SLC-RV-29B	Piping
2-1786	01059620 05	Replaced body to bonnet studs and nuts for valve RCC-TCV-72B	Valve
2-1787	01038874 01	Replaced parts for valve SLC-V-4A	Valve
2-1788	01043129 01	Replaced rupture disc for RCIC-RD-1 and RCIC-RD-2	Piping
2-1789	01047989 01	Prefabricated 18" Service Water (SW) pipe piece near valve SW-V-12A	Piping
2-1789	01047989 05	Replaced 18" Service Water (SW) pipe piece near valve SW-V-12A	Piping
2-1790	01047989 03	Repaired wasted surfaces for valve SW-V-12A	Valve
2-1793 *	01045472 01	Replaced valve MS-V-706C	Piping
2-1794	01037493 01	Installed flushing ports (taps) for Scram Discharge Volume (SDV - CRD)	Piping
2-1796	01004931 01	Replaced existing relief valve MS-RV-1D with spare S/N N63790-03-0122	Piping
2-1797	01004928 01	Replaced existing relief valve MS-RV-2A with spare S/N N63790-03-0051	Piping
2-1798	01004927 01	Replaced existing relief valve MS-RV-3A with spare S/N N63790-03-0058	Piping
2-1799	01039817 01	Replaced existing relief valve MS-RV-3D with spare S/N N63790-03-0057	Piping
2-1800	01004929 01	Replaced existing relief valve MS-RV-5B with spare S/N N63790-03-0060	Piping
2-1801 *	01049646 01	Prefabricated - Replaced valves RCIC-V-25, 26, 54 and associated piping	Piping
2-1801 *	01039141 01	Installed - Replaced valves RCIC-V-25, 26, 54 and associated piping	Piping
2-1802	01038639 01	Replaced relief valve RCIC-RV-17	Piping
2-1803*	01055127 01	Prefabricated - Replaced SW supply and return piping to RHR-HX-2A - See Plan 2-1867	Piping
2-1803 *	01044705 07	Installed - Replaced SW supply and return piping to RHR-HX-2A - See Plan 201007	Piping
2-1803		Prefabricated - Replaced SW supply and return piping to CAC-HR-1B	
2-1804 2-1804	01056149 08	Installed - Replaced SW supply piping to CAC-HR-1B	Piping
	01056149 08 01055125 01		Piping
2-1805 2-1805		Prefabricated - Replaced SW return piping from CAC-HR-1A	Piping
2-1805	01044747 03	Installed - Replaced SW return piping from CAC-HR-1A	Piping
2-1806 *	01056129 02	Prefabricated - Replaced piping material associated with SW-V-777A	Piping
2-1806*	01034304 01	Installed - Replaced piping material associated with SW-V-777A	Piping
	01046272 01	Assembled/Refurbished mechanical seal S/N N01-1 for RRC pumps	Pump
2-1807 2-1809	01045039 02	Replaced relief valve RHR-RV-1A - See plan No 2-1811	Piping

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#### ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR COLUMBIA GENERATING STATION REFUELING OUTAGE R16

8/20/2003

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PLAN NO WOT NO		COMPONENT NUMBER AND WORK DESCRIPTION					
2-1811	01027538 01	Replaced disc for relief valve RHR-RV-1A, S/N N60597-00-0018 - See plan No 2-1809	Relief Valve				
-1812	01038643 01	Replaced relief valve RHR-RV-25B	Piping				
-1813 *	01059091 01	Replaced valve RRC-V-20	Piping				
-1814	01045018 01	Replaced relief valve SW-RV-1A	Piping				
-1815	01038700 01	Replaced relief valve SW-RV-1B	Piping				
-1816	01028746 01	Made body to bonnet seal weld for valve CIA-V-52A	Valve				
-1817	01028745 01	made body to bonnet seal weld for valve CIA-V-58B	Valve				
-1818	01037256 01	Replaced studs and nuts for DCW-HX-1B1	Heat Exchanger				
-1819	01037255 01	Replaced studs and nuts for DCW-HX-1B2	Heat Exchanger				
-1820	01042995 01	Replaced valve COND-V-1060	Piping				
-1821	01049443 08	Replaced studs and nuts for piping flange joints associated with EDR-HX-1	Piping				
-1822	01050687 01	Replaced valve RCIC-PCV-15	Piping				
-1823	01043289 01	Installed hinge pin cover for valve RFW-V-10A	Valve				
-1824	01043293 01	Installed hinge pin cover for valve RFW-V-10B	Valve				
-1825	01037260 11	Fabricated (machined) tube plugs for RHR-HX-1A/1B - See Plan No 2-1826	Heat Exchanger				
-1826	01057255 12	Replaced parts for valve MS-V-22A	Valve				
-1827 *	01027725 01	Replaced valve RFW-V-45B	Piping				
-1829	01050687 02	Fabricated orifice plate for RCIC-RO-9	Piping				
2-1830	01057081 01	Machined under sized pins	Supports				
2-1831	01037433 01	Replaced snubbers with rigid struts for supports RHR-373, 414, 416, 419 and 983N	Supports				
2-1831	01037433 01	Replaced snubbers with rigid struts for supports RHR-218, 403, 449, 454 and 503	Supports				
2-1832	01037433 01	Replaced snubbers with rigid struts for supports RHR-39 and 42	Supports				
-1833	01037433 01	Replaced snubbers with rigid struts for supports RHR-946N, 947N, 948N and 952N	Supports				
2-1833	01037433 01	Replaced snubbers with rigid struts for supports RHR-954N, 183, 906N and 959N	Supports				
2-1834	01037433 01	Replaced snubbers with rigid struts for supports RHR-206, 210, 993N	Supports				
2-1835	01037433 01	Replaced snubbers with rigid struts for supports RHR-400, 401	Supports				
2-1836	01013041 01	Installed hinge pin plug for valve RFW-V-10A	Valve				
2-1844 *	01050530 01	Replaced poppet for valve RHR-V-60A	Valve				
2-1845 *	01050531 01	Replaced poppet for valve RHR-V-75A	Valve				
2-1846	01053751 05	Replaced 18" Service Water (SW) pipe piece near SW-RO-2A	Piping				
2-1847	01057925 01	Made body to bonnet (spring housing) tack welds for valve RCIC-PCV-15	Valve				
2-1848	01057088 01	Performed work on valve LPCS-V-3	Valve				
2-1849	01037167 01	Performed work on valve RHR-V-41B	Valve				
2-1850	PO 313236	Refurbished MSRV S/N N63790-03-0051 - NWS Tech, Spartanburg, SC	Relief Valve				
2-1851	PO 313236	Refurbished MSRV S/N N63790-03-0057 - NWS Tech, Spartanburg, SC	Relief Valve				
2-1852	PO 313236	Refurbished MSRV S/N N63790-03-0058 - NWS Tech, Spananburg, SC	Relief Valve				
2-1853	PO 313236	Refurbished MSRV S/N N63790-03-0060 - NWS Tech, Spartanburg, SC	Relief Valve				
2-1854	PO 313236	Refurbished MSRV S/N N63790-03-0122 - NWS Tech, Spartanburg, SC	Relief Valve				
2-1855 *	01004957 01	Replaced valve IR-V-IR84/V1 (IR-83-V-1C)	Valve				
2-1857	01043563 08	Removed Serial No 28467 and installed Serial No 28472 for valve MS-V-67A	Piping				
2-1858	01032773 13	Removed Serial No 28472 and installed Serial No 28467 for valve MSLC-V-2D	Piping				
2-1859	01038642 11	Replaced base for relief valve RHR-RV-88C, S/N 509258-89-1	Relief Valve				
2-1862	01060660 01	Made body to bonnet seal weld for valve RHR-V-84B	Valve				
2-1864	01059571 02	Replaced disc and made body to bonnet seal weld for valve LPCS-V-34 - See Plan No 2-1866	Valve				
-1865	01010767 01	Replaced bolting material for piping to valve SW-V-165A flanged joints	Piping				
-1866	01059571 02	Replaced bonnet for valve LPCS-V-34 - See Plan No 2-1864	Valve				
-1867 *	01044705 07	Modified (reworked) and install 1" U bolts for SW piping - See Plan No 2-1803	Supports				
2-1868	01044707 01	Replaced material for support CIA-4132-14	Support				
2-1868	01044706 01	Replaced material for support CIA-4133-13	Support				
2-1869	01059768 01	Replaced material for supports SW-1525-16 and SW-1523-24	Supports				
2-1870 *	01039141 10	Modified (reworked) and install 1" U bolts for RCIC piping - See Plan No 2-1802	Piping				
2-1871 *	01059597 10	Replaced hanger rods and nuts for support RCIC-976S	Support				
2-1872	01031772 01	Machined surface defects on disc seating surface for valve RCIC-V-73	Valve				
2-1873	01060688 06	Replaced disc and made body to bonnet seal weld for valve RHR-V-85B	Valve				

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#### ASME SECTION XI REPAIR AND REPLACEMENT LISTING FOR COLUMBIA GENERATING STATION REFUELING OUTAGE R16

8/20/2003

PLAN NO	WOT NO	CODE COMPONEI	
2-1875	01057255 12	Performed VT-1 visual examinations on spare studs and nuts for MSIV's (MS-V-22A)	Valve
2-1876	01057255 12	Ground bore ID for valve MS-V-22A	Valve
2-1877	01057255 12	Weld repaired bore ID for valve MS-V-22A	Valve
2-1878	01060862 01	Replaced pipe for connection with valves HPCS-V-713 and HPCS-V-714	Piping
N/A	01037433 01	Replaced snubber for support MS-1368-12	Support
N/A	01037433 01	Replaced snubber for support RHR-2264-11	Support
N/A	01037433 01	Replaced snubber for support RWCU-1C-8	Support
N/A	01044800 15	Replaced Control Rod Drive (CRD) at Core Location 02-43	CRD
N/A	01044800 28	Replaced Control Rod Drive (CRD) at Core Location 18-31	CRD
N/A	01044800 31	Replaced Control Rod Drive (CRD) at Core Location 14-51	CRD
N/A	01044800 36	Replaced Control Rod Drive (CRD) at Core Location 30-19	CRD
N/A	01044800 52	Replaced Control Rod Drive (CRD) at Core Location 30-03	CRD
N/A	01044800 61	Replaced Control Rod Drive (CRD) at Core Location 18-11	CRD
N/A	01044800 70	Replaced Control Rod Drive (CRD) at Core Location 14-43	CRD
N/A	01044800 73	Replaced Control Rod Drive (CRD) at Core Location 18-07	CRD
N/A	01044800 74	Replaced Control Rod Drive (CRD) at Core Location 38-03	CRD
N/A	01044800 75	Replaced Control Rod Drive (CRD) at Core Location 42-03	CRD
N/A	01044800 77	Replaced Control Rod Drive (CRD) at Core Location 26-31	CRD
N/A	01044800 78	Replaced Control Rod Drive (CRD) at Core Location 34-03	CRD
N/A	01044800 82	Replaced Control Rod Drive (CRD) at Core Location 38-55	CRD
N/A	01044800 84	Replaced Control Rod Drive (CRD) at Core Location 46-27	CRD
N/A	01044800 15	Replaced Control Rod Drive (CRD) at Core Location 26-43	CRD
N/A	01059767 02	Replaced ring flange for Control Rod Drive (CRD) at Core Location 58-31	CRD
N/A	01059767 02	Replaced ring flange cap screws for Control Rod Drive (CRD) at Core Location 58-31	CRD
N/A	01044801 05	Overhauled Control Rod Drive (CRD) Serial No 6108	CRD
N/A	01044801 31	Overhauled Control Rod Drive (CRD) Serial No A9270	CRD
N/A	01044801 35	Overhauled Control Rod Drive (CRD) Serial No A9322	CRD
N/A	01044801 36	Overhauled Control Rod Drive (CRD) Serial No A8974	ĊRD
N/A	01044801 40	Overhauled Control Rod Drive (CRD) Serial No A9343	CRD
N/A	01044801 41	Overhauled Control Rod Drive (CRD) Serial No A9264	CRD
N/A	01044801 42	Overhauled Control Rod Drive (CRD) Serial No 7166	CRD
N/A	01044801 44	Overhauled Control Rod Drive (CRD) Serial No 6552	CRD
N/A	01044801 48	Overhauled Control Rod Drive (CRD) Serial No 7041	CRD
N/A	01044801 50	Overhauled Control Rod Drive (CRD) Serial No 6565	CRD
N/A	01044801 52	Overhauled Control Rod Drive (CRD) Serial No 6088	CRD

NOTES -

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

PLAN No 2-1613

Date: 09/04/02

Sheet: 1 Of 1

Unit: Not Applicable



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(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 Summer 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
FPC-V-123	Velan	77G153	N/A	N/A	1977	Repaired	Yes, Code Class 3

7. Description Of Work Performed: Replaced the existing yoke bushing for valve FPC-V-123. The work was performed as follows: 1) Removed existing yoke bushing.

2) Installed replacement yoke bushing.

3) Made required tack weld(s)

4) Performed visual examination on the final tack weld(s). Visual examination results acceptable.

PLAN No 2-16 <b>EMERGY</b> NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       None         Test Pressure: 85 Psig       Test Temperature: 81° F         Component Design Pressure: 150 Psig       Temperature: 150° F
. 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       Quick Quick         Kuldip Singh - Pfogram Lead Engineer (PLE)         Date       9         9       4         01       Date
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 7/16/02 to 9/16/02 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
1. M. Commissions 748610/7486 WT Thspector's Signature National Board, State, and Endorsements
Date

PLAN No 2-1672



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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station
  - Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 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
RCC-RV-34A Base Assembly Base Assembly	Lonergan Lonergan AGC	137916-2-1 J1579-6 K99408-31-0001	N/A N/A N/A	N/A N/A N/A	1994 1994 2002	Replaced Replacement	Yes, Code Class 3 No, Code Class 3 No, Code Class 2

7. Description Of Work Performed: Replaced nozzle (base assembly) for spare relief valve RCC-RV-34A, Serial No 137916-2-1. The replacement work was performed as follows:

- 1) Removed existing nozzle (base assembly) from the relief valve.
- 2) Installed replacement nozzle (base assembly), Serial No K99408-31-0001 in the relief valve.

#### NOTES -

- 1) ASME Section III, Code Class 2 part for ASME Section III, Code Class 3 application.
- 2) Lonergan relief valves parts are now being manufactured by Anderson Greenwood Crosby (AGC).

Date: 02/22/03 Sheet: 1 Of 1 Unit: Not Applicable

		ENE People - Vis	RGY THWES	<b>T</b>	PLAN No 2-1
FC	ORM NIS-2 OWNER	'S REPORT FOR	REPAIRS	OR REPLACEMENTS	(Back)
Tests Conducte	ed: Hydrostatic Test Pressure: Psic Component Desig		- T	Dperating Pressure	None X
<b>Remarks:</b> See at	attached N-2 Code Data Re	cort for the replaceme	nt nozzle (base	assembly), Serial No K99408	·31-0001.
		CERTIFICATE (	OF COMPLI	ANCE	<u> </u>
to the rules of Type Code Sy Certificate Of	f the ASME Code, Ser ymbol Stamp: Not Appli Authorization No.: Not ite: Not Applicable	ction XI. cable of Applicable	s Report are _ Signed By	Kuldip Singh - Program Lea	ad Engineer (PLE)
Date	2/22/03		Date		3
Vessel Inspect	gned, holding a valid stors and the State of de Island have inspect	Washington and e	led by the N employed by nts describe	ational Board of Boiler Y Factory Mutual Insuranced in this Owner's Repo	ce Company of <b>ort during the</b>
Owner hás péi in accordance By signing this implied, conce Furthermore, i	Frormed examination with the requirement is certificate neither to erning the examination neither the Inspector	is and taken corr its of the ASME ( he Inspector nor ons and correctiv nor his employe s of any kind aris	rective meas Code, Sectio his employe re measures er shall be lia sing from or	er makes any warranty, described in this Own able in any manner for connected with this in:	Owner's Report , expressed or er's Report. any personal spection.
<u>In</u> In:	hspector's Signature	<u> </u>	mmissions	<u>74844</u> National Board, State, and	
Date 1 cy	10-1	<u> </u>			

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PLAN NO. 2-1672 Q.C.-392 Sheet 1 of 2

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As required by the Provisions of the ASME Code, Section III, Division 1 - Not to Exceed One Day's Production 1. Manufactured and certified by Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093 (Name and Address of N Certificate Holder) 2. Manufactured for ENERGY NORTHWEST (Name and Address of Purchaser or Owner) COLUMBIA GENERATING STATION 3. Location of Installation (Name and Address) 4. Type SAEK99408 REV.0 BELOW 2002 BELOW (tensile strength) (CRN) (year built) (drawing no.) (mat'l. spec. no.) **WINTER 1971** 5. ASME Code, Section III, Division 1: 1971 2 (edition) (addenda date) (class) (Code Case No.) 6. Fabricated in accordance with Const. Spec. (Div. 2 only) Revision Date (10.) 5 7. Remarks BASE MATERIAL - SA479 TYPE 316 - TENSILE - 75,000 STUB END MATERIAL - SA479 TYPE 316 - TENSILE - 75,000 FLANGE MATERIAL - SA105 - TENSILE - 70,000 - Dia. ID (ft & in.) - Length overall (ft & in.) 8. Nom. thickness (in.) - Min. design thickness (in.) 9. When applicable, Certificate Holders' data reports are attached for each item of this report. National Part or Appurtenance **National** Part or Appurtenance --- Serial Number Board No. Serial Number Board No. in Numerical Order in Numerical Order K99408-31-0001 (26)(1) K99408-31-0002 (27) (2) K99408-31-0003 (28) (3) (29) (4) (30)(5) 4408-31-0001 (6) (31) (32) (7) (33) (8) (9) (34) (10) (35) 6.5 (11)(36) (12)(37) (38) (13) (39) (14) (15) (40)(16) (41) (17) (42) (18) (43) (19) (44) (20)(45) (21) (46) (47) (22) (23)(48) (24) (49) (25) (50) ۵ F Hydro. test pressure 425 F 10. Design pressure at temp. 70 psi. Temp. (when applicable)

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

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

Form N-2 (Back)

Certificate Holder's Serial No. K99408-31-0001

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	<u>CERTIFI</u>	CATE OF DES	IGN		
Design specifications certified by	D.MURPHY (when a	applicable)	P.E. State	WA	Reg. no. <u>12542</u>
Design report* certified by	(when appl	icable)	P.E. State		_Reg. no
		<u>TE OF COMPL</u>			
We certify that the statements made conforms to the rules of construction				ASSEM	IBLIES
NPT Certificate of Authorization No Date 20 - MAR - 02 Signed	Anderson Gre	xpires Sep. 30 enwood Crosby am, MA	by D./E	E.T.	~
		icate Holder)			Representative)
I, the undersigned, holding a valid co State or Province of <u>Massachusett</u> of <u>Iohnston</u> , Rhode Island <u>Marca 4</u> 20, 20 04 has fabricated these parts or appurtent been authorized for stamping on the d By signing this certificate, neither the the equipment described in this Data R manner for any personal injury or prop Date <u>3-38</u> , 20 Signed <u>Massachuset</u> (Authorized Insp	mmission issued by the second state shown above. Inspector nor his employed be and state that to ances in accordance where the shown above. Inspector nor his employed to a state shown above.	y <u>Factory M</u> inspected these its the best of my knowith the ASME Co ployer makes any , neither the Inspect of any kind arisin	of Boiler and Pre- lutual Insurance ( ims described in the owledge and belief ode, Section III, D warranty, express of rom or connect from or connect	Co. his Data R f, the Certi Division 1. sed or impl over shall the d with the -14/1 8	eport on ficate Holder Each part listed has lied, concerning be liable in any
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Q.C.-392 Sheet 2 of 2

PLAN No 2-1681



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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' <b>s</b> Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-28	WPPSS *	RHR(1)-2B-P1	N/A	N/A	1984	Replacement	Yes, Code Class 2
RHR-V-633	Borg Warner	79966	N/A	N/A	1983		Yes, Code Class 1

7. Description Of Work Performed: Replaced (modified) existing vent connection down stream of valve RHR-V-632. The replacement work was performed as follows:

1) Removed existing vent connection down stream of valve RHR-V-632.

2) Installed new piping material such as elbows, coupling and pipe.

3) Installed new valve RHR-V-633, Serial No 79966.

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.

7) Installed new U bolts and jam nuts associated with new support.

#### NOTES-

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the new valve RHR-V-633, Serial No 79966 was installed is Residual Heat Removal (RHR) piping system RHR(1)-2B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The new valve RHR-V-633, Serial No 79966 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

4) ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.

Date: 08/05/02 Sheet: 1 Of 1 Unit: Not Applicable

	PLAN No 2-
FORM NIS-2 OWNER'S REP	PORT FOR REPAIRS OR REPLACEMENTS (Back)
	Imatic Nominal Operating Pressure None X Test Temperature: ° F
emarks: See attached NPV-1 Code Data Report fo	or the new valve RHR-V-633, Serial No 79966.
CERT	TIFICATE OF COMPLIANCE
Ne certify that the statements made in the othe rules of the ASME Code, Section & Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	sable Sund Signed By Relding Sunds
	ATE OF INSERVICE INSPECTION
, the undersigned, holding a valid comm /essel inspectors and the State of	nission issued by the National Board of Boller and Pressure
essei hispectors and the state of	and employed by have inspected the components
described in this Owner's Report during	the period to and
corrective measures described in this O ASME Code, Section XI.	elief, the Owner has performed examinations and taken wner's Report in accordance with the requirements of the spector nor his employer makes any warranty, expressed or
implied, concerning the examinations an Furthermore, neither the Inspector nor h	nd corrective measures described in this Owner's Report. This employer shall be liable in any manner for any personal ny kind arising from or connected with this inspection.
njury or property damage or a loss of a	
Injury or property damage or a loss of an Not Required - Replacement <u>1" NPS And Smaller</u> Inspector's Signature	Commissions

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	s Required by the Pro					
Manufactured by <u>Nuc</u>	Lear Valve Div.	Borg Warner	7500 Tyroni alderi	3000 Geor	n Nuys, C	<u>alif.</u> gton Wa
Manufactured for Wa	IName and Address of Public	Power Supply	y Systems, R	Ichland, W	ashington	•
Location of Installation	Richland, Wash	hington WPP	SS Hanford #	2 Job Sit	8	
Pump or Valve Y	(Name and Address) Globe Valve	Nominal I	nlet Size	3/4 Out	tlet Size	3/4
				ich)		(inch)
(a) Model No., (c Series No.	) N Certificate Holder': Serial	•	- (d) Drawing		(1) Nar'L	(g) Yez
or Type	No.	Na.	No.	(e) Class	Bd. No.	Built
1500#	79951 thru	N/A	76590-2	1	N/A	1983
(1) <u> </u>	75570					
(3)						
(4)	(11) 6					
(5)	RHR-V	-633 8	N 79960	s		
(6)					<u> </u>	
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(7)		(	( Louin S			
(8)		(	kildip &	suc 5		
(8) (9)	· · · · · · · · · · · · · · · · · · ·	C	Liberp St	102.		
(8) (9) (10)	re designed to h	andie a fini	d media spic	102.		
(8) (9) (10) The valves a	re designed to h	tc., associa	ted with a P	WR and BWI	-	ater
(8) (9) (10) The valves a	borated water. e	tc., associa	ted with a P	WR and BWI	-	ater
(8) (9) (10) The valves a	-	tc., associa on of service for whic of the media	ted with a P	WR and BWI	R. The	ater
(8) (9) (10) The valves a	Borated water, e Briad description pressure fating 3600 psi	tc., associa on of service for white of the media 100	ted with a P h equipment was de- is stated b	WR and BWI	-	
(8) (9) (10) The valves a <u>condensate</u> <u>temperature</u> Design Conditions	Briad description Briad description pressure fating 3600 psi Pressure)	tc., associa on of service for white of the media 100 (Temperature)	ted with a P h equipment was de- is stated b	WR and BWI signed) elow.	R. The	
(8) (9) (10) The valves a condensate. temperature	Brief description Brief description pressure Tating 3600psi (Pressure) 	tc., associa on of service for white of the media 100 (Temperature)	ted with a P h equipment was de- is stated b	WR and BWI signed) elow.	R. The	
(8) (9) (10) The valves a <u>condensate</u> <u>temperature</u> Design Conditions Cold Working Pressure Pressure Retaining Piec	borated water, e Brief description pressure Tating 3600 psi Pressure 3600 psi at	100 (Temperature)	ted with a P h equipment was de- is stated b - "F or Valve Pro	WR and BW signed) elow. 	R. The N/A	(1)
(8) (9) (10) The valves a <u>condensate</u> <u>temperature</u> Design Conditions Cold Working Pressure	Brief description Brief description pressure Tating 3600psi (Pressure) 	100 (Temperature)	ted with a P h equipment was de- is stated b	WR and BW signed) elow. 	R. The	(1)
(8) (9) The valves a <u>condensate</u> <u>temperature</u> Design Conditions Cold Working Pressure Pressure Rataining Piec Mark No.	borated water, e Brief description pressure Tating 3600 psi Pressure 3600 psi at	100 (Temperature)	ted with a P h equipment was de- is stated b - "F or Valve Pro	WR and BW signed) elow. 	R. The N/A	(1)
(8) (9) (10) The valves a <u>condensate</u> <u>temperature</u> Design Conditions Cold Working Pressure Pressure Retaining Piec	borated water. e Brief description pressure rating 3600psi Pressure 3600psi at as Material S	100 (Temperature)	ted with a P h equipment was dr is stated b - "F or Valve Pro : : : : :	WR and BW signed) alow. sssure Class _	R. The N/A	(1)
(8) (9) The valves a <u>condensate</u> <u>temperature</u> Design Conditions Cold Working Pressure Pressure Rataining Piec Mark No. (a) Castings	borated water. e Brief description pressure fating 3600 psi Pressuref 3600 psi at es Materiat \$ Stellite #5	100 (Temperature)	ted with a P h equipment was de- is stated b - "F or Valve Pro	WR and BW signed) alow. sssure Class _	R. The N/A	(1)
(8) (9) (10) The valves a <u>condensate</u> . <u>temperature</u> Design Conditions Cold Working Pressure Pressure Retaining Fiec Mark No. (a) Castings Disc-Code 1X20'	borated water. e Brief description pressure fating 3600 psi Pressuref 3600 psi at es Materiat \$ Stellite #5	100 (Temperature)	ted with a P h equipment was dr is stated b - "F or Valve Pro : : : : :	WR and BW signed) alow. sssure Class _	R. The N/A	(1)
(8) (9) (10) The valves a <u>condensate</u> . <u>temperature</u> Design Conditions Cold Working Pressure Pressure Retaining Fiec Mark No. (a) Castings Disc-Code 1X20'	borated water. e Brief description pressure rating 3600 psi Pressuref 3600 psi at es Materiat \$ Stellite #5	100 (Temperature)	ted with a P h equipment was dr is stated b - "F or Valve Pro : : : : :	WR and BW signed) alow. sssure Class _	R. The N/A	(1)
(8) (9) (10) The valves a <u>condensate</u> . <u>temperature</u> Design Conditions Cold Working Pressure Pressure Retaining Fiec Mark No. (a) Castings Disc-Code 1X20'	borated water. e Brief description pressure rating 3600 psi Pressuref 3600 psi at es Materiat \$ Stellite #5	100 (Temperature)	ted with a P h equipment was dr is stated b - "F or Valve Pro : : : : :	WR and BW signed) alow. sssure Class _	R. The N/A	(1)
(8) (9) (10) The valves a <u>condensate</u> . <u>temperature</u> Design Conditions Cold Working Pressure Pressure Retaining Fiec Mark No. (a) Castings Disc-Code 1X20'	borated water. e Brief description pressure rating 3600 psi Pressuref 3600 psi at es Materiat \$ Stellite #5	100 (Temperature)	ted with a P h equipment was dr is stated b - "F or Valve Pro : : : : :	WR and BW signed) alow. sssure Class _	R. The N/A	(1)

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(1) For manually operated valves only.

(b) Forgings

Body-Code 1V46

• 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 js\_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) Cther Parts	
(d) Other Parts         ackseat-Code 4J86         SA 504 Ty 530         Jorgensen Steel         4H70,5E84	
Ackseat-Code 4J86 SA 504 Ty 530 Jorgensen Steel	
Ackseat-Code 4J86 SA 504 Ty 530 Jorgensen Steel	
Ackseat-Code 4J86 SA 504 Ty 530 Jorgensen Steel	
ckseat-Code 4J86 · SA 564 Ty 530       Jorgensen Steel         4H70,5E84	
ckseat-Code 4J86       SA 504 Ty 530       Jorgensen Steel         4H70,5E84	
ckseat-Code 4J86       SA 504 Ty 530       Jorgensen Steel         4H70,5E84	
ckseat-Code 4J86       SA 504 Ty 530       Jorgensen Steel         4H70,5E84	
tydrostatic test 5400 pei. Disk Differential test pressure_3600 pei.	
4H70, 5E84	
Hydrostatis test _5400 pel. Disk Differential test pressure_3600 pel. CERTIFICATE OF COMPLIANCE	
CERTIFICATE OF COMPLIANCE	
CERTIFICATE OF COMPLIANCE	
CERTIFICATE OF COMPLIANCE	
CERTIFICATE OF COMPLIANCE	
CERTIFICATE OF COMPLIANCE	
CERTIFICATE OF COMPLIANCE	
Ined <u>Huclear Valve Div. Borg Harner</u> by <u>Junia</u> R. Muik (In Certificate Holder) or ASME Certificate of Authorization No. <u>H-1254</u> to use the <u>N</u> symbol expires <u>10/27</u> (0)	
CERTIFICATION OF DESIGN sign information on file at HVD of Borg Warner, 7500 Tyrone Ave., Van Nuys, Ca. 91409 ress analysis report (Class 1 only) on file at NVD of Borg Warner, 7500 Tyrone Ave., Van Nuys,	CA
sign specifications cartified by (1)Bavid J. Murphy	
State Washington Reg. No. 12542	
State CA Reg. No. E123	
Signature not required. List name only.	



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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 Bullt	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2A RHR-V-753	WPPSS* 79963	RHR(1)-2A-P1 Borg Warner	N/A N/A	N/A N/A	1983 1983	Replacement	Yes, Code Class 2 Yes, Code Class 1
RHR-V-754	79965	Borg Warner	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced (modified) existing vent connection down stream of valve RHR-V-739. The replacement work was performed as follows:

1) Removed existing vent connection down stream of valve RHR-V-739.

2) Installed new piping material such as elbows, couplings and pipe.

3) Installed new valve RHR-V-753, Serial No 79963.

4) Installed new valve RHR-V-754, Serial No 79965.

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) Installed new U bolts and jam nuts associated with new support.

### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the new valve RHR-V-753, Serial No 79963 and RHR-V-754, Serial No 79965 were installed is Residual Heat Removal (RHR) piping system RHR(1)-2A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The new valve RHR-V-753, Serial No 79963 and RHR-V-754, Serial No 79965 are certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

4) ASME Section III, Code Class 1 valves for ASME Section III, Code Class 2 application.

Date: 01/08/03 Sheet: 1 Of 1 Unit: Not Applicable

PLAN No 2-16
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F       Component Design Pressure: Psig       Temperature: ° F
<b>Remarks:</b> See attached NPV-1 Code Data Report for the following replacement valves: <u>EPN No Serial No</u> RHR-V-753 79963 RHR-V-754 79965
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
Prepared By       Guidip Singh - Program Lead Engineer (PLE)       Signed By       Guidip Singh - Program Lead Engineer (PLE)         Date       1803       Date       1803
CERTIFICATE OF 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 periodtotoand state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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

Pump or Valve <u>Y Globe</u> (a) Model No., (b) N Certli Series No. S or Type (1) <u>1500</u> # 75955 (2)	Icate Holder's (c) Canadian erial Registration No. No. thru N/A 5570 C-V-753_S]N HC-V-754_S[N] HC-V	n = (d) Drawing No. (e) C 76590-2 76590-2 79963 79963 19965 Quedip Inid media which inc cisted with a PHR at which equipment was designed) dia is stated below.	(f) Nar'l (g) Yea Class Bd. No. Built 1 N/A 1983 1 N/A 1983 0 Sureb 1) E 0 3 cludes stesm, water nd EWR. The
Series No. S or Type (1) 1500# 75951 (2) 79 (3) 79 (4) 79 (4) 79 (5) 79 (5) 79 (6) 79 (7) 79 (6) 79 (7) 79 (7) 79 (8) 79 (7) 79 (8) 79 (7) 79 (8) 79 (9) 79 (10) 79 (8) 79 (10) 79	erial Registration No. No. thru N/A 5570 <u>R-V-753 SJM</u> <u>HR-V-754 SJM</u> <u>HR-V-755 SJM</u>	n = (d) Drawing No. (e) C 76590-2 76590-2 79963 79963 79965 19975 19975	Class Bd. No. Built 1 N/A 1983 N/A 1983 D Supp 1) Elo 3 cludes stesm, water nd BWR. The Class N/A (1)
(1)       75         (2)       75         (3)       75         (4)       75         (5)       84         (5)       84         (6)       84         (7)       84         (8)       95         (10)       100         The valves are dest       100         (10)       100         The valves are dest       100         (10)       100	STO R-V-753 SIN HR-V-754 SIN HR-V-754 SIN Igned to handle a fl water. etc., assoc (Brief description of service for the mac (Brief description of service for the mac psi 100 set 1007F.	79963 <u>J9965</u> <u>Julaip</u> Inid media which inc ciated with a PAR ar which equipment was designed) dia is stated below.	Class N/A (1
(5)KA (6)KA (7)KA (8)KA (9)KA (10)KA (10)KA (10)KA The Valves are desc <u>condensate</u> , horates <u>temperature pressur</u> <u>temperature pressur</u> <u>Cold Working PressureSO</u> Pressure Retaining Fieces <u>Mark No.</u> (a) <u>Castings</u> Disc-Code 1X20'St	Igned to handle a fl I water, etc., asso (Brief description of service for ra rating of the mac psi 	19965 Aulding Inid media which inc ciated with a PAR ar which equipment was designed) dia is stated below.	1) 8103 cludes steam, water nd BWR. The Class <u>N/A</u> (1
(8) (9) (10) The valves are des: <u>condensate</u> , horate <u>temperature pressur</u> Design Conditions <u>3600</u> (Pressur Cold Working Pressure <u>36</u> Pressure Rataining Fieces <u>Mark No.</u> (a) Castings Disc-Code 1X20' St	Igned to handle a fl I water, etc., asso (Brief description of service for ra rating of the mac psi 	Inid media which inc cisted with a PAR ar which equipment was designed) dia is stated below.	1) 8103 cludes steam, water nd BWR. The Class <u>N/A</u> (1
(10)	Brief description of service for (Brief description of service for ra rating of the med psi fremperature 00psi at 100°F.	Inid media which inc cisted with a PWR ar which equipment was designed) dia is stated below.	1) 8103 cludes steam, water nd BWR. The Class <u>N/A</u> (1
Disc-Code 1X20' St	•		
Disc-Code 1X20' St			1
	ellite #5	Rex Precision	
· · ·			
(b) Forgings			
ody <u>-Code_1V46 . 5</u>	A 105 ·	Kawaguchi	
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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 kems 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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FORM NPV-1 (Back)								
Mark No.	Material Spec. No.	Manufacturer	Remarks					
c) Bolting N/A		•	•					
	· · · · · · · · · · · · · · · · · · ·							
	•	•						
<u></u>	· · · · · · · · · · · · · · · · · · ·							
		· · · · · · · · · · · · · · · · · · ·						
(d) Other Parts								
ckseat-Code 4J86 -	SA 504 Ty 530	Jorgensen Steel						
4H70, 5E84 ·								
			•					
vdrostatis test _5400 p								
anda Winter '75		t and that this pump, or valve, c mponents. Section III, Div. L. Edit $\underline{N/A}$ Date $\underline{7/2}$						
dends <u>Winter '75</u> Dent ned <u>Ruclear Valva</u> (N Certificate de r ASME Certificate of Author	CERTIFICATION	The symbol	ion <u>1974</u> 7/343 Amerik expires <u>10/27/84</u> Densi					
dends <u>Winter '75</u> Densi med <u>Nuclear Valve</u> ON Certificate He r ASME Certificate of Author sign information on file at	CERTIFICATION TYD of Borg Warner, 750 only) on file st NVD of Borg	OF DESIGN O Tyrone Ave., Van Nuys	ion <u>1974</u> 7/343 Amerik expires <u>10/27/84</u> Densi					
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 11/13/01 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Containment Atmosphere Control (CAC) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced rupture disc for CAC-RD-1A. The replacement work was performed as follows: 1) Removed existing rupture disc from CAC-RD-1A.

2) Performed VT-3 visual examination on the existing studs for CAC-RD-1A bolted joint. VT-3 visual examination results acceptable.

3) Performed VT-3 visual examination on the existing nuts for CAC-RD-1A bolted joint. VT-3 visual examination results acceptable.

4) Installed new rupture disc in CAC-RD-1A.

5) Reinstalled VT-3 visually examined existing studs for CAC-RD-1A bolted joint.

6) Reinstalled VT-3 visually examined existing nuts for CAC-RD-1A bolted joint.

7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of CAC-RD-1A bolted joint. No evidence of leakage during the pressure test.

PLAN No 2-1683
ENERGY
NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       Other       Other         Test Pressure: 38.7 Psig       Test Temperature: 78° F         Component Design Pressure: 50 Psig       Temperature: 350° F
9. Remarks: None
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable
Prepared By Undup Sweb Signed By Undup Sweb
Kuldip Singh - Hrogram Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 111301 Date 111301
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $20-9-91$ to $12-6-91$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report
in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or
implied, concerning the examinations and corrective measures described in this Owner's Report.
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
Injury or property damage or a loss of any kind arising from or connected with this inspection.
AMT, the sure is a sure in the
Inspector's Signature Commissions 7456 k/ 7486 N I National Board, State, and Endorsements
Date 11-6-01

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 2. Plant: Columbia Generating Station
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 Bulit	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		Yes, Code Class 3
FPC-RV-117A	Anderson Greenwood	98-09537	N/A	N/A	1999	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 98-09537.

- 2) Installed replacement relief valve FPC-RV-117A, Serial No 137916-1-1.
- 3) Reinstalled existing studs and nuts for the relief valve joint.

### NOTES .

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system applicable to the replacement relief valve FPC-RV-117A, Serial No 137916-1-1 is Fuel Pool Cooling (FPC) piping system FPC(1)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement relief valve FPC-RV-117A, Serial No 137916-1-1 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements.

Date: 08/05/02 Sheet: 1 Of 1 Unit: Not Applicable

PLAN No 2-1724 <b>EMERGY</b> NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure 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
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the period <u>191/01</u> to <u>190/02</u> and state to the best of my knowledge and bellef, the Owner has performed examinations and taken corrective measures described in this Owner's Report In accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or Implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be Ilable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         J

Manufactured and certified by $\underline{\mathbf{I}}$	unkle Industries, Inc. opergan Value Division, A	3772 Bluffton Road. I trume and address of NV Car	Fort Vayne IN	46809 PLAN NO.
Manufactured for	n Public Power Supply Sys	stem Accts Pay HD	055, P.O. Box	968, Richland, WA 9935
Location of installation Unching	ton Public Power Supply S	AVISTON UNP-2 OPS LAS	E. Complex Ma	
Valve NJL141-021-000150 0	nilice size 0.312	Nom Jolet size 3/	14	Richland, WA 9935
faive total to per total po	ilice sizefall	Nom. inlet size	fin.) Out	let size in.l
SME Code, Section III, Division	1971	Winter 1971	3	N/A .
NSME LOGE, Section 41, Drission	tedmoni	(addenda date)	(class)	Code Case no.1
vpe Spring	150 N/A	400 <sup>0</sup> F	225	
teerre. stat gr so are seened		n, psi) frated temp.) ·	Phydro. test, psig.	iniet)
Identification 137916-1-2	N/A	A930298 Rev. 1	· N/A	1994
ECert. Holder's serial	ne.l (CRN)	(drawing no.)	ENat'l. Bd. no.J	(year built)
ontrol ring settingsN/A				
ressure retaining items:	Serial No. or		. Spec.,	STID2 Tensile
· · · · · · · · · · · · · · · · · · ·	Identification	- <u></u>	ype or Grade	Strength
DON Compression Scree	34601	SA-479 TY 316		75 ksi
	39/C469 / A6139/C476 /	SA-216_WCB		70 ksi
20000000000 98848/7	01093 / 841TNT/M25024 Co	de ARPN SA-479 TY 31	6 / SA-105	75 ksi / 70 ks
ODM Guide Pin	35486	<u></u>		<u>75 ksi</u>
isk ·	966313	<u></u>		<u>75 ksi</u>
NONDOODBOOXBase (Assy.)	.11579-13, -17 /	SA-351_CE8M		70 ksi
00000663022630	38062 / 840TNF	SA-479 TY 316	/_SA-105	75 ksi / 70 ks
SOCK Gag Plug Screu	39883	SA-479 TY 316		75 ksi
ipring	8F5901	<u>A-313 TY 316</u>	<u> </u>	**
00005KSpring Step	30340	<u></u>		75 ksi
20000000X Cap		<u></u>	·	<u>75 ksf</u>
Sten	966313	SA-479 TY 316		75 ksi
	./hr. (17.8 GPM) @ @	107 overpressure	as certified by the	National Board _01/25/85
Remarks: <u>* Spring exampt</u>	from material requirements	s of ND-2000 but mee	ts design requ	irements of ND-3595.
	• ·· •	'ION OF DESIGN		
n Specification certified by		P.E. State	N7/4	Reg. no <u>12542</u>
Report certified by	N/A	P.E. State	<u>N/A</u>	Reg. no <u>N/A</u>
		· · · · · · · · · · · · · · · · · · ·		······
		OF COMPLIANCE		
	n this report are correct and that "	this valve conforms to the	rules for construct	ion of the ASME Code, Section
ertify that the statements made in ivision 3.				
ivision 1. ertificate of Authonzation No	N-2853	Expir	res <u>November</u>	18, 1994
vision 1. ertificate of Authonzation No	N-2853 Kunkle Industries, Inc.	Expir	res <u>November</u>	18, 1994
vision 1. ertificate of Authonzation No	N-2853 Kunkle Industries, Inc. Lonergan Valve Division	Expir	res <u>November</u> Uebra G.Z.	18, 1994 Uttzel
rision 1. Ertificate of Authonization No	N-2853 Kunkle Industries, Inc.	Expir	res <u>November</u> Jebra G.Z. teuthoired	18, 1994 Uttzel
sion 1. tificate of Authorization No 5-23-74/Name imental information in form of lists.	N-2853 Kunkle Industries, Inc. Lonergan Valve Division	provided (1) size is 8% × 11,	Lebra G. Z. touthorized (2) information in ite	Uttel

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# FORM NV-1 (Back - Pg. 2 of \_2\_)

137916-1-1 through

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Certificate Holder's Scrial 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
of Hartford, CT have inspected the value 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 conjected with this inspection.)

10000670 Dato 5-25-9 ralg commissions NAT44 KIBIA Tild 840 Signed



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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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	*********	Yes, Code Class 3
FPC-RV-117B	Anderson Greenwood	98-09536	N/A	N/A	1999	Replaced	Yes, Code Class 3
FPC-RV-117B	Lonergan	137916-1-2	N/A	N/A	1994	Replacement	Yes, Code Class 3
	Í						

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 98-09536.

2) Installed replacement relief valve FPC-RV-117B, Serial No 137916-1-2.

3) Reinstalled existing studs and nuts for the relief valve joint.

### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system applicable to the replacement relief valve FPC-RV-117B, Serial No 137916-1-2 is Fuel Pool Cooling (FPC) piping system FPC(1)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement relief valve FPC-RV-117B, Serial No 137916-1-2 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements.

Date: 08/08/02 Sheet: 1 Of 1 Unit: Not Applicable

	AN No 2-172
EMERGY	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
NORTHWEST	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
B Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Non Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F	e 🔀
<b>). Remarks:</b> 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 conto the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable	nforms
Expiration Date: Not Applicable         Prepared By       Julat         Kuldip Singh - Program Lead Engineer (PLE)         Date       \$19102	or (PLE)
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pre Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Comp Johnston, Bhode Island have Inspected the components described in this Owner's Report durin period	any of ig the lief, the Report
By signing this certificate neither the inspector nor his employer makes any warranty, expres implied, concerning the examinations and corrective measures described in this Owner's Rep Furthermore, neither the inspector nor his employer shall be liable in any manner for any per- injury or property damage or a loss of any kind arising from or connected with this inspection	oort. sonal
Inspector's Signature Commissions 7456-047456-012 National Board, State, and Endorse	ments
Date	

۱.	Manufactured and certified by	Kunkle Industries, Inc. Lonergan Value Division, 8	222 Bluffton Road Fort Hayne .	IN 46809 PLANNO.2
2.	Manufactured for	ton Bublic Barer Supply Sys	tem Accts Pay MD 055 P.O.	Box 968, Richland, WA 99352-
Ļ	Location of installation Machine	ogton Bublic Power Supply S	vstom, UNP-2 OPS UNSE, Complex	
-		0.310		Richland, WA 99352
	Valve NJL14J-021-000150	Orifice size	Nom. inlet size	_ Outlet size fou
		1971	Winter 1971 3	N/A
•	ASME Code, Section III, Divisi	on 1:	(addenda dato) (classi	and the second se
	- Contor	150 N/A	400° F 2	75 at 33 •F
	Type Spring			8t #t #t
	(197916-1-1 t 137916-1-1 t 137916-1-2	hrough	A930298 Rev. 1N/A	1994
•	Identification 137916-1-2		(Mat'l. 8d.	اليراد بالمراجع المراجع فأشألك فبمراجع والمراجع المتقوم والمراجع
	• • • • • • • • • • • • • • • • • • •	·		
•	Control ring settingsN/A		70 8111 10-7011 1	-2
	• • • • • • • • • • •	FPC-KV-II	18, SIN 137916-1-	O O E
•	Pressure retaining items:	•		edip Bue 5
		Serial No. or	Mat'l Spec.	8/1 02-Tensile
	•	Identification	Including Type or Grade	
	NON Commenter Par	34601	SA-479 TY 316	75 ks1
	MARK Compression Scree	6139/C469 / A6139/C476 /		70 ksi
		/701093 / 841TNT/M25024 Cox		
		35486	SA-479 TY 316	<u>75 ksi</u>
	NESDEN Guide Pin	9F6313	<u>SA-479 TY 316</u>	
	Disk ·	دورين ويستخاب ومسجعه الوكالة الأشريس ويرد		
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		<u>SA-351 CF8M</u> SA-479 TY 316 / SA-105	
	X000605532606X	38062 / 840TNE	<u></u>	<u>75 ksi</u>
	XXXXXX Gag Plug Scree	39883	<u>A-313 TY 316</u>	<u>/_KS1</u>
	Spring	8E5901 30340	SA-479 TY 316	75 ksi
	KOOOOKSpring Step	701632	SA-479 TY 316	75 ksi
	100000000X Cap		SA-479 TY 316	75 ksi
·	Sten Relieving capacity	9E6313 1b./hr. (17.8_GPH) @		the National Board _01/25/85
•	Remarks: <u>* Spring exemp</u>	(steen or had, bow)	s of ND-2000 but meets design	requirements of ND-3595.
			ION OF DESIGN	- 19542
	gn Specification certified by		P.E. State WA	
5	gn Report certified by		P.E. State	Reg. noN/n
_	<u> </u>			· · · · · · · · · · · · · · · · · · ·
	certify that the statements mad livision 1.		OF COMPLIANCE this valve conforms to the rules for con:	struction of the ASME Code, Section
	•	N-2853	Novor	ber 18, 1994
. C	Partitions of Authorsenster M.		Expires Noven	
. (	Certificate of Authorization No		· _	/
. 0	Certificate of Authorization No	Kunkle Industries, Inc. Lonergan Valve Division	Signed Debra C	2. 7. Ortal

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# FORM NV-1 (Back - Pg. 2 of \_2\_)

137916-1-1 through

Certificate Holder's Scrial No. 137916-1-2

Commissions MATHY (ASBIA), INC STO INer'L Bd. Enclored another and state or prov. and ne.

	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of
	of Hartford, CT have inspected the valve described in this Data Report on
$\sim$	MAY 25, 1994 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this valve in accordance
2	with the ASMÉ Code, Section III, Division 1.
JO	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described
2	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
167	a loss of any kind arising from or connected with this inspection
2,60	Date 5-25-94 Signed Jucklesch Lidly Commissions NB7444(NB1A), INC 840

Date 5-25-94 Signed



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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 02/22/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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	*******	Yes, Code Class 3
RCC-RV-34A	Anderson Greenwood	98-09538	N/A	N/A	1999	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 98-09538.

2) Installed replacement relief valve RCC-RV-34A, Serial No 137916-2-1.

3) Reinstalled existing studs and nuts for the relief valve joint.

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system applicable to the replacement relief valve RCC-RV-34A, Serial No 137916-2-1 is Reactor Closed Cooling (RCC) piping system RCC(5)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement relief valve RCC-RV-34A, Serial No 137916-2-1 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements.

4) Lonergan relief valves were being manufactured by Anderson Greenwood.

FORM NIS-2 OWNER'S REPORT FOR REI	PAIRS OR REPLACEMENTS (Back)
	minal Operating Pressure None X Test Temperature: ° F Temperature: ° F
<b>9. Remarks:</b> See attached NV-1 Code Data Report for the replacement va	ive RCC-RV-34A, Serial No 137916-2-1.
CERTIFICATE OF C	OMPLIANCE
We certify that the statements made in this Owner's Rep to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	ned By Auduly Sub Kuldip Singh - Program Lead Engineer (PLE)
CERTIFICATE OF INSERV	/ICE INSPECTION
I, the undersigned, holding a valid commission issued by Vessel Inspectors and the State of Washington and employ Johnston, Rhode Island have inspected the components of period <u><u>7</u>/<u>2</u>/<u>7</u> to <u>3</u>/<u>6</u>/<u>7</u> and state Owner has performed examinations and taken corrective in accordance with the requirements of the ASME Code, By signing this certificate neither the Inspector nor his en implied, concerning the examinations and corrective me Furthermore, neither the Inspector nor his employer sha injury or property damage or a loss of any kind arising f</u>	oyed by Factory Mutual Insurance Company of described in this Owner's Report during the e to the best of my knowledge and belief, the re measures described in this Owner's Report , Section XI. Employer makes any warranty, expressed or easures described in this Owner's Report. all be liable in any manner for any personal

		Required by the ovision Kunkle Industries, In	<u></u>			on 1 Pg. 1 of	
I. N	fanufactured and certified t	by Lonergan Valve Divisi	ion. 8222 Bi	luffton Road, Fo	iticate Molders	1_46809	
2. K	tanufactured for <u>Washing</u>	ton Public Power Supply	r System Ar	rts Pay MD 05 and address of Purchesers	5, P.O. Box	968 Richland, VA 99	352-09
3. L	ocation of installation <u>Was</u>	hington Public Power Su	ipply System	name and address!	E Complex, W	hse. 11. North Power Richland, WA 99	
<b>4</b> . v	alve <u>NJL141-D21-DG026</u>	5 Orifice size0_312	Nom.	inlet size3/4	0	utlet size	
5. A	SME Code, Section III, Divi	ision 1:	Winter	<u>1971</u>	3	N/A	
- -	Camlan	965	N/A	100° F	397		
6. T	ype	10d) (set presoure, psig) (R	<u> </u>	f(1) P (rated temp.)	Biydre, test, ps	8112 ig, inlet)	♥F
3	137916-2-1	through	•	09 Page 1	N/A	1994	
<b>7</b> . Id	dentification(Cen. Holder's	serial no.) ICRNI		98 Rev. 1	N/A \$Net"1, 8d. no.!		
				-			
. C	Control ring settings <u>N/A</u>	<u> </u>				71	
			VaWE	RCC-KN	-34 A -	S)N 137916	-2-
). P	ressure retaining items:				J	Theod	
• .							10
	•	Serial No. or		Mat'l.		Tensile	2
		Identification		Including Ty	pe or Grade	Strength	
Ж	080XCompression Screw	34601		SA-479 TY 316		75 ksi	
	onnetSERER (Assy.)			SA-216 MCB			
	0266600050	701093 / 841TNT		SA-479 TY 316 /	SA-105	75 ksi / 70	ksi
	2022X Guide Pin	35486		SA-479 TY 316		75_ksi	
	usk	966313		SA-479 TY 316	•	75 ksi	
. –	pring 10995633Sten	30340		SA-479 TY 316	· · ·	75 ksi	
	20000000000000000000000000000000000000			SA-351 CE84			
-	GNUK	36560-6/38062 / 840TNE		SA-479 TY 316 /	SA-105	-75  ksi/70	kei
	· · · ·			A-313 TY 316		<u>/KSL_/_/L</u> *	حلقها
	pring	39883		SA-479 TY 316		<u>*</u>	
	00006Gag Plug Screw DBODDGOOK Cap	701632		SA-479 TY 316	· ·	<u></u>	
_	•			SA-479 TY 316	·······	<u>75 ksi</u>	
	11 800		•				lec
J. R	elieving capacity11,800	ID./IL'. (20.0 GETI) (steem or fluid, Ib/fvr)	@ <u>07</u> (05i)	overpressure a	is certified by th	e National Board _01/25/	<u> </u>
			40.04		•		
		npt from material requi	rements of I	ND-2000 but meet	te decim red	mirmonts of ND-3595	
. n	emarks:	un rith haternar regins		M ZIKA DUL BELLI			La
-							·
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-					<u>.</u>		
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		CERT	TIFICATION OF	F DESIGN			
	- Constituentian antified bu	B. M		P.E. State .	WA	Reg. no 12542	
	3 SDecilication certilian nur			P.E. State .			
	n Specification certified by .	<u>W</u> A	<u></u>	F.C. State ,	W/1	Reg. noN/A	
	n Report certified by						
	•			MITIANCE			
sigr	n Report certified by		FICATE OF CO		uten les energies	ction of the ASME Code, S	ection
e ce	n Report certified by	CERTIF ade in this report are correct ar		ve conforms to the r	ules for constru		
e ce	n Report certified by			ve conforms to the r	dies for constru		
esigr /e ce	n Report certified by			ve conforms to the r	ules for constru		
esigr Ve ce I, Div	n Report certified by	ade in this report are correct ar	nd that this val	ve conforms to the r		r 18, 1994	
esigr Ve ce I, Div	n Report certified by rtify that the statements ma rision 1. rtificate of Authorization N	ade in this report are correct ar	nd that this val			<u>- 18, 1994</u>	
esigr /e ce I, Div	The Report certified by relify that the statements may rision 1. relificate of Authorization N 5-24004	ade in this report are correct ar	nd that this value			- 18, 1994	

This form (E00042) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

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# FORM NV-1 (Back - Pg. 2 of \_2\_

137916-2-1 through

and ne.

Certificate Holder's Serial No. 137915-2-2

CERTIFICATE	OF	INSPECTION
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	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province
	of Hichigan and employed by HSBI & I Co.
	HALL 15 1494 of Hartford, CT have inspected the valve described in this Data Report on
3	MAY 25 1494, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this value in accordance
	with the ASME Code, Section III, Division 1.
0	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described
0	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
Q	a loss of any kind arising from or connected with this inspection,
<u>60</u>	Date 5-2494 Signed Fuckers K- harry commissions NB 2444 (NHIN), Ind 34D
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	(Authorized Vispector) (Nat's 54, End, endersemetric) and state or arow, and on 1



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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 08/09/02 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Reactor Closed Cooling (RCC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 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	*****	Yes, Code Class 3
RCC-RV-34B	Anderson Greenwood	98-09539	N/A	N/A	1999	Replaced	Yes, Code Class 3
RCC-RV-34B	Lonergan	137916-2-2	N/A	N/A	1994	Replacement	Yes, Code Class 3
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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 98-09539.

- 2) Installed replacement relief valve RCC-RV-34B, Serial No 137916-2-2.
- 3) Reinstalled existing studs and nuts for the relief valve joint.

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system applicable to the replacement relief valve RCC-RV-34B, Serial No 137916-2-2 is Reactor Closed Cooling (RCC) piping system RCC(5)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement relief valve RCC-RV-34B, Serial No 137916-2-2 is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1971 Addenda requirements.

	<b>EMER</b> NORTHW		PLAN No 2-12
FO	IM NIS-2 OWNER'S REPORT FOR RE		(Back)
		ominal Operating Pressure Test Temperature: ° F Temperature: ° F	None X
<b>Remarks:</b> See attr	ched NV-1 Code Data Report for the replacement v	alve RCC-RV-34B, Sarial No 137916-2-2	
	CERTIFICATE OF C	OMPLIANCE	
to the rules of t Type Code Syn Certificate Of A Expiration Date Prepared By	NADA ON	Kuldip Singh - Program Lear	nent <i>conforms</i> عنت لح I Engineer (PLE)
Vessel inspecto Johnston, Rhode period <u>9/2/</u> Owner has perf in accordance v By signing this implied, concert	ormed examination's and taken correctiv ith the requirements of the ASME Code certificate neither the inspector nor his e ling the examinations and corrective ma	by the National Board of Boiler a loyed by Factory Mutual Insurance lescribed in this Owner's Repor to to the best of my knowledge of measures described in this O Section XI. Employer makes any warranty, de easures described in this Owne	Company of t during the and belief, the wner's Report expressed or r's Report.
Furthermore, no Injury or proper	ither the inspector nor his employer sha y damage or a loss of any kind arising t	all be liable in any manner for a	ny personal bection.

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Image and many and the second server of the second server of the serv	Decide me, server etail     Exit     Exit     MA       ME Code, Section III, Division 1:107     Joint Provide Metail Section     Section 100 Provide Metail Section     N/A     MA     MA       Specific Section III, Division 1:201     Boordware, poil Section 100 Provide Metail Section     MA     MA     MA       Section 2: Through Section 100 Provide Metail Section 2: Through Section 2:		•	(neme and address)				
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Serial No. or Identification     Mat'L Spec., Including Type or Grade     Multiply Tensile Strength       360XCompression Screw     3601     SA-479 TY 316     75 kst       360XCompression Screw     3601     SA-479 TY 316     75 kst       360XCompression Screw     701093 / 841TNT     SA-479 TY 316     75 kst       360XCompression Screw     701093 / 841TNT     SA-479 TY 316     75 kst       360X Outlde Pin     35466     SA-479 TY 316     75 kst       360X Outlde Pin     36467     SA-479 TY 316     75 kst       360X Outlde Pin     36560-6/3062 / 800TNF     SA-479 TY 316     75 kst       360X Outlde Pin     36560-6/3062 / 800TNF     SA-479 TY 316     75 kst       360X Outlde Pin     36560-6/3062 / 800TNF     SA-479 TY 316     75 kst       360X Outlde Pin     3656170     -     A-479 TY 316     75 kst       360X Cap     701632     SA-479 TY 316     75 kst       360X Cap     701632     SA-479 TY 316     75 kst       361     985513     SA-479 TY 316     75 kst <td>Serial No. or Identification     Mat'l Spec., Including Type or Grade     Multiply (Miley Tensile Strength)       SWCompression Screw     24601     SA-479 TY 316     75 kst       SWCompression Screw     34626     SA-479 TY 316     75 kst       SWCompression Screw     966313     SA-479 TY 316     75 kst       SWCompression Screw     30300     SA-479 TY 316     75 kst       SWCompression Screw     30300     SA-479 TY 316     75 kst       SWCompression Screw     3060-5/38062 / 8400NF     SA-479 TY 316     75 kst       SWEGROW Cap     201652     SA-479 TY 316     75 kst       Swing capacity 11_800 1b./ftcr. (23.6 GPH)     0 107     overpressure as certified by the National Board 01/25/85       Marks: * Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595     Secilication certified by     N/A       CERTIFICATION OF DESIGN     FE state     <td< td=""><td>control ring settings <u>N/A</u></td><td><u></u></td><td>······································</td><td></td><td></td></td<></td>	Serial No. or Identification     Mat'l Spec., Including Type or Grade     Multiply (Miley Tensile Strength)       SWCompression Screw     24601     SA-479 TY 316     75 kst       SWCompression Screw     34626     SA-479 TY 316     75 kst       SWCompression Screw     966313     SA-479 TY 316     75 kst       SWCompression Screw     30300     SA-479 TY 316     75 kst       SWCompression Screw     30300     SA-479 TY 316     75 kst       SWCompression Screw     3060-5/38062 / 8400NF     SA-479 TY 316     75 kst       SWEGROW Cap     201652     SA-479 TY 316     75 kst       Swing capacity 11_800 1b./ftcr. (23.6 GPH)     0 107     overpressure as certified by the National Board 01/25/85       Marks: * Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595     Secilication certified by     N/A       CERTIFICATION OF DESIGN     FE state <td< td=""><td>control ring settings <u>N/A</u></td><td><u></u></td><td>······································</td><td></td><td></td></td<>	control ring settings <u>N/A</u>	<u></u>	······································				
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Serial No. or Identification     Mat'L Spec., Including Type or Grade     Multiply Tensile Strength       360XCompression Screw     3601     SA-479 TY 316     75 kst       360XCompression Screw     3601     SA-479 TY 316     75 kst       360XCompression Screw     701093 / 841TNT     SA-479 TY 316     75 kst       360XCompression Screw     701093 / 841TNT     SA-479 TY 316     75 kst       360X Outlde Pin     35466     SA-479 TY 316     75 kst       360X Outlde Pin     35467     SA-479 TY 316     75 kst       360X Outlde Pin     35660-6/3062 / 800TNF     SA-479 TY 316     75 kst       360X Outlde Pin     36560-6/3062 / 800TNF     SA-479 TY 316     75 kst       360XGap Step     30300     36560-6/3062 / 800TNF     SA-479 TY 316     75 kst       360XGap Step     30300     3656170     -     A-479 TY 316     75 kst       360XGap Step     701632     SA-479 TY 316     75 kst     5kst       360XGap Step     701632     SA-479 TY 316     75 kst       361     985513     SA-479 TY 316     75 kst       361 <t< td=""><td>Serial No. or Identification     Mat'l Spec., Including Type or Grade     Multiply (Miley Tensile Strength)       SWCompression Screw     24601     SA-479 TY 316     75 kst       SWCompression Screw     34626     SA-479 TY 316     75 kst       SWCompression Screw     966313     SA-479 TY 316     75 kst       SWCompression Screw     30300     SA-479 TY 316     75 kst       SWCompression Screw     30300     SA-479 TY 316     75 kst       SWCompression Screw     3060-5/38062 / 8400NF     SA-479 TY 316     75 kst       SWEGROW Cap     201652     SA-479 TY 316     75 kst       Swing capacity 11_800 1b./ftcr. (23.6 GPH)     0 107     overpressure as certified by the National Board 01/25/85       Marks: * Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595     Secilication certified by     N/A       CERTIFICATION OF DESIGN     FE state     <td< td=""><td>ressure retaining items:</td><td>KCC - KV -=</td><td>24 B SIN 134</td><td>110-0</td><td>3 3. 0 1.</td></td<></td></t<>	Serial No. or Identification     Mat'l Spec., Including Type or Grade     Multiply (Miley Tensile Strength)       SWCompression Screw     24601     SA-479 TY 316     75 kst       SWCompression Screw     34626     SA-479 TY 316     75 kst       SWCompression Screw     966313     SA-479 TY 316     75 kst       SWCompression Screw     30300     SA-479 TY 316     75 kst       SWCompression Screw     30300     SA-479 TY 316     75 kst       SWCompression Screw     3060-5/38062 / 8400NF     SA-479 TY 316     75 kst       SWEGROW Cap     201652     SA-479 TY 316     75 kst       Swing capacity 11_800 1b./ftcr. (23.6 GPH)     0 107     overpressure as certified by the National Board 01/25/85       Marks: * Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595     Secilication certified by     N/A       CERTIFICATION OF DESIGN     FE state <td< td=""><td>ressure retaining items:</td><td>KCC - KV -=</td><td>24 B SIN 134</td><td>110-0</td><td>3 3. 0 1.</td></td<>	ressure retaining items:	KCC - KV -=	24 B SIN 134	110-0	3 3. 0 1.		
Serial No. er       Mail: Spec.       Mail: Special Specia	Serial No. er     Mail: Spec., Including Type or Grade     (7)     Strength       SQCCmpression     Screw     34601     SA-479 TY 316     75 kst       SQRCmpression     Screw     34601     SA-479 TY 316     75 kst       SQRCmpression     701093 / 84170T     SA-479 TY 316     75 kst     70 kst       SQRC Guide Pin     35486     SA-479 TY 316     75 kst     75 kst       SQRC Guide Pin     35486     SA-479 TY 316     75 kst     75 kst       SQRC Guide Pin     35486     SA-479 TY 316     75 kst       SQRC Guide Pin     35486     SA-479 TY 316     75 kst       SQRC Guide Pin     35486     SA-479 TY 316     75 kst       SQRC Guide Pin     35486     SA-479 TY 316     75 kst       SQRC Guide Pin     3560-6/38052 / 840TW     SA-479 TY 316     75 kst       SQRC Guide Pin     39883     SA-479 TY 316     75 kst       SQRC Guide Gap     701632     SA-479 TY 316     75 kst       m     955313     SA-479 TY 316     75 kst       marks: ± Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595.     Max       CERTIFICATION OF DESIGN       Specification certified by     D. Mirphy       N/A     Reg. no. <td cols<="" td=""><td></td><td></td><td></td><td></td><td>I dub Sines</td></td>	<td></td> <td></td> <td></td> <td></td> <td>I dub Sines</td>					I dub Sines	
SQXCompression Screez       34601       SA-472 TY 316       75 kst         SQXCompression Screez       34601       SA-472 TY 316       70 kst         SQXCompression Screez       70 kst       75 kst       75 kst         SQXCompression Screez       70 kst       75 kst       75 kst         SQXCompression Screez       70 kst       75 kst       75 kst         SQXCompression Screez       76 kst       75 kst       75 kst         SQXCompression Screez       70 kst       75 kst       75 kst         SQXCompression Screez       70 kst       75 kst       75 kst         SQXQUQQDSQXSCREASS       70 kst       75 kst       75 kst         SQUQQQDSQXCREASS       70 kst       75 kst       75 kst         SQUQQQDSQXCREASS       70 kst       75 kst       75 kst         SQUQQQDSCREAS       70 kst       75 kst       75 kst         SQUQQQDSQXCREAS       70 kst       75 kst       <	SQCCompression Screev       34601       SA-479 TY 316       75 kst         VertSRSSSR (Assy.)       A6139-CA72, -CA73./       SA-479 TY 316       75 kst         SPERDORSK       T01093./       ReitTRT       SA-479 TY 316       75 kst         SRX Guide Pin       35486       SA-479 TY 316       75 kst       75 kst         star Guide Pin       35486       SA-479 TY 316       75 kst       75 kst         star Guide Pin       35486       SA-479 TY 316       75 kst       75 kst         star Guide Pin       35486       SA-479 TY 316       75 kst       75 kst         star Guide Pin       35467       SA-479 TY 316       75 kst       75 kst         star Guide Pin       36560-6/38062       SA-479 TY 316       75 kst       75 kst         Star Guide Ping       8651720       A-313 TSBH       70 kst       75 kst         Star Guide Ping       8651720       A-313 TSBH       71 kst       75 kst         Star Guide Ping       865170       A-313 TSBH       71 kst       75 kst         Star Guide Ping       90633       SA-479 TY 316       75 kst       75 kst         Star Guide Ping Star Guide	•	Serial No. or	Mat	1. Spec.,	On Tensile		
Some USDAVEX (Assy.)       A6139-CA72       -C473 /       SA-216 MXB       70 kst         V2EXEDX2NX       701093 / B41TNT       SA-279 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX2NX       701093 / B41TNT       SA-279 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX2NX       701093 / B41TNT       SA-279 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX2NX       975313       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX2NX       11579-6, -16 / SA-279 TY 316 / SA-371 CERH       70 kst       70 kst         V2EXEDX0000282826       30300       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX0000282826       30560 / B40TNE       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX00000282826       30560 / B40TNE       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX0000028282       30560 / B40TNE       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX0000028282       30583 / SA-479 TY 316 / SA-479 TY 316       75 kst / 70 kst       75 kst / 70 kst         V2EXEDX0000028282       925313       SA-479 TY 316 / SA-479 TY 316 / TS kst       75 kst         V2EXEDX0000000000000000000000000000000000	www.USD2000K (Assy.)       A5130-CAT2, -CAT3 /       SA-216 MCE       70 kst         SEREDXEXX       71003 / ASITNT       SA-479 TY 316 / SA-105       75 kst / 20 kst         SEXX Guide Pin       35486       SA-479 TY 316 / SA-105       75 kst / 20 kst         ing X080503CStep       30340       SA-479 TY 316 / SA-105       75 kst / 70 kst         ing X080503CStep       30340       SA-479 TY 316 / SA-105       75 kst / 70 kst         X0000000000Base Assy.       11579-6, -16 / SA-479 TY 316 / SA-105       75 kst / 70 kst         MOR       3550-5/3062 / SAMINF       SA-479 TY 316 / SA-105       75 kst / 70 kst         MOR       3550-5/3062 / SAMINF       SA-479 TY 316 / SA-105       75 kst / 70 kst         MOR       3550-5/23062 / SAMINF       SA-479 TY 316 / SA-105       75 kst / 70 kst         MOR       956313       SA-479 TY 316 / TS kst       75 kst / 70 kst         marks:       956313       SA-479 TY 316 / TS kst       75 kst         marks:       \$Specification certified by the National Board .01/25/85       Mass       Mass         marks:       \$Specification certified by       D. Matter       P.E. State       MA         Specification certified by       N/A       P.E. State       N/A       Reg. no.       N/A		Identification	Including	Type or Grade	Strength		
Some USDAVEX (Assy.)       A6139-CA72       -C473 /       SA-216 MXB       70 kst         V2EXEDX2NX       701093 / B41TNT       SA-279 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX2NX       701093 / B41TNT       SA-279 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX2NX       701093 / B41TNT       SA-279 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX2NX       975313       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX2NX       11579-6, -16 / SA-279 TY 316 / SA-371 CERH       70 kst       70 kst         V2EXEDX0000282826       30300       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX0000282826       30560 / B40TNE       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX00000282826       30560 / B40TNE       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX0000028282       30560 / B40TNE       SA-479 TY 316 / SA-105       75 kst / 70 kst         V2EXEDX0000028282       30583 / SA-479 TY 316 / SA-479 TY 316       75 kst / 70 kst       75 kst / 70 kst         V2EXEDX0000028282       925313       SA-479 TY 316 / SA-479 TY 316 / TS kst       75 kst         V2EXEDX0000000000000000000000000000000000	www.USD2000K (Assy.)       A5130-CAT2, -CAT3 /       SA-216 MCE       70 kst         SEREDXEXX       71003 / ASITNT       SA-479 TY 316 / SA-105       75 kst / 20 kst         SEXX Guide Pin       35486       SA-479 TY 316 / SA-105       75 kst / 20 kst         ing X080503CStep       30340       SA-479 TY 316 / SA-105       75 kst / 70 kst         ing X080503CStep       30340       SA-479 TY 316 / SA-105       75 kst / 70 kst         X0000000000Base Assy.       11579-6, -16 / SA-479 TY 316 / SA-105       75 kst / 70 kst         MOR       3550-5/3062 / SAMINF       SA-479 TY 316 / SA-105       75 kst / 70 kst         MOR       3550-5/3062 / SAMINF       SA-479 TY 316 / SA-105       75 kst / 70 kst         MOR       3550-5/23062 / SAMINF       SA-479 TY 316 / SA-105       75 kst / 70 kst         MOR       956313       SA-479 TY 316 / TS kst       75 kst / 70 kst         marks:       956313       SA-479 TY 316 / TS kst       75 kst         marks:       \$Specification certified by the National Board .01/25/85       Mass       Mass         marks:       \$Specification certified by       D. Matter       P.E. State       MA         Specification certified by       N/A       P.E. State       N/A       Reg. no.       N/A		24601	SA_679 TV 316	4			
200000202X       701093 / 81TNT       SA-479 TY 316 / SA-105       75 kst / 70 kst         20200 Cuide Pin       35486       SA-479 TY 316       75 kst / 70 kst         20200 Cuide Pin       35486       SA-479 TY 316       75 kst / 70 kst         20200 Cuide Pin       3540       SA-479 TY 316       75 kst / 70 kst         20200 Cuidesse Assy       11579-6, -16 /       SA-479 TY 316       75 kst / 70 kst         20200 Cuidesse Assy       11579-6, -16 /       SA-479 TY 316       75 kst / 70 kst         20200 Cuidesse Assy       11579-6, -16 /       SA-479 TY 316       75 kst / 70 kst         20200 Cag Ping Scrow       30983       SA-479 TY 316       75 kst         20200 Cap Cours       30983       SA-479 TY 316       75 kst         20200 Cap Ty 316       75 kst       75 kst       75 kst         20200 Cap Ty 316       75 kst       75 kst       75 kst         20200 Cap Ty 316       75 kst       75 kst       75 kst         20200 Cap Ty 316       74 77 Ty 316       75 kst       75 kst         20200 Cap Ty 316       54-477 TY 316       75 kst       75 kst         20200 Cap Ty 316 Cap Ty 316       75 kst       75 kst       75 kst         20200 Cap Cap Ty 316       100 Ly Ty 310 Ty 316 <td< td=""><td>SPERCHEARX       701093 / RATENT       SA-479 TY 316 / SA-105       75 kst / 70 kst         SRAK Guide Pin       35486       SA-479 TY 316       75 kst / 70 kst         k       976313       SA-479 TY 316       75 kst / 70 kst         k       9766313       SA-479 TY 316       75 kst / 70 kst         xk       9766313       SA-479 TY 316       75 kst / 70 kst         X0000090000000000000000000000000000000</td><td>· •</td><td></td><td></td><td></td><td></td></td<>	SPERCHEARX       701093 / RATENT       SA-479 TY 316 / SA-105       75 kst / 70 kst         SRAK Guide Pin       35486       SA-479 TY 316       75 kst / 70 kst         k       976313       SA-479 TY 316       75 kst / 70 kst         k       9766313       SA-479 TY 316       75 kst / 70 kst         xk       9766313       SA-479 TY 316       75 kst / 70 kst         X0000090000000000000000000000000000000	· •						
SREAK Quilde Pin       35486       SA-479 TY 316       75 ksi         sk       976313       SA-479 TY 316       75 ksi         oring N39666035tep       30340       SA-479 TY 316       75 ksi         oring N39666035tep       30340       SA-479 TY 316       75 ksi         oring N39666035tep       30340       SA-479 TY 316       75 ksi         SA0006       36560-6/38062 / 84000F       SA-479 TY 316       75 ksi       75 ksi         SA0006       36560-6/38062 / 84000F       SA-479 TY 316       75 ksi       75 ksi         SA0006 Big Server       368693       SA-479 TY 316       75 ksi       75 ksi         SA0006 Big Server       368693       SA-479 TY 316       75 ksi       75 ksi         SERVICE Cap       701632       SA-479 TY 316       75 ksi       75 ksi         Serving capacity       11.800 1b./ftr. (23.6 GPH)       0 1072       overpressure as certified by the National Board       01/25/85         Itemm reflex Bhrl       0 1072       0 1072       overpressure as certified by the National Board       01/25/85         Specification certified by       D. Mitchiny       P.E. State       NA       Reg. no.       11/242         Report certified by       N/A       P.E. State       NA       Reg. no	REXX Guide Pin       35686       SA-479 TY 316       75 kst         k       GEG313       SA-479 TY 316       75 kst         ing DSG6003Step       30340       SA-479 TY 316       75 kst         DODM       36560-6/38062 / 840TNF       SA-479 TY 316 / SA-105       75 kst         DOW       36560-6/38062 / 840TNF       SA-479 TY 316 / SA-105       75 kst         DOW       36560-6/38062 / 840TNF       SA-479 TY 316 / SA-105       75 kst         DOW       36560-6/38062 / 840TNF       SA-479 TY 316 / SA-105       75 kst         DOW       36560-6/38062 / 840TNF       SA-479 TY 316 / SA-105       75 kst         DOW       36560-6/38062 / 840TNF       SA-479 TY 316 / SA-105       75 kst         DOW       36560-6/38062 / 840TNF       SA-479 TY 316 / TS kst       75 kst         DOW       955313       SA-479 TY 316 / TS kst       75 kst         marks:       * Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595.       Kates         Specification certified by       D. MUEDBY       P.E. State       MA       Reg. no.       12542         Report certified by       N/A       P.E. State       N/A       Reg. no.       N/A         CERTIFICATION OF DESIGN <td <="" colspan="2" td=""><td>· ·</td><td></td><td></td><td></td><td></td></td>	<td>· ·</td> <td></td> <td></td> <td></td> <td></td>		· ·				
sk       9F6313       SA-479 TY 316       75 ks1         oring X0906020325 tep       30340       SA-479 TY 316       75 ks1         SQD00Q0000020325 tep       30340       SA-479 TY 316       75 ks1         SQD00Q0000020325 tep       30340       SA-479 TY 316       75 ks1         SQD00Q00000020325 tep       30560-4/33052 / 240TNF       SA-479 TY 316       75 ks1         SQD04       35500-4/33052 / 240TNF       SA-479 TY 316       75 ks1         SQD04       35500-4/33052 / 240TNF       SA-479 TY 316       75 ks1         SQD04Cap Plug Screaz       39283       SA-479 TY 316       75 ks1         SQD04Cap Plug Screaz       39283       SA-479 TY 316       75 ks1         Sectification certified by the National Board _01/25/85       SA-479 TY 316       75 ks1         State screaz       9E6313       SA-479 TY 316       75 ks1         Sectification certified by       D. Murphy       0 107       overpressure as certified by the National Board _01/25/85         Sectification certified by       D. Murphy       0 107       test       Kate         Specification certified by       D. Murphy       P.E. State       MA       Reg. no.       12542         Report certified by       N/A       P.E. State       N/A       Reg.	kt       9F6313       SA-479 TY 316       75.ksi         ing \$V3980803\$Step       30300       SA-479 TY 316       75.ksi         D000009080008Base.Assy. 11579-6., -16./       SA-379 TY 316       75.ksi         ing \$\frac{3}{3660-5/38062}.       SA-479 TY 316       75.ksi         DNBCag Plug Scrow.       39883       SA-479 TY 316       75.ksi         DNBCag Plug Scrow.       39883       SA-479 TY 316       75.ksi         marks:       \$\frac{9}{905313}	02666025217	01093 / 841TNT	<u>SA_479_TY_316</u>	<u>/</u>	<u>75 ksi / 70 ksi</u>		
Dring X93060X3 tep	SA-479 TY 316       75 ksi         XXXXXXXX       70 ksi         XXXXXXXXXXX       70 ksi         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	2332X Guide Pin	35486			<u>_75 ksi</u>		
Dring X93060X3 tep	SA-479 TY 316       75 ksi         XXXXXXXX       70 ksi         XXXXXXXXXXX       70 ksi         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	).sk	956313	SA-479 TY 316		75 ksi		
SQUENCYSQUEDace Assy       11579-6, -16 /       SA-351 CE2M       70 ksi         SQUENCYSQUEDace Assy       36560-6/38062 / 840TNF       SA-479 TV 316 / SA-105       75 ksi / 70 ksi         SQUENCYSQUEDace Assy       39833       SA-479 TV 316 / SA-105       75 ksi / 70 ksi         SQUENCYSQUEDace Assy       39833       SA-479 TV 316 / TS ksi       #         SQUENCYSQUEDace Assy       70 ksi       -       -       #         SQUENCYSQUEDace Assy       39833       SA-479 TV 316 / TS ksi       #         SQUENCYSQUEDace Assy       70 ksi       -       -       #         SQUENCYSQUEDace Assy       10622       SA-479 TV 316 / TS ksi       #       #         SQUENCYSQUEDace Assy       70 ksi       -       -       State       TS ksi       -       -       -       State       -       -       State       -	DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD				· ·	75 ksi		
SNOK	36560-6/32062 / 840TNF       SA-479 TY 316 / SA-105       75 kst / 70 kst         Arg       8E6170       A-313 TY 316       *         DDNRGag Plug Screet       39883       SA-479 TY 316       75 kst         DDNRGag Plug Screet       39883       SA-479 TY 316       75 kst         DDNRGag Plug Screet       39883       SA-479 TY 316       75 kst         marks:       9E6313       SA-479 TY 316       75 kst         marks:       # Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595.       Katest         marks:       # Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595.       Katest         Specification certified by	•						
pring	Imag       BF6120       A=313 TY 316       #         DDBCage Plug Scrox:       39883       SA=A79 TY 316       75 ks1         DDCGAGE Plug Scrox:       39883       SA=A79 TY 316       75 ks1         DDCGAGE Plug Scrox:       39583       SA=479 TY 316       75 ks1         DDCGAGE Plug Scrox:       9E6313       SA=479 TY 316       75 ks1         DD:       //r.c. (23.6 CPH)       © 107       overpressure as certified by the National Board _01/25/85         Invariance Fluid, B/M1       @ 107       overpressure as certified by the National Board _01/25/85         Invariance Fluid, B/M1       @ 107       overpressure as certified by the National Board _01/25/85         Invariance Fluid, B/M1       @ 107       overpressure as certified by the National Board _01/25/85         Marks:       * Spring exempt: from material requirements of ND=2000 but meets design requirements of ND=3595.         Specification certified by       D. Murphy       P.E. State       WA       Reg. no12542         Report certified by       N/A       P.E. State       NA       Reg. noN/A         CERTIFICATE OF COMPLIANCE         ify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code. Section 1.         tificate of Authorization No							
SDDBGeg Plug Screes       39883       SA-479 TV 316       75 kst         HNDDRDRW Cap       701632       SA-479 TV 316       75 kst         em       9E6313       SA-479 TV 316       75 kst         emerch       11_800 1b_Arr, (23.6 GRH)       0 107       overpressure as certified by the National Board 01/25/85         emerch       Specification certified by       D. Murphy       P.E. State       MA       Reg. no.       12542         Specification certified by       D. Murphy       P.E. State       NA       Reg. no.       N/A         CERTIFICATE OF COMPLIANCE         rtificate of Authorization No.       M-2853         Expires       N/A         CERTIFICATE OF COMPLIANCE         rtificate of Authorization No.       M-2853         Expires       N/A<	DNMCag Plug Scrow:       39883       SA=A79 TY 316       75 kst         MSDRSKX Cap       701632       SA=A79 TY 316       75 kst         m       995313       SA=479 TY 316       75 kst         marks:       # Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595.       6000000000000000000000000000000000000	·····			<u>/_SA=105</u>			
CERTIFICATION OF DESIGN       N/A         Report certified by       N/A         CERTIFICATION OF DESIGN       N/A         Report certified by       N/A         PIESTIFICATION OF DESIGN       N/A         Report certified by       N/A         PIESTIFICATE OF COMPLIANCE       Reg. no.         rtificate of Authorization No.       N-2853         Expires       November 18, 1994         Market Industries, Inc.       Signed         Start Market Industries, Inc.       Signed         MV Certificate Modent       Report det depresentation         MV Certificate Modent       Signed         MV Certificate Modent       Loutheringerestife depresentation	BADRERY Cap       701632       SA-479 TY 316       75 ks1         m       9E6313       SA-479 TY 316       75 ks1         fiewing capacity       11.800 1b./hr. (23.6 GRM)       0       107       overpressure as certified by the National Board       01/25/85         intervent       istain       0       107       overpressure as certified by the National Board       01/25/85         marks:       * Spring exempt       from material requirements of ND-2000 but meets design requirements of ND-3595.         Specification certified by       D. Murphy       P.E. State       WA       Reg. no.       12542         Report certified by       N/A       P.E. State       N/A       Reg. no.       12542         CERTIFICATE OF COMPLIANCE       ify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code. Section in 1.       Centrification No.       N-2853       Expires       November 18, 1994         tificate of Authorization No.       N-2853       Expires       November 18, 1994       Leuberized representative)         entationering inform of lasts, steetees, or drawings may be used provided (1) size is 8 % x 11, (2) information in items 1 through 4 on this Data Report ded on each sheet, 131 each sheet is numbered and the number of sheets is secorded at the top of this form.	Spring			······			
em 955313 SA-479 TY 316 75 ks1 elleving capacity	m       9E6313       SA-479 TY 316       75 ks1         isoving capacity	6000Gag Plug Screw			·			
Elleving capacity	Identified by 11.800 1b./htt. (23.6 GPM)         Identified by the National Board _01/25/85_         Identified by the National Board _01/25/85_         Identified by the National Board _01/25/85_         Marks: _# Spring exempt from material requirements of ND-2000 but meets design requirements of ND-3595.         CERTIFICATION OF DESIGN         Specification certified by	CHOODROOK Cap	701632	<u></u>	· · · · · · · · · · · · · · · · · · ·	<u> 75 ksi</u>		
Litisem of Null 1994         Litisem of Null 1994         CERTIFICATION OF DESIGN         CERTIFICATION OF DESIGN         O Specification certified by	Iteration in form of lasts, sketches, or drawings may be used provided (11 size is 8 ½ x 11, (21 information in items 1 through 4 on this Data Report		9E6313	SA-479 TY 316		<ul> <li>75 ksi</li> </ul>		
Litisem of Null 1994         Litisem of Null 1994         CERTIFICATION OF DESIGN         CERTIFICATION OF DESIGN         O Specification certified by	Iteration in form of lasts, sketches, or drawings may be used provided (11 size is 8 ½ x 11, (21 information in items 1 through 4 on this Data Report	ten		· a 107 automatic	e as certified by the	National Board _01/25/85		
D. Mutphy       P.E. State       WA       Reg. no.       12542         D. Report certified by       N/A       P.E. State       N/A       Reg. no.       N/A         CERTIFICATE OF COMPLIANCE         rtify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code. Section ision 1.         rtificate of Authorization No.       N=2853         D. Mutphy         P.E. State       N/A         Report certificate of Authorization No.         N=2853         Expires       November 18, 1994         Mutphy         Mutphy         November 18, 1994         Mutphy         Mutphy         Mutphy         Mutphy         November 18, 1994         Mutphy	Specification certified by		Isteem or fluid, 80/Tv1	losil		(date)		
Report certified by	Report certified byN/A       P.E. State	Relieving capacity800_]	Isteam er fluid, K/hr)	• _ tps4	. •	(Cate)		
CERTIFICATE OF COMPLIANCE rtify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section ision 1. rtificate of Authorization No. <u>N-2853</u> Expires <u>November 18, 1994</u> Kurkle Industries, Inc. <u>5-24-94</u> Name <u>Lonergan Valve Division</u> RV Certificate Modert Expires <u>Signed</u> <u>Low Q. W.C.</u> (RV Certificate Modert) Expires 1 through 4 on this Data Reported on each sheet. [3] each sheet is numbered and the number of sheets is recorded at the top of this form.	CERTIFICATE OF COMPLIANCE ify that the statements made in this report are correct and that this valve conforms to the rules for construction of the ASME Code, Section sion 1. tificate of Authorization No. <u>N-2853</u> Expires <u>November 18, 1994</u> Kunkle Industries, Inc. <u>5-24-94</u> Name <u>Lonergan Valve Division</u> NV Certificate Holder: Signed <u>Dibla A. With</u> tautherized representatives mental information in form of ksts, sketches, or drawings may be used provided (11 size is 8% x 11, (21 information in items 1 through 4 on this Data Reporded on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.	Relieving capacity <u>11,800</u>	Isteam or Ruid, BART	TEMPENTS OF ND-2000 buil me	ets design req	uirements of ND-3595.		
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# FORM NV-1 (Back - Pg. 2 of \_2\_)

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
4	MAY 23 1494, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this value in accordance
	with the ASME Code, Section III, Division 1.
E	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
9	a loss of any kind arising from or connected with this inspection
ing7in	Date 5-2494 Signed Tuckless K- Kary commissions NB 2444 (NBIN), In 5 34D (Authorized J'spector) (Hart Bd. and endorsometrics) and real
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 08/23/01 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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, 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
MS-V-706A	Borg Warner	19814	N/A	N/A	1977	Replacement	Yes, Code Class

7. Description Of Work Performed: Performed on-line leak seal for packing leak for valve MS-V-706A. The work was performed as follows:

- 1) Drilled and tapped one (1) hole into the valve packing chamber area to install 5/16" injector (shutoff) adapter. See Note 1.
- 2) Installed one (1) 5/16" injector (shutoff) adapter in the valve packing chamber area. See Note 1.

NOTES-

1) The ASME Section XI related work was to drill and tap the hole into the ASME pressure boundary (retaining) material. In accordance with PPM 1.3.30, the purpose of this ASME Section XI work plan was to document the size and location of the hole in the valve packing chamber area where the injector (shutoff) adapter was installed and that the injector (shutoff) adapter was procured to QC 1 requirements.

Inspector's Signature National Board, State, and Endorsements	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)         Fests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F       Component Design Pressure: Psig       Test Temperature: ° F         Remarks: None       EERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.       Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable       Expiration Date: Not Applicable
rests Conducted: Hydrostalic Pneumalic Nominal Operating Pressure None Test Tremperature: <sup>0</sup> F       None Test Tremperature: <sup>0</sup> F         Test Pressure: Psig       Test Temperature: <sup>0</sup> F         Cemarks: 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 Author/station No.: Not Applicable         Expiration Date: Not Applicable       Signed By         Weight Singh - Program Lead Engineer (PLE)       Kudip Singh - Program Lead Engineer (PLE)         Date       \$23   0           CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel inspectors and the State of and employed by and espinoed by and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report nor his employer makes any warranky, expressed or implied, concerning the examinations and corrective measures described in this Inspection or his employer shall be 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       Mational Board, State, and Endorsements	rests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F       Component Design Pressure: Psig       Temperature: ° F         Remarks: None       CERTIFICATE OF COMPLIANCE       CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.       Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable       Expiration Date: Not Applicable       Authorization No.: Not Applicable
ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Component Design Pressure: Psig Test Temperature: <sup>0</sup> F Component Design Pressure: Psig Test Temperature: <sup>0</sup> F Temperature: <sup>0</sup> F 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 Kudip Singh - Program Laad Engineer (PLE) Muldip Singh - Program Laad Engineer (PLE) Date <u>Sp3 D1</u> Date <u>Sp23 D1</u> CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel inspectors and the State of <u>o</u> <u>and</u> state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or Implied, concerning the examinations and corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or Implied, concerning the examinations and corrective measures described in this Downer's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or Implied, concerning the examinations and corrective measures described in this Downer's Report in accordance with the inspector. Mathematice - Replacement 1'NPS And Smaller Commissions Mathematice - Replacement 1'NPS And Smaller Commissions of the addition and manner for any personal Inspector's Signature Commissions described with this inspection.	ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: °F Component Design Pressure: Psig Temperature: °F 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
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By	CERTIFICATE OF COMPLIANCE We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
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Prepared By       Mudp       Signed By       Sig	$\Lambda_{12}$ $\Lambda_{2}$ $\Lambda_{12}$ $\Lambda_{2}$
Date       82301         Date       82301         CERTIFICATE OF INSERVICE INSPECTION         Inspectors and the State of and employed by         Lot	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State ofand employed by	
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	
Vessel inspectors and the State of and employed by         described in this Owner's Report during the period to         described in this Owner's Report during the period to         state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be 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	CERTIFICATE OF INSERVICE INSPECTION
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. <u>Not Required - Replacement 1° NPS And Smaller</u> <u>Commissions</u> Inspector's Signature <u>National Board, State, and Endorsements</u>	Vessel Inspectors and the State of and employed by
state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>Not Required - Replacement 1° NPS And Smaller</u> Inspector's Signature Commissions Commissions	have inspected the components
Implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>Not Required - Replacement 1° NPS And Smaller</u> Inspector's Signature Commissions National Board, State, and Endorsements	state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
Inspector's Signature National Board, State, and Endorsements	implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
	Not Required - Replacement 1* NPS And Smaller Commissions



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 08/23/01 Sheet: 1 of 1 Unit: Not Applicable

Address: Columbia Generating Station Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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-1B Mechanical Seat* Mechanical Seat	Bingham Bingham Bingham	210100 (B-2-1035) N01-1* 11N92-1	135 473* 1078	NA N/A N/A	1974 1981* 1983	Replaced Replacement	Yes, Code Class 1 No, Code Class 1* Yes, Code Class 1

7. Description Of Work Performed: Replaced existing upper mechanical seal for pump RRC-P-1B. The replacement work was performed as follows:

1) Removed existing upper mechanical seal, Serial No N01-1.

2) Installed spare replacement upper mechanical seal, Serial No 11N92-1.

3) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

NOTES -

1) The existing pump RRC-P-1B is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements. 2) The replacement mechanical seal, Serial No 11N92-1 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with 1971 Addenda requirements.

3) \* The origin of the replaced mechanical seal, Serial No N01-1 is as follows:

Mechanical seal, Serial No N01-1 is from a pump, Serial No 00N04, National Board No 473. This pump was furnished by Bingham Willamette to Black Fox plant. This plant was later cancelled. There is no ASME Code stamping nor ASME Code Data Report for this seal since it was part of an ASME Section III, Code Class 1 stamped pump, Serial No 00N04, National Board No 473.

PLAN NO 2-1769
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       Other       None         Test Pressure: 935 Psig       Test Temperature: 528.9° F       Component Design Pressure: 1650 Psig       Temperature: 575° F
<b>. Remarks:</b> See attached N-2 Code Data Report for the spare replacement mechanical seal, Serial No 11N92-1.
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       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       \$23 01
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>2/24/01</u> to <u>3/27/01</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Mathematical Description       Commissions <u>24860/24656467555</u> National Board, State, and Endorsements         Date       SHMM
Date <u>8///////</u>

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	FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES. Cura	) [
:		7
	(a) Manufactured by Bingham-Willamette Company, Portland, OR RRC-P-1B	•
<b>6</b> .	(b) Manufactured for Washington Public Power Supply System, Richland, WA	
	(Nono and address of Manufesturer of completed nuclear component)	
<u>,</u>	Identification-Hasufacturer's Serial No. of Part. 11892 - 1	•.
	(a) Constructed According to Drawing No. <u>J1756</u> Drawing Prepared by <u>Bingham-Hillamette Company</u>	
	(b) Description of Part Inspected_Mechanical Seal. type RV875B-2	
	(c) Applicable ASHE Code: Section III, Edition 1971 , Addends date 1971 , Case No. NONE Ciere 1	
3.	Remarkas To prevent liquids from escaping from nump. PB Parts consist of: (Brief description of service for which component was designed)	
	a.)Seal Holder SN 149285-1b.) Gland-Upper Seal SH 1495283-1	
	Seal Hydrotested at 2575 PSI	
	Hotes: Items 4-18 not applicable.	÷
D	NOV 21 1983 igaed MILANETTE COMPANY NOV 21 1983 igaed MILANETTE COMPANY Manufacturer) striffests of Authorization No. N-16-55	•
Γ	CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)	: ! .
ľ	Design laformation on file at <u>N/A</u>	•
	Stress analysis seport on file at N/A	
ŀ	Design specifications certified by N/A Prof. Eng. State Reg. No.	
	Stress analysis repart certified by M/A	
	CERTIFICATE OF SHOP INSPECTION	ļ
:	I, the undersigned, helding a valid commission issued by the National Board of Boller and Pressure Vessel Inspectors .and/or the State of Province of Oregon and employed by	,
	of have, inspected the part of a pressure vessel described in this NUV 2 1 1983 19, 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 cartificate, asither the inspector nor his employer makes any warranty, expressed or implied, concern- ing the part described in this Manufacturer's Partial Data Report. Furthermore, asither the Inspector nor his employer	
	with this isspection.	•_
	DateNOV 2 1 198319	
••	Lasperier's Elgander Commissions AB 8036 OCC 500	
	report is included on eath sheet, and (3) each sheet is dumbered and number of sheets is reported in the 3. "Remarks".	
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•	S.O. 11N92-1	

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(b)	·			·····			·		<u> </u>
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ITEM	1N-2 Code Data Repor	2
PAGE	3	

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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 08/23/01 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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 Bullt	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4A MS-V-706A MS-V-706A	WPPSS * Borg Warner Borg Warner	MS(1)-4A-P1 19814 16872	N/A N/A N/A	N/A N/A N/A	1983 1977 1977	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing valve MS-V-706A. The replacement work was performed as follows: 1) Removed existing globe valve MS-V-706A, Serial No 19814.

Premoved existing globe valve MS-V-706A, Serial No 19014.
 Installed replacement gate valve MS-V-706A, Serial No 16872.

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement gate valve MS-V-706A, Serial No 16872 was installed is Main Steam (MS) piping system MS(1)-4A-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement gate valve MS-V-706A, Serial No 16872 is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

4) The existing globe valve MS-V-706A, Serial No 19814 is ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.

PLAN NO 2- EMERGY NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F         Remarks: See attached NPV-1 Code Data Report for the replacement valve MS-V-706A, Serial No 16872.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By
CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Bolier 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 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
Date

FORM I		ERTIFICATE HOLDERS' I Required by the Provisions				NO.
1. Manufactured	by Mucle	ur Valve Div., Borg	Verber, 7500 Tyra	LA AVE., VI	m Noys, Ca	111.
2. Manufactures	for Bove	Name and Address of N Cer • & Creil/G.E.E.I.,	P.O. Box 1040, 1	tichland, 1	Vashington	9935
		Hame and Accress of Purchaser Richland, Washingto	or Owners			
3. Location of In		Iname and Addressi				
4. Pump or Val	Gate_	<u>Valve</u> . 1	Nominal Inlet Size <u>1</u>	Linctit Ou	ntiet Size	linchi
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5 Centre for the second sec	de 1J60; -70453	Insted     writer.     Eff.       (Ener description of bay       essure rating of the       0     pai       0     pai       100       Pressure       3600       pai at 100°F.       Maternal Spec. No       SA296 Type 630       SA564 Type 630	ARROCIATED With a most for proch sources was a media is stated 	PHE and Br bequed helow. Pressure Cless Curer Pcision Ision Ision Ision	N/A Remarks Mat *1 Spec	
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\* Supplemental sheets in form of lists, eastches or drawings may be used provided (1) size is 8-10° ± 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 a recorded at top of this form.

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## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and th	
construction of the ASME Code for Nuclear Power Plant Components	2. Section III, Div. L. Edition
Accerda Nint(r 1973 Code Case No	
Signed Muclaar Laire Div., Borg Warner	Elucit to pro-
OUP ASINE CARDINERS OF AUCHORIZATION ING.	Un Dette

## CERTIFICATION OF DESIGN

Design information on file at TYD of Borg Farmer, 7500 Tyrone Ave., Van Buys, Ca. 91409 Stress analysis report (Class 1 only) on the st ...

Design specifications carolined by (1) \_\_\_\_\_ David J. Murphy PE Store Veshington Reg. No 12542 Stress analyse certified by (1) \_\_\_\_ PE State ..... \_\_ Reg. No. .

(1) Signeours not required. List name only.

#### CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel inspectors and the State or Province of
of Long Grove, TILIncia have inspected the pump, or valve, described in this Data Report on Decipe ber 18 19 81 and state that to the best of my knowledge and belief, the N Cartificate Holder has con-
soucced this purity, of velve, in accordance with the ASIME Code, Section M.
by success this sections, success the interactions and he excited the unstant of unstantial or interaction of the

r nor his employer mai es sny wertanty, i e the ine the equipment described in this Deta Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any lond arising from or connected with this inspection. ,81

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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
DO(1)-1-1B	WPPSS*	DO(1)-1B-P3	N/A	N/A	1983		Yes, Code Class

7. Description Of Work Performed: Replaced U bots for supports DO-2710-34 (3/4" DO-2712), DO-2710-34 (1" DO-2710) and DO-2708-31 (1" DO-2708). The replacement work was performed as follows:

1) Removed existing U bolts from the supports.

2) Installed replacement U bolts for the supports.

3) Installed replacement jam nuts for the supports.

# NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) ASME Section III, Code Class NF(3) for the support material.

Date: 06/05/02 Sheet: 1 Of 1 Unit: Not Applicable

NORTHWEST         FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)         8 Tests Conducted: Hydrostatic Pressure: Prig         Test Pressure: Prig         Test Pressure: Prig         Test Temperature: °F         Component Design Pressure: Prig         Test 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         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Expiration Signer: Prigram Lead Engineer (PLE)         Date         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of	Er	PLAN NO 2-1771
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None X       Test Pressure: Psig       Test Temperature: ° F         8 Tests Sconducted: Hydrostatic 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       Expiration Date: Not Applicable         Prepared By       Lidday Singh. Pridgram Lead Engineer (PLE)         Date       8 [ ] 0 2         Date         Signed By         Lidday Singh. Pridgram Lead Engineer (PLE)         Date       8 [ ] 0 2         Date         Signed By         Lidday Singh. Pridgram Lead Engineer (PLE)         Date       8 [ ] 0 2         Date         Signed By         Lidday Singh. Pridgram Lead Engineer (PLE)         Date       8 [ ] 0 2         Date         Signed By         Lidday Singh. Pridgram Lead Engineer (PLE)         Date       8 [ ] 0 2         CERTIFICATE OF INSERVICE INSPECTION         I, the undersign		
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: NA Applicable         Expiration Date: Not Applicable         Prepared By       Jul Dh         Kudip Singh - Pidytam Lead Engineer (PLE)         Date       Signed By         Kudip Singh - Pidytam Lead Engineer (PLE)         Date       Signed By         Kudip Singh - Pidytam Lead Engineer (PLE)         Date       Signed By         Kudip Singh - Pidytam Lead Engineer (PLE)         Date       Signed By         Kudip Singh - Pidytam Lead Engineer (PLE)         Date       Signed By         Kudip Singh - Pidytam Lead Engineer (PLE)         Date       Signed By         Kudip Singh - Notingtam Lead Engineer (PLE)         Date       Signed By         Kudip Singh - Report during the period       have inspected the components and employed by         described in this Owner's Report during the period       have inspected the components and employed by         described in this Owner's Report during the period       have inspected the com	FORM NIS-2 OWNER'S REPORT I	FOR REPAIRS OR REPLACEMENTS (Back)
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       We define Program Lead Engineer (PLE)         Date       Signed By         Kuidip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuidip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuidip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuidip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuidip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Like undersigned, holding a valid commission Issued by the National Board of Boller and Pressure         Vessel Inspectors and the State of and employed by	Test Pressure: Psig	Test Temperature: ° F
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Automation Signed By       Signed By         Automation Signed By       Signed By         Signed By       Multip Singh - Program Lead Engineer (PLE)         Issue Signed	9. Remarks: None	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Automation Singh - Program Lead Engineer (PLE)         Date       Signed By         Automation Singh - Program Lead Engineer (PLE)         Date       Signed By		
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Automation Singh - Program Lead Engineer (PLE)         Date       Signed By         Automation Singh - Program Lead Engineer (PLE)         Date       Signed By		
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Automation Singht - Program Lead Engineer (PLE)         Date       Signed By         Automation Singht - Program Lead Engineer (PLE)         Date       Signed By		
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Multip Singh - Program Lead Engineer (PLE)         Date       Signed By         Automation Singht - Program Lead Engineer (PLE)         Date       Signed By         Automation Singht - Program Lead Engineer (PLE)         Date       Signed By		
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	CERTIFICA	TE OF COMPLIANCE
Kuldip Singh - Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)         Date	to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable	ner's Report are correct and this replacement conforms
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	Kuldip Singh - Prøgram Lead Engineer (PL	E) Kuldip Singh - Program Lead Engineer (PLE)
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	I, the undersigned, holding a valid commission	issued by the National Board of Boiler and Pressure
state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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         National Board, State, and Endorsements		have inspected the components
Inspector's Signature National Board, State, and Endorsements	state to the best of my knowledge and belief, th corrective measures described in this Owner's ASME Code, Section XI. By signing this certificate neither the Inspector Implied, concerning the examinations and corre Furthermore, neither the Inspector nor his emp	ne Owner has performed examinations and taken Report in accordance with the requirements of the nor his employer makes any warranty, expressed or ective measures described in this Owner's Report. Poloyer shall be liable in any manner for any personal
Date		_ Commissions National Board, State, and Endorsements
	Date	

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Date: 08/05/02

Unit: Not Applicable

Sheet: 1 Of 1



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

1. Owner: Energy Northwest Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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		Yes, Code Class 3

7. Description Of Work Performed: Replaced U bolt for support SW-4576-12 (1" SW). The replacement work was performed as follows:

1) Removed existing U bolt from the support.

2) installed replacement U bolt for the support.

3) installed replacement jam nuts for the support.

NOTES-

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) ASME Section III, Code Class NF(3) for the support material.

		EMERG	-
FOR	M NIS-2 OWNER'S RI	EPORT FOR REPAIL	RS OR REPLACEMENTS (Back)
	Hydrostatic Pro Test Pressure: Psig Component Design Pro		al Operating Pressure None X Test Temperature: ° F Temperature: ° F
<i>Remarks:</i> None			
	CEF	RTIFICATE OF COM	PLIANCE
to the rules of the Type Code Symb Certificate Of Au Expiration Date: I Prepared By	ASME Code, Section of Stamp: Not Applicable thorization No.: Not App	Icable	By Kuklip Singh - Program Lead Engineer (PLE)
		ATE OF INSERVICE	
	a, noiding a valid comi and the State of		e National Board of Boiler and Pressure ployed by
state to the best of corrective measu ASME Code, Sect By signing this ce implied, concernia Furthermore, neit	res described in this C ion XI. ertificate neither the In ng the examinations a her the Inspector nor I	belief, the Owner has Owner's Report in acc spector nor his empl nd corrective measu his employer shall be	
	cement 1" NPS And Smaller	r Commission	National Board, State, and Endorsements
Inspect	tor's Signature		National Board, State, and Endorsements



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

1. Owner: Energy Northwest

**Address:** Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **2.** *Plant:* Columbia Generating Station Date: 08/09/02 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest
- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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	NA	1983		Yes, Code Class 3

7. Description Of Work Performed: Prefabricated spool piece for 18° Service Water (SW) Loop B return piping down stream of valve SW-V-12B. The prefabrication work was performed as follows:

1) Cut new replacement 18" pipe to the required length or longer.

- 2) Beveled pipe ends on as needed basis to the required configuration.
- 3) Drilled hole in the 18° pipe for installation of new replacement 3/4° sockolet.
- 4) Installed new replacement 3/4" sockolet.
- 5) Made required weld.
- 6) Performed visual examination on the final weld. Visual examination results acceptable.

#### NOTES-

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The prefabricated spool piece was installed in accordance with ASME Section XI Plan No 2-1774.

PLAN No 2-1773 <b>EMERGY</b> NORTHWEST FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9. Remarks: ** VT-2 visual examination to confirm pressure boundary integrity of the joints was in accordance with ASME Section XI Plan No 2-1774.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
Prepared By Audup Sups signed By Juldup
Prepared By     Muldup     Signed By       Kuldip Singh - Program Lead Engineer (PLE)     Signed By     Kuldip Singh - Program Lead Engineer (PLE)       Date     8902     Date     8902
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $7/8/2$ to $3/2/2$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
1. M. Entropy Commissions 74186W/7486 NF Inspector's Signature Commissions 74186W/7486 NF National Board, State, and Endorsements
Date <u>\$/21/02</u>

PLAN No 2-17
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#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 08/09/02 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(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)-2UG	WPPSS*	SW(22)-2UG-P1	N/A	N/A	1983		Yes, Code Class 3

7. Description Of Work Performed: Replaced spool piece for 18° Service Water (SW) Loop B return piping down stream of valve SW-V-12B. The replacement work was performed as follows:

1) Removed existing section of 18" pipe with a through wall pin hole leak.

2) Beveled valve SW-V-12B cut end.

3) Performed magnetic particle (MT) examination on the beveled valve SW-V-12B end. The magnetic particle (MT) examination results acceptable

4) Installed new section of 18" of pipe.

5) Completed the root pass on both the 18" circumferential butt welds.

6) Performed visual examination on the root pass on both the 18" circumferential butt welds. Visual examination results acceptable.

7) Performed magnetic particle (MT) examination on the root pass for both the welds. The magnetic particle (MT) examination results acceptable.

8) Completed both the 18° circumferential butt welds.

9) Performed visual examination on both the final 18" circumferential butt welds. Visual examination results acceptable

10) Performed magnetic particle (MT) examination on both the final 18° circumferential butt welds. Magnetic particle (MT) examination results acceptable.

11) Made required socket welds.

12) Removed the ASME Code Name Plate from the existing pipe section by grounding off the tack welds.

13) Performed magnetic particle (MT) examination on the ground/prepped surfaces. The magnetic particle (MT) examination results acceptable.

14) 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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The new spool piece was previously prefabricated in accordance with ASME Section XI Plan No 2-1773.

3) The magnetic particle (MT) examination on the root pass for both the 18" welds was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

4) 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 requirements outlined in Code Case N-416-1.

5) 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 requirements outlined in Code Case N-416-1.

		<b>EMER</b> NORTHW		PLAN No 2-1
FORM	I NIS-2 OWNER'S	REPORT FOR RE	EPAIRS OF	REPLACEMENTS (Back)
	Hydrostatic F est Pressure: 210 Ps omponent Design F	sig	Tes	erating Pressure X None Temperature: 67º F operature: 150º F
	Cl	ERTIFICATE OF C	COMPLIAN	CE
to the rules of the Type Code Symbol Certificate Of Auto Expiration Date: N Prepared By	ASME Cods, Section I Stamp: Not Applicable torization No.: Not A Applicable	on XI. He pplicable	ned By	Kuktip Singh - Program Lead Engineer (PLE)
Vessel inspectors Johnston, Rhode Isla period <u>7/6/2</u> Owner has perform in accordance with By signing this cell implied, concernin Furthermore, neith	holding a valid con and the State of Wa and have inspected if 2to/2/ and examinations a the requirements tificate neither the g the examinations er the inspector no	Ashington and employed the components d and taken corrective of the ASME Code Inspector nor his and corrective ma or his employer sha	by the Natio loyed by Fa lescribed in te to the be a measure by Section X employer n easures de all be liable	onal Board of Boiler and Pressure ctory Mutual Insurance Company of this Owner's Report during the st of my knowledge and belief, the s described in this Owner's Report
<u>91- 111</u> Inspecto Date <u><u>\$11-11-</u></u>	EMC rs Signature 12	<u> </u>	issions <u>7</u>	National Board, State, and Endorsements

			<b>ERG</b>				PLAN No 2-177
		OWNER'S REPO lired By The Provi					·
2. Plant: Columi Address: Co 3. (a) Work Per (b) Repair Or (c) Type Cod (d) Certification (e) Expiration 4. Identification 5. (a) Applicable (b) Applicable Code Case:	lumbia Generating Station bia Generating Station lumbia Generating Station rformed By: Energy rganization P.O. I le Symbol Stamp e Of Authorization of Authorization of Date: Not Application of System: Service the Construction Construction None	ation, North Power Plan y Northwest No, Job No, etc.: En Not Applicable In No.: Not Applicable	t Loop, Richlan ergy Northwesi , Code Class 3 ed <b>For Repai</b>	d, Washin , 1971 Edi <b>irs Or R</b> é	gton, 993 ition with	52 Shee Unit: 52 Summerk <sup>KS</sup> <del>Winter</del> 1973 Addeno <b>Rents:</b> 1989 Edition	
Name Of Component	Name Of Manufacturer	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-V-12B	Velan	77Q536	N/A	N/A	1977	Repaired	Yes, Code Class 3

7. Description Of Work Performed: Repaired by welding wasted areas on the inside (ID) surfaces of valve SW-V-12B outlet. The repair work was performed as follows:

Work was performed as follows:

 Prepped wasted areas by grinding to provide access for welding.
 Weld repaired (weld built up) the wasted areas.
 Grinded/blended the weld repaired areas flush with the adjacent base metal to match the contour of the inside surfaces.
 Performed visual examination on the weld repaired areas. Visual examination results acceptable.
 Performed magnetic particle (MT) examination on the weld repaired areas. Magnetic particle (MT) examination results acceptable.

CERTIFICATE OF INSERVICE INSPECTION  Autorsland have inspected the components described in this Owner's Report and Pressure Company of onston, Bipode lagand have inspected the components described in this Owner's Report and state of the SAME Code, Section XI.  Prepared By	PLAN No 2-1
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)  ests Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  None  Test Pressure: 210 Psig Test Temperature: 67° F Component Design Pressure: 300 Psig Temperature: 150° F  Remarks: None   CERTIFICATE OF COMPLIANCE  We certify that the statements made in this Owner's Report are correct and this repaired conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Expiration Date: Not Applicable Expiration Date: Not Applicable Expiration Date: Not Applicable Date Date Date Date Date Date Date Dat	
ests Conducted: Hydrostatic Pressure: 210 Psig       Test Temperature: 67° F         Component Design Pressure: 300 Psig       Test Temperature: 150° F         Remarks: None       CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this repaired conforms to the rules of the ASME Code, Section XI.       Signed By         Nulley Singh - Program Lead Engineer (PLE)       Signed By       Kuidep Singh - Program Lead Engineer (PLE)         Prepared By       Kuidep Singh - Program Tead Commission issued by the National Board of Boiler and Pressure fersoring the components described in this Owner's Report of my knowledge and belief, the Owner is performed examinations and carective measures described in this Owner's Report of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report on the period in this Owner's Report on the spect of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report on the accordance with the requirements of the ASME Code, Section XI.         Y signing this certificate neither the inspector on his employer shall be liable in any manner for any personal neithy components described in this Owner's Report.         Writerwore, neither the inspector on his employer shall be liable in any manner for any personal neithy components described in this Owner's Report.         Writerwore, neither the inspector on his employer shall be liable in any manner for any personal neithy or property damag	NORTHWEST
Test Pressure: 210 Psig Component Design Pressure: 300 Psig       Test Temperature: 67° F Temperature: 150° F         Remarks: None       CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this repaired conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Expiration Date: Not Applicable         Perpared By       July         Kuldip Singh - Progrem Code Test Test Temperature: 150° F         Date       Mail Dury         Kuldip Singh - Progrem Code Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Date       Mail Dury         Kuldip Singh - Progrem Code Section XI.         Nucleip Singh - Progrem Code Section XI.         Nate       Date         Mail Dury       Signed By         Kuldip Singh - Progrem Code Section XI.         Nucleip Singh - Progrem Code Section XI.         Prepared By       Date         Kuldip Singh - Progrem Code Section XI.         Prepared By       Date         Kuldip Singh - Progrem Code Section XI.         Prepared By       Date         Kuldip Singh - Progrem Code Section XI.         Second Symbol Stamp: Commission issued by the National Board of Boller and Pressure         Pressel Inspectors and the State of Washington and employed by F	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this repaired conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Depared By       Muldip Singh - Program Lead Engineer (PLE)         Muldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Muldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Muldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Muldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Angle Cols         CERTIFICATE OF INSERVICE INSPECTION         In the undersigned, holding a valid commission issued by the National Board of Boller and Pressure fessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of onston, Bhoge Island have Inspected the components described in this Owner's Report during the period         Muldip Singh the requirements of the ASIME Code, Section XI.         Dy signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplice, concerning the examinations and corrective measures described in this Owner's Report.         Dy signing this certificate neither the Inspector nor his employer shall be liable in any manner f	Test Pressure: 210 Psig Test Temperature: 67° F
We certify that the statements made in this Owner's Report are correct and this repaired conforms to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Drepared By	Remarks: None
We certify that the statements made in this Owner's Report are correct and this repaired conforms to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Drepared By	
We certify that the statements made in this Owner's Report are correct and this repaired conforms to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Drepared By	
We certify that the statements made in this Owner's Report are correct and this repaired conforms to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Drepared By	
We certify that the statements made in this Owner's Report are correct and this repaired conforms to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Drepared By	
It is rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Image: Signed By         Kulcip Singh - Program Lead Engineer (PLE)         Nate       Date         Date       Image: Signed By         Kulcip Singh - Program Lead Engineer (PLE)         Nate       Date         Date       Image: Signed By         Kulcip Singh - Program Lead Engineer (PLE)         Nate       Date         CERTIFICATE OF INSERVICE INSPECTION         It the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         ferstel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of onston, Rhode Island have inspected the components described in this Owner's Report during the error         Deriver has performed examinations and taken corrective measures described in this Owner's Report and belief, the Downer has performed examinations and taken corrective measures described in this Owner's Report and belief, the Downer has performed examinations and corrective measures described in this Owner's Report.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in	CERTIFICATE OF COMPLIANCE
Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Image: Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Note         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Note       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Experiment Signed, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of         Oh	We certify that the statements made in this Owner's Report are correct and this repaired conforms to
Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Orepared By       Image: Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed By         CERTIFICATE OF INSERVICE INSPECTION         The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Versel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of         Onston, Brode Island have inspected the components described in this Owner's Report during the         Versel Inspectors and the State of Washington and state to the best of my knowledge and belief, the         Downer has performed examinations and taken corrective measures described in this Owner's Report         naccordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or         mplied, concerning the examinations and corrective measures described in this Owner's Report.         <	
Prepared By       Multip Singh - Program Lead Engineer (PLE)       Signed By       Multip Singh - Program Lead Engineer (PLE)         Date       Studip Singh - Program Lead Engineer (PLE)       Date       Studip Singh - Program Lead Engineer (PLE)         Date       Studip Singh - Program Lead Engineer (PLE)       Date       Studip Singh - Program Lead Engineer (PLE)         Date       Studip Singh - Program Lead Engineer (PLE)       Date       Studip Singh - Program Lead Engineer (PLE)         Date       Studip Singh - Program Lead Engineer (PLE)       Date       Studip Singh - Program Lead Engineer (PLE)         Date       Studip Singh - Program Lead Engineer (PLE)       Date       Studip Singh - Program Lead Engineer (PLE)         Date       Studip Singh - Program Lead Engineer (PLE)       Date       Studip Singh - Program Lead Engineer (PLE)         Date       Studip Singh - Program Lead Engineer (PLE)       Date       Studip Singh - Program Lead Engineer (PLE)         Commission studies       Date       Studip Singh - Program Lead Engineer (PLE)       Date       Studip Singh - Program Lead Engineer (PLE)         Commission studies       Date       Studies       Date       Studies       Studies         Commission and corrective measures described in this Owner's Report.       Studies and state to the best of any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Re	Certificate Of Authorization No.: Not Applicable
Kuldip Singh - Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)         Date       SAD         Date       SAD         CERTIFICATE OF INSERVICE INSPECTION         In the undersigned, holding a valid commission issued by the National Board of Boller and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of         Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of         Ohnston, Rhode Island have inspected the components described in this Owner's Report during the         Versel       SAD         MULL       SAD         Date       SAD         Versel inspectors and the State of Washington and employed by Factory Mutual Insurance Company of         Ohnston, Rhode Island have inspected the components described in this Owner's Report during the         Versel inspector to SAD         Owner has performed examinations and taken corrective measures described in this Owner's Report.         In accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or         Implied, concerning the examinations and corrective measures described in this Owner's Report.         Inthermore, neither the Inspector nor his employer shall be liable in any manner for any personal no property damage or a loss of any kind arising from or connected with this inspectio	Expiration Date: Not Applicable
Date SADL Date Date SADL. CERTIFICATE OF INSERVICE INSPECTION The undersigned, holding a valid commission issued by the National Board of Boller and Pressure Versel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Rhode Island have inspected the components described in this Owner's Report during the eriod SALC to SALC and state to the best of my knowledge and bellef, the Downer has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. M. M. Turto Commissions <u>THYROW MUL</u>	Prepared By Audup Sup Signed By Judup Sup 1
CERTIFICATE OF INSERVICE INSPECTION The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>7/9/02</u> to <u>9/9/02</u> and state to the best of my knowledge and belief, the Dwner has performed examinations and taken corrective measures described in this Owner's Report accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal njury or property damage or a loss of any kind arising from or connected with this inspection. <u>M.M. Tutton</u> <u>Commissions</u> <u>7/19/04/04/04/04/04/04/04/04/04/04/04/04/04/</u>	
the undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Bhode Island have inspected the components described in this Owner's Report during the period <u>1/1/22</u> to <u>\$/1/22</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report on accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	DateDateDateDate
the undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Bhode Island have inspected the components described in this Owner's Report during the period <u>1/1/22</u> to <u>\$/1/22</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report on accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	
The undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Bhode Island have inspected the components described in this Owner's Report during the period $\underline{7/102}$ to $\underline{8/2/02}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report on accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	
The undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Bhode Island have inspected the components described in this Owner's Report during the period $\underline{7/102}$ to $\underline{8/2/02}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report on accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	
Messel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>7972</u> to <u>9772</u> and state to the best of my knowledge and belief, the Dwner has performed examinations and taken corrective measures described in this Owner's Report on accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	CERTIFICATE OF INSERVICE INSPECTION
Commissions <u>Miniperted</u> the components described in this Owner's Report during the period <u>19102</u> to <u>39102</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal neither the Inspector nor his employer shall be liable in any manner for any personal neither the Inspector nor his employer shall be liable in any manner for any personal neither the Inspector. <u>1110</u> <u>Commissions</u> <u>71110</u> <u>71110</u> <u>1110</u>	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
Period <u>7/9/02</u> to <u>\$/2//02</u> and state to the best of my knowledge and belief, the Dwner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal nijury or property damage or a loss of any kind arising from or connected with this inspection.	Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Bhode Island have inspected the components described in this Owner's Report during the
In accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal minimity or property damage or a loss of any kind arising from or connected with this inspection.	period 7/9/02 to 8/2//02 and state to the best of my knowledge and belief, the
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal nijury or property damage or a loss of any kind arising from or connected with this inspection.	
mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	In accordance with the requirements of the ASME Code, Section Al. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
njury or property damage or a loss of any kind arising from or connected with this inspection.	implied, concerning the examinations and corrective measures described in this Owner's Report.
1. 1M. Tento Commissions 74 Stoles/7456 MI	
	1 was Tratto The due touch at
Date <u>\$/11/102</u>	
Date <u>3/1/1/01</u>	chilan
-	Date

			<b>IERG</b>				PLAN No 2-177
		2 OWNER'S REPO uired By The Provi					
2. Plant: Columt Address: Col 3. (a) Work Per (b) Repair Or (c) Type Cod (d) Certificator (e) Expiration 4. Identification 5. (a) Applicable (b) Applicable Code Case:	umbia Generating S bia Generating Statio umbia Generating Statio (ganization P.O. e Symbol Stamp e Of Authorizatio Date: Not Application of System: Sen e Construction ( e Edition Of ASI None	tation, North Power Plant gy Northwest <b>No, Job No, etc.:</b> En 9: Not Applicable 9 <b>: No.:</b> Not Applicable	t Loop, Richlan ergy Northwes , Code Class 3 ed <b>For Repa</b> i	d, Washin , , 1971 Edi irs Or Ra	gton, 993 ition with	352 Shea Unit 352 Winter 1973 Addena nents: 1989 Edition	
Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2	WPPSS *	SW(22)-2-P1	N/A	N/A	1983	*******	Yes, Code Class 3

7. Description Of Work Performed: Replaced existing pipe nipple associated with valve CCH-V-28B. The replacement work was performed as follows: 1) Removed existing pipe nipple.

Installed replacement pipe nipple.
 Made required socket weld.
 Performed visual examination on the final socket weld. Visual examination results acceptable.

NOTES-

Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
 The existing ASME Code Stamped piping system is Service Water (SW) piping system SW(22)-2-P1. The Control Room Chilled Water (CCH) piping material and components were installed in accordance with ASME Section XI program using ASME Code Stamped piping system SW(22)-2-P1.

	PLAN NO 2-17 <b>MERGY</b> ORTHWEST
	T FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic Pneumat Test Pressure: Psig Component Design Pressure	ic Nominal Operating Pressure None X Test Temperature: <sup>o</sup> F 2: Psig Temperature: <sup>o</sup> F
Remarks: None	
CERTIFIC	ATE OF COMPLIANCE
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By Kuldip Singh - Program Lead Enginee	Dwner's Report are correct and this replacement conforms Signed By
	OF INSERVICE INSPECTION on issued by the National Board of Boiler and Pressure
Vessel Inspectors and the State of	
corrective measures described in this Owner's ASME Code, Section XI. By signing this certificate neither the Inspecto implied, concerning the examinations and cor	the Owner has performed examinations and taken is Report in accordance with the requirements of the or nor his employer makes any warranty, expressed or rective measures described in this Owner's Report.
injury or property damage or a loss of any kin	ployer shall be liable in any manner for any personal d arising from or connected with this inspection.
Not Required - Replacement 1* NPS And Smaller Inspector's Signature Date	Commissions National Board, State, and Endorsements

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/08/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Process Instrument (PI) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X84b PI-VX-269 PI-VX-269	JCI Target Rock Target Rock	PI(1)-4S-X84b 19 22	N/A N/A N/A	N/A N/A N/A	1983 1992 1998	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 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 19.

- 2) Installed replacement piping material such as coupling, plate and pipe.
- 3) Installed new replacement valve PI-VX-269, Serial No 22.
- 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) Installed support material such as tube steel, angle iron, plate.

7) Made required welds for the support material.

8) Performed visual examination on the final welds. Visual examination results acceptable.

9) Installed additional support material such as U bolts, jam nuts.

#### NOTES -

1) The existing ASME Code Stamped instrument system in which the replacement valve PI-VX-269, Serial No 22 was installed is Process Instrument (PI) system PI(1)-4S-X84b. This process instrument system is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda requirements.

2) The replacement valve PI-VX-269, Serial No 22 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda requirements.

	) q	PLA ENERGY NORTHWEST	AN No 2
FOF	M NIS-2 OWNER'S REF	PORT FOR REPAIRS OR REPLACEMENTS (Back)	
ests Conducted	l: Hydrostatic Pneu Test Pressure: Psig Component Design Pres	Imatic Nominal Operating Pressure None Test Temperature: ° F ssure: Psig Temperature: ° F	×
<b>?emarks:</b> See atta	ched NPV-1 Code Data Report f	for the replacement valve PI-VX-269, Serial No 22.	
	CERI	TIFICATE OF COMPLIANCE	
to the rules of t Type Code Syn	he ASME Code, Section 3 abol Stamp: Not Applicable uthorization No.: Not Applic		nforms
Prepared By	Kuldip Singh - Program Lead Eng	ginder (PLE) Signed By Kuldip Singh - Program Lead Engine	er (PLE)
Date		Date	
	ned, holding a valid comm	ATE OF INSERVICE INSPECTION nission issued by the National Board of Boiler and Pro	essure
		and employed by have inspected the comp	onents
state to the bes corrective mean ASME Code, So By signing this implied, concer Furthermore, n	t of my knowledge and b sures described in this O ection XI. certificate neither the Ins ning the examinations ar either the Inspector nor h	the period to a pelief, the Owner has performed examinations and tak owner's Report in accordance with the requirements of spector nor his employer makes any warranty, express and corrective measures described in this Owner's Rep his employer shall be liable in any manner for any per- ony kind arising from or connected with this inspection	nd en of the ssed or port. sonal
Not Required - Rep	placement 1" NPS And Smaller pector's Signature	Commissions National Board, State, and Endorse	ements

### PLAN NO. 2-1777

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

Ì

1 .

Pg. 1 of \_1\_

<b>2</b> .	Manufactured for _	Washington P			•	WA 99352		
3.	Location of installa		orth Power F and address		land, WA 9	9352		<u></u>
4.	Model No., Series	No., or Type <u>79</u> T	T-001	_ Drawing7	)TT-001		CRN_	N/A
5.	ASME Code, Section	on III, Division 1: _	<u>1974</u> (edition)	<u> </u>	975 a date)	<u>      2                              </u>	N (Code	one Case no.)
6.	Pump or valve	Valve	Nomir	nal inlet size	1(in.)	Outl	et size	1 (in.)
7.	Material: Body <u>S</u>	A182 F316L	Bonnet _	SA479 316	Disc	<u>SA479 316</u>	Bolting	<u>N/A</u>
	(a) Cert. Holder's Serial No.	(b) Nat'l Board No.		(c) Body Serial No.	Bor	1) anet rial 0.	(e) Dis Seri No	c al
	21	N/A		4727A	39	13	111	5
	22			4779A	39	12	110	0
		VALVE	₽E-V>	(-269,5	5]N 2	2		
	·			Child	hp 8	el que		
					621	03	<u></u>	
							<u> </u>	<u></u>

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

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300 REPRINT 6/93

#### FORM NPV-1 (BACK - Pg. 2 of \_\_\_)

						Certif	ficate Hol	der's Seri	ial No. <u>21 &amp; 2</u>	2
8. Design c	onditions _	45 (pressi	ure)		340 (temperature)	°F or valve	pressure	class	<u>N/A</u>	(1)
9. Cold wor	king press	ure	1545		psi at 100 °F					
10. Hydrosta	tic test	2345	psi.	Dis	c differential te	st pressure .	N	//A		psi
11. Remarks	:				<u></u>					
<del></del>										
				<u>.</u>				<del></del>		
					<u></u>	<u>_</u>	<u></u>			
									. <u> </u>	
· <u>····</u> ····			CE	RTIF		ESIGN				
Design Spec	ification c	ertified by	<u>S. F</u>	<b>)X</b>		P.E	. State _	WA	_ Reg. No. <u>161</u> _ Reg. No	68
Design Repo	ort certified	by	Not	Applic	able	P.E	E. State		Reg. No	-
			<u></u>						·	
			CERT	TIFIC/	ATE OF COMP	PLIANCE				
construction (	of the ASN	AE Code, S	Section III, D	ivisio	n 1.		•		ms to the rules	
									12/98	-
Date <u>4/9</u>	<u>/98</u> r	lame	Target	Rock		Signed	$\underline{\frown}$	-		_
			(N Certific	ate H	older)		R. E. Gl	•	inager, Q.E. resentative)	
					<u> </u>					

#### **CERTIFICATE OF INSPECTION**

I, the undersigned, holding a	valid commission issued by f	he National Board of Boil	er and Pressure Vessel Inspectors
and the State of Province of	New York	and employed by _	Commercial Union Ins.
of <u>Boston, MA</u>	have inspected the pump, o	r valve, described in this	s Data Report on _4/9/98
and state that to the best of m	y knowledge and belief, the	Certificate Holder has c	constructed this pump, or valve, in
accordance with the ASME C	ode, Section III, Division 1.		
Decision that the constituents of	aither the increator and h		Contraction and the second sec

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.

N.Y. STATE COMMISSION NO. 2288 ommissions ALSO COMMISSIONED IN PENN., OHIO & CONN. Alex Date 7 Signed/// (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/08/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Process Instrument (PI) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 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-220-25.0-SR-14 [PI(1)-4S-X84b]	JCI	D-220-25.0-SR-14 [PI(1)-4S-X84b]	N/A	N/A	1983		Yes, Code Class 3

7. Description Of Work Performed: Replaced existing tubing material associated with valve PI-VX-269. The replacement work was performed as follows:

- 1) Removed existing tubing material.
- 2) Installed replacement tubing material.
- 3) Made required welds.
- 4) Performed visual examination on the final welds. Visual examination results acceptable.

				PLAN No
			RGY THWES	<b>T</b>
FO	RM NIS-2 OWNER'S	REPORT FOI	R REPAIRS	OR REPLACEMENTS (Back)
ests Conducted	d: Hydrostatic P Test Pressure: Psig Component Design H	neumatic		Dperating Pressure None X est Temperature: ° F emperature: ° F
emarks: None				
	<u></u> ,,		<u> </u>	
	C	ERTIFICATE	OF COMPLI	IANCE
to the rules of Type Code Syr Certificate Of A Expiration Date Prepared By _	the ASME Code, Secti nbol Stamp: Not Applicat Authorization No.: Not A	on XI. ble pplicable	r's Report are Signed By Date	E correct and this replacement conforms
		FICATE OF IN		
				National Board of Boiler and Pressure ployed by
-				have inspected the components
state to the bes corrective mea ASME Code, S By signing this implied, conce Furthermore, r	st of my knowledge ar soures described in th ection XI. certificate neither the rning the examination neither the inspector n	d belief, the ( is Owner's Re inspector no s and correct or his employ	Owner has po eport in accou or his employ live measure yer shall be li	to and erformed examinations and taken rdance with the requirements of the ver makes any warranty, expressed or s described in this Owner's Report. iable in any manner for any personal r connected with this inspection.
	<i>placement <u>1" NPS And Sma</u> spector's Signature</i>	ller C	Commissions	Mational Board, State, and Endorsements



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 02/27/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 Nozzles For MSRV's	Crosby	See Item No 7 Below For Serial No's Of Spare Nozzles	N/A	N/A	N/A	Repair	No, Code Class 1 Spare Nozzles

7. Description Of Work Performed: Modified spare nozzles for Main Steam Relief Valves (MSRV's). The work was performed as follows:

1) Modified (machined) the spare nozzles in accordance with Crosby's Field Services Procedure No FS-5335, CVI No 932-00,2. 2) Performed Fluorescent Liquid Penetrant (PT) examination on the final machined surfaces of the spare nozzles. The Fluorescent Liquid

Penetrant (PT) examination results are as described below and also see Note 1 for additional information.

3) Lined out the old Part No N93184 on the modified spare nozzles and vibroengrave the new Part No N97498.

4) The following is a listing of spare nozzles which were modified (machined):

Nozzle No	Nozzle Serial No	PT Results	Final Disposition
1	New Serial No - N/A (Scrapped)	Reject	Scrapped - See Note 1
	Old Serial No N93184-41-0099	-	
2	New Serial No N97498-47-0120	Accept	Accept - See Note 1
	Old Serial No N93184-47-0120		
3	New Serial No N97498-47-0123	Accept	Accept - See Note 1
	Old Serial No N93184-47-0123		
4	New Serial No N97498-50-0149	Accept	Accept - See Note 1
	Old Serial No N93184-50-0149		
5	New Serial No N97498-50-0150	Accept	Accept - See Note 1
	Old Serial No N93184-50-0150		
6	New Serial No - N/A (Scrapped)	Reject	Scrapped - See Note 1
	Old Serial No N93184-51-0153		
7	New Serial No - N/A (Scrapped)	Reject	Scrapped - See Note 1
	Old Serial No N93184-51-0157		

#### Continued on Sheet 2 of 2

		PLAN No 2-1
(E <sub>N</sub>	ENERGY	r
Peo	ple · Vision · Solution	-
FORM NIS-2 OWNER'S REPO	RT FOR REPAIRS (	OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic 🦳 Pneuma	atic 🗔 Nominal C	perating Pressure None X
Test Pressure: Psig Component Design Pressu	Te	est Temperature: ° F emperature: ° F
Remarks: None		
CERTIFI	CATE OF COMPLI	ANCE
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	1	
Expiration Date: Not Applicable		4
Provent By All all A Sing	Signed By	think Sob
Frepared ByKuldip Singh - Program Lead Enginee		Kuldip Singh - Program Lead Engineer (PLE)
	Date	coloria
Date2121103		
	•	
CERTIFICATE	OF INSERVICE IN	SPECTION
l, the undersigned, holding a valid commiss	ion issued by the Na	ational Board of Boiler and Pressure
Vessel Inspectors and the State of Washingt		
Johnston, Rhode Island have inspected the co period <u>10/48/02</u> to <u>3/6/03</u>		
Owner has performed examinations and tal		best of my knowledge and belief, the ures described in this Owner's Report
in accordance with the requirements of the		-
By signing this certificate neither the Inspec	-	
implied, concerning the examinations and c		
Furthermore, neither the Inspector nor his e		
injury or property damage or a loss of any l	and arising from or	connected with this inspection.
Mille Call ()	Commissions	71186 W/ 74156 NIZ N.
Inspector's Signature	_	National Board, State, and Endorsements
2/1/12		
Date <u>) / 6/ 65</u>		



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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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 Nozzles For MSRV's	Crosby	See Item No 7 Below For Serial No's Of Spare Nozzles	N/A	N/A	N/A	Repair	No, Code Class 1 Spare Nozzles

#### 7. Description Of Work Performed: Continued from Sheet 1 of 2

Nozzle No	Nozzle Serial No	PT Results	Final Disposition
8	New Serial No N97498-53-0167	Accept	Accept - See Note 1
	Old Serial No N93184-53-0167		
9	New Serial No - N/A (Scrapped)	Reject	Scrapped - See Note 1
	Old Serial No N93184-54-0168	•	
10	New Serial No - N/A (Scrapped)	Reject	Scrapped - See Note 1
	Old Serial No N93184-56-0174	•	

#### NOTES -

1) Performed Fluorescent Liquid Penetrant (PT) examination on the final machined surfaces. Fluorescent Liquid Penetrant (PT) examination results are as follows:

Fluorescent Liquid Penetrant (PT) examination results acceptable for five (5) spare nozzles out of total of ten (10) spare nozzles. The remaining five (5) spare nozzles were rejected and were scrapped due to unacceptable Fluorescent Liquid Penetrant (PT) examination results.

2) The spare modified (machined) nozzles are kept as replacement nozzles for future use. When need arises in the future, these spare modified nozzles will be installed in the Main Steam Relief Valves (MSRV's) as replacement parts.

3) The old Part No N93184 was lined out on the modified spare nozzles and new Part No N97498 was vibroengraved. Thus the modified spare nozzles now have a new serial number - Example: Serial No N93184-33-0055 was changed to Serial No N97498-33-0055.

Date: 02/27/03 Sheet: 2 Of 2 Unit: Not Applicable



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

1. Owner: Energy Northwest Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 01/08/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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 Buiit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC(2)-3S SLC(1)-1S SLC-RV-29A SLC-RV-29A	WPPSS * WPPSS * Lonergan Lonergan	SLC(2)-3S-P1 SLC(1)-1S-P1 509258-82-1 137180-1-1	N/A N/A N/A N/A	N/A N/A N/A N/A	1983 1982 1978 1994	Replaced Replacement	Yes, Code Class Yes, Code Class Yes, Code Class Yes, Code Class

- 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-RV29A, 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.
  - Performed VT-3 visual examination on the existing nuts for the relief valve outlet joint. VT-3 visual examination results acceptable.
     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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve SLC-RV-29A, Serial No 137180-1-1 was installed is Standby Liquid Control (SLC) piping system SLC(2)-3S-P1 (For inlet). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system in which the replacement valve SLC-RV-29A, Serial No 137180-1-1 was installed is Standby Liquid Control (SLC) piping system SLC(1)-1S-P1 (For outlet). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement valve SLC-RV-29A, Serial No 137180-1-1 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements.

				PLAN No	2-17
			ECT		_
		People - Vision - Sole	EJ I utions		
FORI	M NIS-2 OWNER'S RI	EPORT FOR REPA	IRS OR REPL	ACEMENTS (Back)	
ests Conducted:	Hydrostatic Pn	eumatic 🚺 Nomi	nal Operating F	Pressure X Other	
1	Test Pressure: Static Hea Component Design Pr	ad	• •	rature: 117.8° F	
Remarks: 1) See att component design pres	tached NV-1 Code Data Rep ssure of 1400 Psig is relief va	ort for the replacement val alve set pressure and desi	ve SLC-RV-29A, Se gn temperature of 2	erial No 137180-1-1. 00 <sup>0</sup> F is reli <i>e</i> f valve rated temperatu	r <del>a</del> .
	CE	RTIFICATE OF COI	MPLIANCE		
			rt are correct a	nd this replacement conforms	
	te ASME Code, Section bol Stamp: Not Applicable				
Certificate Of Au	Ithorization No.: Not App				
Expiration Date:		0	$\mathcal{A}$	0. 001	
Prepared By	uldip Singh - Program Lead E		d By <u>40</u> Kuldip Sin	dip Sure 5	
Date		Vale _			
<u></u>			······································		
	CERTIFI	CATE OF INSERVIC	CE INSPECTIO	N	
l, the undersigne	ed, holding a valid con	nmission issued by	the National Bo	ard of Boiler and Pressure	
Vessel Inspector	rs and the State of Wa	shington and employ	red by Factory N	lutual Insurance Company of	
~ / / / /	island have inspected to the second sec			Wher's Report during the hy knowledge and belief, the	•
		nd taken corrective	measures desc	ribed in this Owner's Repo	rt i
	vith the requirements of			· · · · · · · · · · · · · · · · · · ·	
				any warranty, expressed or I in this Owner's Report.	
Furthermore, ne.	ither the Inspector no	r his employer shall	be liable in any	manner for any personal	
injury or propert	ty damage or a loss of	' any kind arising fro	m or connected	d with this inspection.	
at im	-T-T+		~1111	e land -	
<u></u>	AM	Commiss	sions 7436		2
Inspe	ector's Signature		National	Board, State, and Endorsements	
. /					
Date	103				

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r .	equired by the Provis Kunkle Industries,	, Inc.			Pg. 1 of _2
Manufactured and certified by	<u>, Lopergan Valve Div</u>	vision, 8222_B1	and address of MV Cenilia	T Wayne TN 46	319 PLAN No. 2-
factured for Mashingtr	n Public Power Sup	ply System, WNP	-2 OPS WHS Compl address of Purchaser	ler, Varebouse Richland, 1	L. North Power Plant Loo
ocation of installation _Last	nington Public Power	r Supply System	MNP-2 OPS MHS		ouse 1. North Power Plan
	•		(name and address)	Loop, Rich	land, WA 99352
ValveNDSODS	Orifice size 394		ulet size1"	Outlet	size?"
	• •		. · <b>6</b> 4		Gn.t
ASME Code, Section III, Divis	tion 1: <u>1976</u>	Winter	<u>1974</u>		N/A
_ <b>.</b> .	· · · · · · · · · · · · · · · · · · ·		100° F		
Type <u>Spring</u> , pilot or power operate	d: tert presevre, poig)	blowdown, pel)	- 100- P • (rated temp.)		et <u>33° mfn</u> •F
	-1-7 N/A	102	0246 Rev. 0	N/A	1994
Identification <u>13718(-1-1-1</u> Cort Holder's et	erial RG.) (CRN)		rawing na.)	(Nat'l. Bd. no.)	typer bulk)
Control ring settingsN/A					
		SLC-EV-2	9A SIN I	37180-1-	-1
Pressure retaining items:			· ) = [··· ·		Tensile 1/8/0:
					griding and
	Serial No. or		Mat'L S	ipec.,	Tensile 1010
· ·	Identification		Including Typ	e or Grade	Strength
Body	T3815-1, -2		SA-351 Gr. C	28M	70 ksi
Bennet XXXXX	T3304-34		SA-351 Gr. C	- MS	70.ksf
KARADAZZK Stem	94918		SA-479 TY 31	75 ks1	
	35726		SA-479 TY 31	75 ksi	
Disk	30340		SA-479 TY 31	75 ks1	
Spring Wilkie Ster	31828		SA-479 TY 31		
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Serreus 30091		SA-479 TY 31	5	75 ksi
Y & Plug	73028		SA-479 TT 31	75 ksf	
Sping	20330		ASTM A-313 T	7 316	*
EXERCISE Nut	8079541 / N4C	·	SA-194 Gr. 7	ŧ	N/A
1000200255 Stud	8866612		SA-193 Gr. B	7	125 ksi
Continued below **					
Relieving capacity63_533	(steem of Ruid, B/hr)	(pel)		•	ational Board <u>01/25/85</u> Idenal
Remarks: * Spring exemp	ot from material rec	quirements of N	0-2000 but meets	s design requir	
t* Cap	<u></u>	•	SA-351 Gr. C		<u>70 ksi</u>
mpression Screw 700737			<u></u>		<u>75 ksi</u>
	30091	· · ·	SA-479 TY 310	2	<u>75 ksi</u>
Gag Plug Screw		CERTIFICATION OF	DESIGN		
Gag Plug Screw	C David M. Bosi	CERTIFICATION OF	•	WA	Beg. pg 20941
ag Plug Screw		CERTIFICATION OF	P.E. State		xt/4
Gag Plug Screw	David M. Bosi	CERTIFICATION OF	•		
ag Plug Screw	David M. Bosi N/A	CERTIFICATION OF	P.E. State P.E. State		xt/4
Sag Plug Screw	David M. Bosi N/A CE	RTIFICATE OF CO	P.E. State P.E. State P.E. State MPLIANCE	<u>N/A</u>	Reg. noiN/A
	David M. Bosi N/A CE de in this report are correct . <u>N-2853</u>	RTIFICATE OF CO ct and that this valu	P.E. State P.E. State P.E. State MPLIANCE	N/A	Reg. no
Gag Plug Screw	David M. Bosi N/A CE de in this report are correc	ERTIFICATE OF CO ct and that this values, Inc.	MPLIANCE	N/A	n of the ASME Code, Section

ncluded on each sheet, [3] each sheet is numbered and the number of sheets is recorded at the top of this form. ŋ

# FORM NV-1 (Back - Pg. 2 of \_2\_)

	Certificate Holder's Serial No. 137180-1-1 thru -
CERTIFICATE OF INSPECT	ION
I, the undersigned, holding a valid commission issued by the National Board of Boile of <u>Michigan</u> and employed by <u>HSBI &amp; I Co.</u>	er and Pressure Vessel Inspectors and the State or Province
with the ASME Code, Section III, Division 1. By signing this cartificate neither the inspector nor his employer makes any warranty	
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	ions N/B 1444 (NBIDS, Ind 840
L (Authorized inegetian)	[Nor'l, 8d, Encl. Indersements/ and state or prov. and st.]

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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 SLC(1)-1S SLC-RV-29B SLC-RV-29B	WPPSS * WPPSS * Lonergan Lonergan	SLC(2)-3S-P1 SLC(1)-1S-P1 139407-1-2 137180-1-2	N/A N/A N/A N/A	N/A N/A N/A N/A	1983 1982 1994 1994	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2 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-RV29B, 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.

Performed VT-3 visual examination on the existing nuts for the relief valve outlet joint. VT-3 visual examination results acceptable.
 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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve SLC-RV-29B, Serial No 137180-1-2 was installed is Standby Liquid Control (SLC) piping system SLC(2)-3S-P1 (For inlet). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system in which the replacement valve SLC-RV-29B, Serial No 137180-1-2 was installed is Standby Liquid Control (SLC) piping system SLC(1)-1S-P1 (For outlet). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement valve SLC-RV-29B, Serial No 137180-1-2 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements.

Date: 01/08/03 Sheet: 1 Of 1 Unit: Not Applicable

PLAN No 2-1781 ENERGY NORTHWEST People: Vision: Selutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Test Pressure: Static Head Test Temperature: 84° F Component Design Pressure: 1400 Psig Temperature: 200° F
9. Remarks: 1) See attached NV-1 Code Data Report for the replacement valve SLC-RV-29B, Serial No 137180-1-2. 2) Component design pressure of 1400 Psig is relief valve set pressure and design temperature of 200 <sup>0</sup> F is relief valve rated temperature.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>9//////1</u> to <u>1/////1</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements
Date _// 10/03

· · · · · · · · · · · · · · · · · · ·	Kunkle Industries, by Lonergan Valve Divi	Inc.	office Dead Fer	theme TN 4631	PLAN NO. 2-1
lanufactured and certilied	by <u>Intergative invi</u>		and address of MV Certific	ate Holder)	
	ton Public Paver Supply				North Power Plant L
cation of installation	shington Public Power	Supply System	UNP-2 OPS UNS		
			(Name and address)	Loop, Richla	nd, WA 99352
elve <u>ND50DS</u> emodel eq., series eq.)	Orifice size 394		nlet size <u>1"</u> fn	J. Outlet sla	(in.)
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onnet XXXXXX	13304-34		SA-351 Gr. CF		70 ksf
KKKKPBBBBK Stem	94918		SA-479 TY 316		75_ks1
lozzie	35726		SA-479 TY 316		_75_ksi
)isk	30340		SA-479 TY 316		75 ksi
pring VORKER Ster	31828				75 kst
BORDERS AND BORING PI	in Screws 30091		SA-479 TY 316		75 ksi
X Plug	73028		SA-479 TT 316		75 kst
	20330		ASTM A-313 T	7 316	*
SEREK Nut	8079541 / N4C		SA-194 Gr. 2	1	N/A
00000006% Stud	8866612		SA-193 Gr. 87	7	<u>125 ksi</u>
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Remarks: <u>* Spring exe</u> * Cap	H8506-10, -13	········	<u>SA-351 Gr. CI</u> SA-479 TV 316	<u>SA-479 TY 316</u>	
lemenks: <u>* Spring exe</u> * Cap compression Screw	H8506-10, -13 700737	······································	SA-479 TY 316		75 ksi
Remarks: <u>* Spring exe</u> * Cap Compression Screw	H8506-10, -13				
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lements: <u>* Spring exe</u> * Cap compression Screw ag Plug Screw	HESOG-10, -13 700737 30091 	RTIFICATION OF	SA-479 TY 316 SA-479 TY 316		75 ksi
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Remarks: <u>* Spring exe</u> * Cap Compression Screw ag Plug Screw n Specification certified by n Report certified by	E8506-10, -13 700737 30091 <u>CE</u> <u>David M. Bosi</u> N/A	TIFICATE OF CO	SA-479 TY 316 SA-479 TY 316 DESIGN P.E. State _ P.E. State _ DMPLIANCE	5RARA	75 ksi 75 ksi ks. no. <u>20941</u> kg. no. <u>N/A</u>
Remarks: <u>* Spring exe</u> * Cap Compression Screw Cag Plug Screw ag Plug Screw an Specification certified by n Report certified by entify that the statements m	E8506-10, -13 700737 30091 	TIFICATE OF CO	SA-479 TY 316 SA-479 TY 316 DESIGN P.E. State _ P.E. State _ DMPLIANCE	5RARA	75 ksi 75 ksi ksi kg. no. <u>20941</u> kg. no. <u>N/A</u>
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Remarks: <u>* Spring exe</u> * Cap Compression Screw Cag Plug Screw ag Plug Screw n Specification certified by n Report certified by	E8506-10, -13 700737 30091 	TIFICATE OF CO and that this value	SA-479 TY 316 SA-479 TY 316 DESIGN P.E. State _ P.E. State _ DMPLIANCE	5RARA	75 ksi 75 ksi 75 ksi kg. no. <u>20941</u> kg. no. <u>N/A</u> If the ASME Code, Section
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# FORM NV-1 (Back - Pg. 2 of \_2\_)

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Certificate Holder's Serial No. 13/180-1-1 third
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 <u>Michigan</u> and employed by <u>HSBI &amp; I Co.</u>
of
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
2.24.99 JANA IN MARA IN MARA COMMINS AND STONE 840
Signed Signed (Autherized Inspicted Contribusions [Net'L 84, Onch indersemental and net and net

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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 07/17/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Reactor Closed Cooling (RCC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCC-TCV-72B	Fisher	6054690	2321	N/A	1977	Replacement .	Yes, Code Class 3

7. Description Of Work Performed: Replaced body to bonnet botts and nuts for existing valve RCC-TCV-72B. The replacement work was performed as follows:

- 1) Removed existing bolts and nuts.
- 2) Cut/ground the bolt heads from the bolts.
- 3) Cut threads to make all thread studs.
- 4) Beveled the stud ends.
- 5) Perform visual examination on the newly cut threads. Visual examination results acceptable.
- 6) Installed replacement bolts and nuts.

7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

ENERGY NORTHWEST People - Vision - Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Test Pressure: 71 Psig Test Temperature: 65° F Component Design Pressure: 150 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       Signed By         Kuldip Singh - Hogram Lead Engineer (PLE)         Date       7/12/03
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hanford Steam Boiler Of Connecticut of Hanford, Connecticut have inspected the components described in this Owner's Report during the period <u>OG</u> / <u>3/05</u> to <u>OT</u> / <u>33/05</u> and state to the best of my knowledge and bellef, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Mathematical Mathema

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/31/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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(2)-4S SLC-V-4A Trigger Body Trigger Body Inlet Fitting Inlet Fitting	WPPSS * Conax Conax Conax Conax Conax	SLC(2)-4S-P1 4 5801 4585 5799 4570	N/A 91 N/A N/A N/A N/A	N/A N/A N/A N/A N/A	1983 1975 1999 1995 1999 1995	Replaced Replacement Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced parts for the existing valve SLC-V-4A, Serial No 4, National Board No 91. The replacement work was performed as follows:

1) Removed the existing Trigger Body Subassembly Serial No 5801 from the valve.

- 2) Installed new replacement Trigger Body Subassembly Serial No 4585 in the valve.
- 3) Removed the existing Inlet Fitting Serial No 5799 from the valve.

4) Installed new replacement Inlet Fitting Serial No 4570 in the valve.

5) Performed VT-3 visual examination on the existing studs for the valve joint. VT-3 visual examination results acceptable. Note - One (1) set of studs cover both the inlet and the outlet joints.

6) Performed VT-3 visual examination on the existing nuts for the valve inlet joint. VT-3 visual examination results acceptable.

7) Performed VT-3 visual examination on the existing nuts for the valve outlet joint. VT-3 visual examination results acceptable.

8) Reinstalled refurbished valve SLC-V-4A, Serial No 4, National Board No 91.

9) Reinstalled VT-3 visually examined existing studs and nuts for the valve inlet and outlet joints.

10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

#### NOTES-

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the existing valve SLC-V-4A, Serial No 4, National Board No 91 was reinstalled is Standby Liquid Control (SLC) piping system SLC(2)-4S-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda for the existing valve SLC-V-4A, Serial No 4, National Board No 91.

4) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new replacement Trigger Body Subassembly Serial No 4585. The new replacement 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 2-1618.

5) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new replacement Inlet Fitting Serial No 4570. The new replacement 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 2-1618.

PLAN No 2-1787 ENERGY NORTHWEST
People · Vision · Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Test Pressure: 1200/1200 Psig Test Temperature: 81/91° F Component Design Pressure: 1400 Psig Temperature: 150° F
9. Remarks:       1) See attached N-2 Code Data Reports for the following new replacement valve parts:         Valve Part       Serial No         Trigger Body Subassembly       4585         Inlet Fitting       4570
2) The design pressure of 1400 Psig and design temperature of 150° F are for both valve SLC-V-4A and Standby Liquid Control (SLC) piping
system SLC(2)-4S-P1 3) Test pressure on the down stream side of valve SLC-V-4A (RPV Side) - Test pressure of 1200 Psig and test temperature of 81 <sup>0</sup> F. 4) Test pressure on the up stream side of valve SLC-V-4A (SLC-P-1A Side) - Test pressure of 1200 Psig and test temperature of 91 <sup>0</sup> 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 Culdy Sugh Signed By Culdy Sugh Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 53103 Date 53103
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>f-2-03</u> to <u>7-1-05</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>MMM</u>

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL         July Support 6 (1)           NUCLEAR PARTS AND APPURTENANCES*           As Required by the Provisions of the ASME Code, Section III           Not to Exceed One Day's Froduction         Pg. 1 of 2           Not to Exceed One Day's Froduction         Pg. 1 of 2           Not to Exceed One Day's Froduction         Pg. 1 of 2           Not to Exceed One Day's Froduction         Pg. 1 of 2           Not to Exceed One Day's Froduction         Pg. 1 of 2           Not to Exceed One Day's Froduction         Pg. 1 of 2           Not to Exceed One Day's Froduction         Pg. 1 of 2           Not colspan="2">Phare are down of the ASME Code, Section III           Not to Exceed One Day's Froduction         Pg. 1 of 2           Not to Exceed One Day's Froduction         Pg. 1 of 2           Astignt State Monator           Not to Exceed One Day's Froduction           Not to Exceed One Day With Colspan="2">NIA         1 State Monator           Ast of State Ast Day Stat				· •		Jo. 2-178\$7
I. Manufactured and certified by         Conax Buffalo Corporation, 2300 Waldan Avenue, Chesktowage, NY 14225           Imanufactured for         Weshington Police Power Suppy, Richland, VA 93352           2. Manufactured for         Weshington Police Power Suppy, Richland, VA 93352           Device and subsets of N/CAA 93352         Power and subsets of N/CAA 93352           3. Location of Installation         WNP-2. Richland, WA 93352           4. Type:         N38017, Rev. F         SA479 304SST           7. Rome and subset         N/A         1995           6. ASME Code, Section III, Division 1:         77         ST7         1         N/A           6. Fabriceted in eccordance with Const. Spec. (Div. 2 only)         N/A         Boore stati         Extension           Freessure Text at 28000 pal for 10 minutes.         B. Nom. thickness (In.)         .040         Min. design thickness (In.)         .051         Length overall fit & in.)         .2.245°           9. When applicable, Cartificate Holders' Data Reports are attached for each item of this report:         Part or Appurtenance         National           101         ESTO         4570         133         Ist.         Fart or Appurtenance         National           110         4570         4570         133         Ist.         Ist.         In Numerical Order           111		FORM N-2 CE N As Require	ed by the Provision	is of the Asmie Cod	le, Section III	
Washington Public Power Supply, Richland, WA 99352           Imme are scient of Protostart           Status of Protostart           Status of Protostart           NINP2_Richland, WA 99352           Imme are scient of Protostart           Immet are scient of Protostart           Protocolspan= scient of Protostart           Protocolspan= scient of Protostart	1. Manufactu	red and certified by		Corporation, 2300 Wald	len Avenue, Cheektow	
3. Location of installation         WNP-2, Richland, WA 9352           terms are stocked           terms are stocked and valve replacement kit for standby liquid control system.           Pressure Test at 2800 psl for 10 minutes.           B. Nom, thickness (in.)	2. Manufactu	red for	Washingto		•	
Inter and address)           A. Type:         N/A         1995           A. SAVE 304SST         T 5 K31         N/A         1995           Convertige to 1         N/A         Remarks:         Inter convertige to 1         N/A         Remarks:         Inter convertige to 1         National           Based to 1         National         Based to 2           Pressure Test at 2800 pai for 10 minutes.           6. Nom: tblckness (in.)         O40         Mational           Based No.         In Numerical Order           Pert or Appurtenance         National           Based No.         In Numerical Order           (1)         4577         (26)           (26)         Colspane Mo.         In National					-	
Growse no.]         mart lage: no.]         larvise strength         GEN0         typer Luio           5. ASME Code, Section III, Division 1:         77         577         1         N/A           6. Fabricested in accordance with Const. Spec. (Div. 2 only)         N/A         Revision         Date           7. Remarks:         Inlet Fitting for explosive actuated valve replacement kit for standby figuid control system.         7           Pressure Test at 2800 pal for 10 minutes.           8. Nom. thickness (in.)         .040         Min. design thickness (in.)         .031         Die. ID (ft & in.)         .895*         Langth overall (ft & in.)         2.245*           9. When applicable, Certificate Holdere' Data Reports are attached for each item of this report:         Part or Appurtenance         National         Board No.           10         4570         4570         (28)	3. Location o	f installation				
5. ASME Code, Section III, Division 1:       77       577       1       N/A         6. Fabricated in accordance with Const. Spec. (Div. 2 only)       N/A       Revision	4. Type:					
6. Fabricated in accordance with Const. Spec. (Div. 2 only)       N/A       Revision	5. ASME Co	•	77	\$77	1	N/A
Pressure Test at 2800 psi for 10 minutes.         E. Nom. thickness (in.)       .040       Min. design thickness (in.)       .031       Dia. D (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       National       National       Board No.         (1)       4570       4570       (26)	6. Fabricated	in accordance with Const. S	ipec. (Div. 2 only)		חכ	
Pressure Test at 2800 psl for 10 minutes.           8. Nom. thickness (in.)040Min. design thickness (in.)031Die. ID (ft & in.)895*Length overall (ft & in.)2245*         9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:           Part or Appurtenance         National Board No. in Numerical Order         Part or Appurtenance Serial Number         National Board No. in Numerical Order         National Board No. in Numerical Order         10         4570         4571         4671         226         226         23         24571         4671         261         2261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261         261	7 Demoko	iniat Fitting for explosio	a schusted valve repla	••••••	mid control system.	
Pressure Test at 2800 psi for 10 minutes.         8. Nom. thickness (in.)O40Min. design thickness (in.)O31 Die. 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	7. nemarks:					
8. Nom. thickness (in.)       .040       Min. design thickness (in.)       .031       Dia. ID (ft & in.)       .895"       Langth overall (ft & in.)       2.245"         9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:       Part or Appurtenance       National Board No. in Numerical Order       Part or Appurtenance       National Board No. in Numerical Order       Image: Serial Number       National Board No. in Numerical Order       [26]       [27]       [26]       [28]       [28]       [29]       [30]       [31]       [31]       [31]       [31]       [33]       [31]       [33]       [31]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [33]       [34]       [35]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       [36]       <			nei for 10 minutes			<u> </u>
B. When applicable, Certificate Holders' Data Reports are attached for each item of this report:       Part or Appurtenance       National Board No. in Numerical Order       Part or Appurtenance       National Board No. in Numerical Order         (1)       4570       4570       (26)       In Numerical Order       In Numerical Order         (3)       (3)       (27)       (28)       In Numerical Order       In Numerical Order         (4)       (30)       (28)       (29)       (30)       In Numerical Order         (6)       (30)       (31)       (31)       In Numerical Order       (32)         (7)       (30)       (31)       In Numerical Order       (31)       In Numerical Order         (10)       FTTTI N & SIN 4 STO       (33)       (34)       In Order       (34)         (11)       INLET       (33)       In Order       (34)       In Order         (12)       IN 5 SIN 4 STO       (36)       In Order       (36)       In Order         (13)       INLET       In Order       In Order       In Order       In Order         (13)       In Order       In Order       In Order       In Order       In Order         (14)       In Order       In Order       In Order       In Order       In Order <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Part or Appurtenance Serial Number         Board No. in Numerical Order         Part or Appurtenance Serial Number         Board No. in Numerical Order           (1)         4570         4570         (26)         In Numerical Order           (2)         4571         4571         (26)         In Numerical Order           (3)         Image: Contract of the series of						overall (IT & IN.)
12       4571       4571       (27)         (3)       (28)       (29)         (4)       (29)       (30)         (6)       (30)       (31)         (7)       (31)       (32)         (8) $SLC - V - 4$ $A$ (9) $SLC - V - 4$ $A$ (10) $F$ $F$ (11) $G$ (33)         (12)       (37)       (36)         (13)       (39)       (39)         (14)       (39)       (40)         (16)       (41)       (42)         (16)       (41)       (42)         (16)       (44)       (42)         (16)       (44)       (42)         (16)       (44)       (42)         (16)       (44)       (42)         (16)       (44)       (42)         (16)       (44)       (42)         (17)       (42)       (43)         (18)       (44)       (44)         (19)       (44)       (44)         (20)       (44)       (45)         (21)       (46)       (46)         (22)	Pa		Board No.			Board No.
(3)       (4)       (26)         (4)       (30)       (30)         (5)       (30)       (31)         (6)       (31)       (32)         (7)       (33)       (32)         (8) $SLC - V - 4$ $A$ $N L E T$ (10) $F T T T I N S$ $S N 4 5 7 O$ (36)         (11)       (11)       (36)       (36)         (12)       (37)       (36)       (37)         (13)       (38)       (39)       (39)         (14)       (40)       (41)       (42)         (16)       (41)       (42)       (43)         (17)       (42)       (43)       (44)         (16)       (41)       (42)       (43)         (17)       (42)       (43)       (44)         (18)       (43)       (44)       (44)         (19)       (46)       (46)       (46)         (21)       (46)       (47)       (46)         (22)       (42)       (43)       (43)         (24)       (42)       (43)       (44)	(1)	4570	4570	(26)		
(4)       (29)       (29) $(5)$ (30)       (31) $(6)$ (31)       (32) $(6)$ (31)       (32) $(6)$ (32)       (33) $(7)$ (32)       (33) $(8)$ SLC-V-4 A INLET       (33) $(10)$ FTTTING SINASTO       (35) $(11)$ (31)       (34) $(12)$ (36)       (36) $(13)$ (38)       (39) $(14)$ (39)       (39) $(14)$ (40)       (41) $(16)$ (41)       (42) $(16)$ (42)       (43) $(16)$ (42)       (43) $(16)$ (41)       (42) $(16)$ (42)       (43) $(16)$ (42)       (43) $(18)$ (44)       (43) $(19)$ (44)       (44) $(20)$ (46)       (46) $(21)$ (46)       (46) $(22)$ (47)       (48) $(24)$ (49)       (49)		4571	4571			
(6)       (31)         (7)       (32)         (8) $SLC - V - 4$ (9)       (33)         (10) $F + TTT + N \le S + N \le TO$ (33)       (34)         (11)       (35)         (11)       (36)         (11)       (37)         (12)       (38)         (13)       (39)         (14)       (40)         (15)       (40)         (16)       (41)         (17)       (42)         (18)       (43)         (19)       (44)         (11)       (42)         (12)       (43)         (14)       (43)         (15)       (44)         (16)       (41)         (17)       (42)         (18)       (43)         (19)       (44)         (20)       (44)         (21)       (44)         (22)       (47)         (23)       (48)         (24)       (49)						
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(11)       (36)       (37)         (12)       (37)       (38)         (13)       (37)       (38)         (14)       (39)       (40)         (15)       (40)       (41)         (16)       (41)       (41)         (17)       (42)       (43)         (18)       (44)       (43)         (20)       (44)       (44)         (21)       (45)       (46)         (22)       (46)       (47)         (23)       (44)       (49)		SEL -V-FF				
(12)       (13)         (13)       (14)         (14)       (15)         (15)       (16)         (16)       (40)         (17)       (41)         (18)       (43)         (19)       (44)         (20)       (44)         (21)       (44)         (22)       (44)         (23)       (44)         (24)       (49)		FTTING	SN4570	(35)		· · · · · · · · · · · · · · · · · · ·
(13)       (13)       (14)         (14)       (15)       (16)         (16)       (16)       (17)         (17)       (17)       (14)         (17)       (17)       (14)         (18)       (19)       (19)         (20)       (19)       (14)         (21)       (11)       (14)         (22)       (11)       (11)         (23)       (11)       (11)         (24)       (11)       (11)						
(14)       (39)       (40)         (15)       (40)       (41)         (16)       (41)       (42)         (17)       (42)       (43)         (18)       (43)       (43)         (19)       (44)       (44)         (20)       (44)       (44)         (21)       (45)       (45)         (22)       (46)       (47)         (23)       (48)       (49)						
(15)       (40)         (16)       (41)         (17)       (41)         (17)       (42)         (18)       (43)         (19)       (43)         (20)       (44)         (21)       (44)         (22)       (45)         (23)       (47)         (24)       (48)						
(17)       (42)         (18)       (43)         (19)       (44)         (20)       (44)         (21)       (45)         (22)       (46)         (23)       (47)         (24)       (48)				(40)		
(18)       (43)       (44)         (19)       (44)       (44)         (20)       (44)       (45)         (21)       (45)       (46)         (22)       (47)       (48)         (23)       (48)       (49)						
(19)       (44)         (20)       (45)         (21)       (46)         (22)       (47)         (23)       (48)         (24)       (49)					· · · · · · · · · · · · · · · · · · ·	
(20)       (45)         (21)       (46)         (22)       (47)         (23)       (48)         (24)       (49)						
(21)     (46)       (22)     (47)       (23)     (48)       (24)     (49)						
(22)     (47)       (23)     (48)       (24)     (49)						-{
(23) (24) (48) (49)			<u> </u>		<u> </u>	
(24) (49)						
(25) (50)	(24)					
	(25)			(50)		

\*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.

°F. Hydro. test pressure

See Remarks

(when applicable)

at temp.ºF

150

1400

10. Design pressure

psi. Temp.

### FORM N-2 (Back - Pg. 2 of \_2\_)

	Certificate Holder's Se	rial Nos4	570	through	4571
	CERTIFICATION OF DES	IGN			
Design specifications certified by	Clyde T. Nich	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 COMPLIA	ANCE			
We certify that the statements made in t	this report are correct and that this (these)	1	Inlet	Fittings	
conforms to the rules of construction of	the ASME Code, Section III, Division 1.				<u></u>
NPT Certificate of Authorization No.	N-1850	Expires	Sep	tember 2, 199	5
Date <u>5/18/25</u> Name	Conax Buffaio Corporation	_ Signed		<b>Dialt</b>	1
	CERTIFICATE OF INSPECT	TION	<u></u>		
······································	sion issued by the National Board of Boiler a / Hartford Steam B		•		rovince of
of <u>Hartford, CT</u> have inspe best of my knowledge and belief, the Ce Section III, Division 1. Each part listed ha By signing this certificate, neither the ins described in this Data Report. Furthermo property damage or loss of any kind aris	Acted these items described in this Data Re rtificate Holder has fabricated these parts as been authorized for stamping on the dat spector nor his employer makes any warra ore, neither the inspector nor his employer ing from or connected with this inspection	or appurtenances i or appurtenances i te shown above. Inty, expressed or i shall be liable in an b.	mplied, cond	, and st e with the ASM cerning the equ	/IE Code, ipment
Date J-/A.A. Signed	(Authorized inspector)	nissions <u>//</u> (Nat <sup>1</sup> B	<u>7640</u> d. (incl. endorse	menta) and state or	prov. and no.]

· .					PLAN	1 No.	2-1787
	s Required by t	R PARTS AND	OAPPURTE	NANCES* IE Code, Sect	DENTICAL	Chedig	2-1787 Smr <sup>6</sup> (j) 5j2)143 Pg. 1 of <u>2</u>
. Manufactured and certified t	ру v	Conax Buffalo Co		00 Walden Aver		aga, NY 14:	225
2. Manufactured for	·····	Washington F	ublic Power	Supply, Richland			
I. Location of installation				chland, WA 993 ne and address)	152	<u></u>	
I. Type: N20000, Rev. G	SA479 304		75 KSI		N/A		1995
(drawing no.)	imat'i spec. r	io.)	(tensile strength)		(CRN)		(year built)
. ASME Code, Section III, Di		77	\$7	-	1		N/A
- Fabricated in accordance wi		edition) /. 2 only}	Inddenda N/A (no.)	Revision	(class)	Date	(Code Case no.)
7. Remarks: Trigger Body	Subassembly for e	xplosive actuated	i valve replac	ement kit for sta	ndby liquid cor	ntrol system.	
	21 (b) is applicable	to ram. Press Fit	/Seal on .328	& .4375 diamat	ters. Overall s	ubassambly l	ength is 2.5".

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Pressure Test at 2800 psi for 10 minutes.

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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	Nationa! Board No. in Numerical Order
1) 4585	4585	(26)	
2) 4586	4586	(27)	
3}		(28)	
4) 5)	·····	(29) (30)	
6)		(31)	<u></u>
n SLC-V-4	ATRIGGER	(32)	
8)		(33)	/
91 130% Y S	N 4585	(34)	
10)		(35)	
11)		(36)	
2)		(37)	ļ
4}		(39)	{ <u></u>
15)		(40)	
6)		(41)	f
7)		(42)	
8)		(43)	
9)		(44)	
.0)		(45)	
22)		(40)	
23)		(48)	
24)	<u> </u>	(49)	
25)		(50)	

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

## FORM N-2 (Back - Pg. 2 of \_2\_)

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	Certificate Holder's Serial Nos.		4585	through	4586
	CERTIFICATION OF DESIGN	t			
Design specifications certified by	Ciyde T. Nich	P.E.	State	CA Reg. no.	15587
Dasign report <sup>*</sup> cartified by	Francis J. Domino (when applicable)	P.E.	State	NY Reg. no	36832
	CERTIFICATE OF COMPLIAN	CE			
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, 199	5
Date 5/16/85Name	Conax Buffalo Corporation (NPT Certificate Holder)	Signed _	Curt		-
	CERTIFICATE OF INSPECTIO	N	<u></u>	<u>_</u>	
I, the undersigned, holding a valid commis	sion issued by the National Board of Boller and i	Prassure '	Vessel Inspect	ors and the State or P	rovince of
NY and employed b	y Hartford Steam Boile	a inspect	ion & Insuran	ce Company	
best of my knowledge and belief, the Co Section III, Division 1. Each part listed h By signing this certificate, neither the in described in this Data Report. Furtherm	ected these items described in this Data Repo entificate Holder has fabricated these parts or has been authorized for stamping on the date s ispector nor his employer makes any warranty lore, neither the inspector nor his employer sh sing from or connected with this inspection.	appurten shown ab r, express	ances in acco love. sed or implied,	rdance with the ASN , concerning the equ	ME Code, ipmant
Date_ <u>J-/F,95</u> Signed <u></u>	Commiss (Authorized Inspector)	sions	(Nat'l Bd. (Incl. e	andorsements) and state or	prov. and no.)



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/17/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

#### 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Seriai No	National Board No	Other I.D.	<b>Ye</b> ar Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(16)-1	WPPSS*	RCIC(16)-1-P1	N/A	N/A	1983		Yes, Code Class 2

7. Description Of Work Performed: Replaced rupture discs for RCIC-RD-1 and RCIC-RD-2. The replacement work was performed as follows:

1) Removed existing rupture discs.

2) Performed VT-3 visual examination on the existing studs for both the bolted joints. VT-3 visual examination results acceptable.

3) Performed VT-3 visual examination on the existing nuts for both the bolted joints. VT-3 visual examination results acceptable.

4) Installed new rupture discs in RCIC-RD-1 and RCIC-RD-2.

5) Reinstalled VT-3 visually examined existing studs for both the bolted joints.

6) Reinstalled VT-3 visually examined existing nuts for both the bolted joints.

7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of both the bolted joints. No evidence of leakage during the pressure test.

#### NOTES-

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

ENERGY NORTHWEST People : Vision : Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       Other         Test Pressure: 3.8 Psig       Test Temperature: 223.8° F         Component Design Pressure: 150 Psig       Temperature: 267° F
9. Remarks: None
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Guideb Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       1/1/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>/O/OO</u> to <u>O7/OO</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Mm Ometric Commissions 8232 WACZA Inspector's Signature National Board, State, and Endorsements
Date 07/23/03



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/30/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No .: Not Applicable

(e) Expiration Date: Not Applicable

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced spool piece for 18" Service Water (SW) Loop B return piping down stream of valve SW-V-12A. The replacement work was performed as follows:

1) Removed existing section of 18" pipe.

2) Beveled valve SW-V-12A cut end and beveled cut pipe ends.

3) Installed new section of 18" of pipe.

4) Completed the root pass on both the 18" circumferential butt welds.

5) Performed visual examination on the root pass on both the 18" circumferential butt welds. Visual examination results acceptable.

6) Performed magnetic particle (MT) examination on the root pass for both the welds. The magnetic particle (MT) examination results acceptable.

7) Completed both the 18" circumferential butt welds.

8) Performed visual examination on both the final 18" circumferential butt welds. Visual examination results acceptable

9) Performed magnetic particle (MT) examination on both the final 18" circumferential butt welds. Magnetic particle (MT) examination

results acceptable.

10) Installed replacement piping material such as sockolet, reducing insert.

11) Made required welds.

12) Performed visual examination on the final welds. Visual examination results acceptable.

13) 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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The magnetic particle (MT) examination on the root pass for both the 18" welds was performed in accordance with the requirements

of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in 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 requirements outlined in 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 requirements outlined in Code Case N-416-1.

Prepared By William Early Bright Bighter (PLE) Prepared By William Early Bighter (PLE) Prepared By					PLAN No 2-1
Tests Conducted: Hydrostatic Pressure: Nominal Operating Pressure: Mother Test Pressure: 215 Peig       Test Temperature: 65° F         Component Design Pressure: 309 Peig       Test Temperature: 150° F         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         Certificate Of Authorization No.: Not Applicable       Signed By       Lucy Lucy         Kuldip Singh - Prégram Lead Engheer (PLE)       Signed By       Lucy Lucy         Date       G 30 [0 3       Date       G 30 [0 3         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford Connecticut areasures described in this Owner's Report In accordance with the requirements of the ASIME Code, Section XI.         By signing this certificate neither the Inspector or his employer makes any warranty, expressed or inplied, concerning the examinations and corrective measures described in this Owner's Report In accordance with the requirements of the ASIME Code, Section XI.         By signing this certificate neither the Inspector or his employer makes any warranty, expressed or inplied, concerning the examinations and corrective measures described in this Owner's Report in				YWEST	
Tests Conducted: Hydrostatic Pressure: Nominal Operating Pressure: Mother Test Pressure: 215 Peig       Test Temperature: 65° F         Component Design Pressure: 309 Peig       Test Temperature: 150° F         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         Certificate Of Authorization No.: Not Applicable       Signed By       Lucy Lucy         Kuldip Singh - Prégram Lead Engheer (PLE)       Signed By       Lucy Lucy         Date       G 30 [0 3       Date       G 30 [0 3         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford Connecticut areasures described in this Owner's Report In accordance with the requirements of the ASIME Code, Section XI.         By signing this certificate neither the Inspector or his employer makes any warranty, expressed or inplied, concerning the examinations and corrective measures described in this Owner's Report In accordance with the requirements of the ASIME Code, Section XI.         By signing this certificate neither the Inspector or his employer makes any warranty, expressed or inplied, concerning the examinations and corrective measures described in this Owner's Report in			People Vision 8	Bolutions	
Test Pressure: 215 Paig       Test Temperature: 65° F         Component Design Pressure: 309 Psig       Temperature: 150° F         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       Expiration No: Not Applicable         Certificate Of Authorization No: Not Applicable       Signed By         Frepared By       Signed By         Kuldip Singh - Prégram Lead Englineer (PLE)       Signed By         Kuldip Singh - Prégram Lead Englineer (PLE)       Signed By         Kuldip Singh - Prégram Lead Englineer (PLE)       Kuldip Singh - Prégram Lead Englineer (PLE)         Date       G 20 [ 0 3         Date         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hariford Steam Boiler Of Connecticu of Hariford, Connecticut have inspected the components described in this Owner's Report during the period (D-2P-OL)         OT D'OL         Presend Washington and employed by Hariford Steam Boiler Of Connecticu of Hariford, Connecticut have inspected the components described in this Owner's Report In accordance with the requirements of the ASME Code, Section XI.	FO	RM NIS-2 OWNER'S	REPORT FOR RE	PAIRS OR R	EPLACEMENTS (Back)
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol State Code, Section XI.         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Prepared By       Kuldip Singh - Prógram Lead Engineer (PLE)         Date       G 3 0 0 3         Nuldip Singh - Prógram Lead Engineer (PLE)         Date       G 3 0 0 3         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Haritord Steam Boiler Of Connecticut of Haritord, Connecticut have inspected the components described in this Owner's Report during the period ( <u>1-29-01</u> , to <u>7-09</u> ) and state to the best of my knowledge and bellef, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signify this certificate neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this Inspection.         Mathemations in the Signature       Commissions <u>Mathematical and Endorsements</u>	Tests Conducte	Test Pressure: 215 Pa	sig	Test Te	emperature: 65° F
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	<b>Remarks:</b> None				
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By					
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By					=
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Wildip Singh - Program Lead Engineer (PLE) Date	10/				
Expiration Date: Not Applicable         Prepared By $Main Main Main Main Main Main Main Main $	to the rules of	the ASME Code, Sect	tio <b>n XI</b> .	eport are corr	ect and this replacement conforms
Prepared By       Midu Bingh - Prégram Lead Engineer (PLE)       Signed By       Miduip Singh - Program Lead Engineer (PLE)         Date       630 (03       Date       630 (03         CERTIFICATE OF INSERVICE INSPECTION         It undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         Of 10 - 29 - 02         of 10 - 29 - 02         Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10 - 29 - 02         In 2 - 02         In and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Matter and Employer's Signature       National Board, State, and Endorsements			Applicable		
Kuldip Singh - Prégram Lead Engineer (PLE)       Kuldip Singh - Prégram Lead Engineer (PLE)         Date       6 30 03         Date       6 30 03         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the         period       10 - 29 - 02         and state to the best of my knowledge and bellef, the         Owner has performed examinations and taken corrective measures described in this Owner's Report         in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         M.M	·	N.S. C	7 06		M. P. Q'
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10-29-02 to 7-1-03 and state to the best of my knowledge and bellef, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Mathematical Actional Board, State, and Endorsements	Prepared By _	Kuldip Singh - Pregram Lea	Signal Si		dip Singh - Program Lead Engineer (PLE)
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{10-29-02}$ to $\underline{7-1-03}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements National Board, State, and Endorsements	Date	630103	Da	te	6130103
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{10-29-01}$ to $\underline{7-1-03}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mathematical National Board, State, and Endorsements					1 1
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I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{10-29-02}$ to $\underline{7-1-03}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements National Board, State, and Endorsements					
Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{i0-29-c2}$ to $\underline{7-1-c3}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements		CERTI	FICATE OF INSEN	IVICE INSPE	CHUN
of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{10-29-01}$ to $\underline{7-1-03}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Minspector's Signature Commissions $\underline{746.007486.001}$ MS National Board, State, and Endorsements					
Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>M.M. E.M.M.</u> Commissions <u>M.M. E.M.M.</u> Commissions <u>M.M. E.M.M.</u> National Board, State, and Endorsements	of Hartford, Co	nnecticut have inspect	ed the components	described in	this Owner's Report during the
in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be iiable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. $\underbrace{\mathcal{M}}_{\text{Inspector's Signature}} \text{Commissions} \underbrace{\frac{7467.00/7466.005}{\text{National Board, State, and Endorsements}}$					
implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>M.M. E.M. Commissions</u> <u>746. w/746. w J ms</u> National Board, State, and Endorsements	in accordance	with the requirement	s of the ASME Cod	e, Section XI.	
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>M.M. E.M.C. M. Commissions</u> Inspector's Signature    Commissions					
M.M. Ford Commissions 7467. W/7487. NJ NS Inspector's Signature National Board, State, and Endorsements	Furthermore,	neither the Inspector I	nor hi <mark>s</mark> employer sl	hall be liable i	n any manner for any personal
Inspector's Signature National Board, State, and Endorsements	injury or prop	erty camage or a loss	of any kind arising	from or cont	ected with this inspection.
Inspector's Signature National Board, State, and Endorsements	MI IM	I ATA	5	741	Austrad up as
Date 7-1-07	 In	Ispector's Signature			
	Data 7-1-	•			
		- 1) 2			



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/06/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 Summer 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW-V-12A	Velan	77G534	N/A	N/A	1977	Repaired	Yes, Code Class 3

7. Description Of Work Performed: Repaired by welding wasted areas on the inside (ID) surfaces of valve SW-V-12A outlet. The repair work was performed as follows:

1) Prepped wasted areas by grinding to provide access for welding.

2) Weld repaired (weld built up) the wasted areas.

3) Ground/blended the weld repaired areas flush with the adjacent base metal to match the contour of the inside surfaces.

4) Performed visual examination on the weld repaired areas. Visual examination results acceptable.

5) Performed magnetic particle (MT) examination on the weld repaired areas. 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.

ENERGY NORTHWEST People - Vision - Bolutions	No 2-1790
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Test Pressure: 215 Psig Test Temperature: 65° F Component Design Pressure: 300 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 repair conforms to rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	,
CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressu	ure
Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connectivity of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $1e-29-e2$ to $4e-3e-e3e^2$ and state to the best of my knowledge and belief, Owner has performed examinations and taken corrective measures described in this Owner's Re- in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed implied, concerning the examinations and corrective measures described in this Owner's Report Furthermore, neither the Inspector nor his employer shall be liable in any manner for any person injury or property damage or a loss of any kind arising from or connected with this inspection.	cut the the port f or
Inspector's Signature Commissions 748660/74186 N.T. National Board, State, and Endorsement	ts
Date <u>(e / 30/03</u>	



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/07/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 MS-V-706C MS-V-706C	WPPSS * Borg Warner Flowserve	MS(1)-4C-P1 19798 E720R-1-1	N/A N/A N/A	N/A N/A N/A	1983 1977 2002	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing valve MS-V-706C. The replacement work was performed as follows: 1) Removed existing valve MS-V-706C, Serial No 19798.

2) Installed replacement valve MS-V-706C, Serial No E720R-1-1.

3) Made required socket welds.

4) Performed visual examination on the final socket welds. Visual examination results acceptable.

5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve MS-V-706C, Serial No E720R-1-1 was installed is Main Steam (MS) piping system MS(1)-4C-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement valve MS-V-706C, Serial No E720R-1-1 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements.

4) Borg Warner valves are now being manufactured by Flowserve.

(F.	PLAN No 2-
Per	ク <b>NORTHWEST</b> ople・Vision・Balutions
FORM NIS-2 OWNER'S REPO	ORT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic D Pneum Test Pressure: Psig Component Design Pressu	natic Nominal Operating Pressure None X Test Temperature: ° F ure: Psig Temperature: ° F
lemarks: See attached NPV-1 Code Data Report for	the replacement valve MS-V-706C, Serial No E720R-1-1.
CERTIF	FICATE OF COMPLIANCE
	s Owner's Report are correct and this replacement conforms
to the rules of the ASME Code, Section XI.	
Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicab	
Expiration Date: Not Applicable	
Prepared By Aldre Su	5 Signed By Juldup Surph
Kuldip Singh - Program Lead Engine	eer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date6903	Date6 9 03
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CERTIFICAT	TE OF INSERVICE INSPECTION
	ssion issued by the National Board of Boiler and Pressure
	have inspected the components
described in this Owner's Report during the state to the best of my knowledge and beli corrective measures described in this Own ASME Code, Section XI.	he period to and lef, the Owner has performed examinations and taken ner's Report In accordance with the requirements of the
state to the best of my knowledge and beli corrective measures described in this Owi ASME Code, Section XI. By signing this certificate neither the Inspe implied, concerning the examinations and Furthermore, neither the Inspector nor his	lef, the Owner has performed examinations and taken
state to the best of my knowledge and beli corrective measures described in this Own ASME Code, Section XI. By signing this certificate neither the Inspe implied, concerning the examinations and Furthermore, neither the Inspector nor his injury or property damage or a loss of any <u>Not Required - Replacement 1" NPS And Smaller</u>	ief, the Owner has performed examinations and taken ner's Report in accordance with the requirements of the ector nor his employer makes any warranty, expressed or corrective measures described in this Owner's Report. a employer shall be liable in any manner for any personal y kind arising from or connected with this inspection.
state to the best of my knowledge and beli corrective measures described in this Own ASME Code, Section XI. By signing this certificate neither the Inspe implied, concerning the examinations and Furthermore, neither the Inspector nor his injury or property damage or a loss of any	ief, the Owner has performed examinations and taken ner's Report in accordance with the requirements of the ector nor his employer makes any warranty, expressed or corrective measures described in this Owner's Report. a employer shall be liable in any manner for any personal y kind arising from or connected with this inspection.

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# PLAN NO. 2-1793

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 \_\_\_\_

1. Manufactured and cer	rtified byFlow	vserve Cor			st Street, Willian		PA 17701
					s of N Certificate Holde	r)	
2. Manufactured for End	ergy Northwest	, P.O. Box 9					
3. Location of installatio	nColumbia (	Generating St	ation, No		lant Loop, Richland	I, WA 9	9352
4. Model No., Series No.	FlexFlex	Wedge Gate	Drawing	Iname and 76700-4	address) RevM		CRN_N/A
5. ASME Code, Section	III, Division 1:	1971		Winter 197			N/A
6. Pump or valve	Valve	(edition) Nominal inlet	size	laddenda da l"	te) (class) Outlet size	1"	(Code Case no.)
7. Material: Body	SA105	Bonnet	SA105	(in.) Disk	SA487-CA6NM	(in.) Bolting	N/A
(a) Cert. Holder's Serial No.	(b) Nat'l Board		(c) Bođ Seri: No.	V ni	(d) Bonnet Serial No.		(e) Disk Serial No.
E720R-1-1	No.		4	·			Heat #E6603
E720R-1-1 E720R-1-2	N/A		<u> </u>		2 3		Heat #E6603
E720R-1-2	N/A		<u> </u>		4		Heat #E6603
<u>E720R-1-5</u>			<u>/</u> 1	<u> </u>			11000 #20005
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	N	<u>15-v-</u>	1060	<u>,&gt;</u>	N E720	<u>K - 1 -</u>	- 1
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<sup>a</sup> Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ × 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88)

This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 6/93

FORM NPV-1 (Back - Pg. 2 of \_\_\_)

				Certificate Holder's Serial No.	E720R-1-1 th	u -1-3
8.	Design conditions	3600	100	.°F or valve pressure class	1500	(1)
	Cold working pressure	(pressure)	(temperature)			
10.	Hydrostatic test	5400 psi.	Disk differential test pressure	3960		. psi
11.	l"-1500 Remarks:	#-Flex Wedge G	ate Valve			
	Disc Ma	terial to 1974 Ed	ition. Summer 1975 Addenda	3	<u></u>	

CERTIFICATION OF D	ESIGN	
Design Specification certified by       Richard L. Schlosser         Design Report certified by       N/A	WA	Reg. no Reg. no

	CERTIFICATE OF COMP	LIANCE
	•	his pump or valve conforms to the rules for construction
of the ASME Code, Section III, Divis N Certificate of Authorization No	sion 1. N1712	Expiles 04/15/04
Date 8-28-02 Name	Flowserve Corporation	signed Mondeaslage
	(N Certificate Holder)	(authorized representative)

	CERTIFICATE OF INSPECTION	
the State or Province of	d commission issued by the National Board of Boiler and Pressure Vesse Pennsylvania and employed by One Beacon America	I inspectors and a Insurance
of Boston, Mass.	have inspected the pump, or valve, described in thi	s Data Report on
34Ch 8-24-02	_, and state that to the best of my knowledge and belief, the Certificate	Holder has con-
structed this pump, or valve, in acc	cordance with the ASME Code, Section III, Division 1.	
component described in this Data is any personal injury or property dam Dat 329-02 Signet Micro	the inspector nor his employer makes any warranty, expressed or implied Report. Furthermore, neither the inspector nor his employer shall be liable in page of a loss of any kind arising from or connected with this inspection.	n and monther for C19 9

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(1) For manually operated valves only.



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/31/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 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
CRD-Scram/Inst.	GE, I&CE	CRD-Scram/Inst.	N/A	N/A	1983		Yes, Code Class 2

7. Description Of Work Performed: Installed sixteen (16) new flush ports (connections) for Scram Discharge Volume (SDV). The installation work was performed as follows:

1) Installed one (1) new elbow flanged pipet on the existing piping.

- 2) Installed fifteen (15) new flanged pipets on the existing piping.
- 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 sixteen (16) new blind flanges for the flanged pipets.

7) Installed new studs for all sixteen (16) new flush ports (connections).

8) Installed new nuts for all sixteen (16) new flush ports (connections).

9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

PLAN No 2-1794
ENERGY NORTHWEST Pepple · Vision · Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic X Pneumatic Nominal Operating Pressure Other Test Pressure: 1605, 1600, 1590 and 1585 Psig Component Design Pressure: 1250 Psig Component Design Pressure: 1250 Psig
<ul> <li>9. Remarks: The actual test pressures and temperatures during hydrostatic tests are as follows:</li> <li>1) Actual test pressures - Two (2) flush ports (connections) at 1605 Psig, seven (7) flush ports (connections) at 1600 Psig, five (5) flush ports (connections) at 1590 Psig and two (2) flush ports (connections) at 1585 Psig</li> <li>2) Actual test temperatures - Two (2) flush ports (connections) at 89° F, six (6) flush ports (connections) at 88° F, six (6) flush ports (connections) at 87° F and two (2) flush ports (connections) at 86° F</li> </ul>
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By ULAY. Sugs Signed By ULAY Sugs
Kuldip Singh - Program Lead Engineer (PLE)     Kuldip Singh - Program Lead Engineer (PLE)       Date     G     Z     O 3
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $2 - 7 - 6 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 1 - 6 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7$



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/25/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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 MS-RV-2D MS-RV-2D	WPPSS * Crosby Crosby	822-G001D-P1 N63790-00-0050 N63790-03-0122 ** (N63790-00-0122) **	N/A N/A N/A	N/A N/A N/A	1983 1980 1981	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 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 twelve (12) existing standard (regular) nuts for the relief valve inlet joint.

2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.

3) Removed existing relief valve Serial No N63790-00-0050 with set pressure of 1175 Psig at rated temperature of 575<sup>0</sup> F.

4) Performed VT-1 visual examination on twelve (12) new "Superbolts" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.

Installed replacement relief valve with Serial No N63790-03-0122 with set pressure of 1175 Psig at rated temperature of 575<sup>0</sup> F.
 Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.

7) Installed sixteen (16) new "Superbolts" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0122 was installed is Main Steam (MS) piping system B22-G001D-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement relief valve Serial No N63790-03-0122 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0122 was previously modified (upgraded) to Serial No N63790-03-0122 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs.

PLAN No 2-12 ENERGY NORTHWEST Papie - Vision - Solutions	796
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Test Temperature: 199.8° F Component Design Pressure: 1250 Psig Temperature: 575° F	
<b>9. Remarks:</b> 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0122, 2) See attached NV-1 (Pr Modification) Code Data Report for relief valve Serial No N63790-00-0122, 3) * The test pressure and the test temperature on the relief valve joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 *Reactor Press Vessel Leakage Test*.	inlet
	ר
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By	
<b>CERTIFICATE OF INSERVICE INSPECTION</b> I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -2-0^2$ to $(2-2^2-0^2)$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal	
injury or property damage or a loss of any kind arising from or connected with this inspection. <u>Mille</u> <u>Commissions</u> <u>74864</u> <u>74864</u> <u>74866</u> <u>748666</u> <u>748666</u> <u>7486666</u> <u>748666666666666666666666666666666666666</u>	

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

PLAN NO. 2-1796

				4000	I DEAT >
1. Work performed by:	NWS Technologies, L. 131 Venture Boulevard, Spa		Purchase Ord 29306	ler #00313236	6126/03 5 Rev. 2
2. Work performed for:	Energy Northwest - Columbi				
· · · · ·	dress and identification of nucl er Plant Loop, Richland, WA 9	• •	nt Energy N	lorthwest - Colum	bia Generating
5. a: Repaired pressur		n Safety Relief	fValve		
HB-65-BP-	FN new s/n: N63790-0	3-0122	N/A stea	<u>im 6 x 10</u>	1981
(type)	(mfr's S	•••	NB#) (servi	•	(yr.built)
d: Construction Cod		<u>    1971    </u>	<u>N/A</u>	<u>N/A</u>	1
	(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
6. ASME Code Section	XI applicable for inservice ins	pection:	1989	<u>N/A</u>	N/A
			(edition)	(addenda)	(Code Case(s))
7. ASME Code Section	XI used for repairs, replaceme	ents:	1989	<u>N/A</u>	<u>N/A</u>
D. Construction Code u			(edition)	(addenda)	(Code Case(s))
8. Construction Code u	sed for repairs, replacements:		(edition)	N/A (addenda)	N/A (Code Case(s))
9. Design responsibilitie	es: N/A		(enmony	(autonia)	
10. Opening pressure:	1175 psig				
Set-pressure adjust		chnologies, Li	LC us	ing <u>steam</u>	
	< (include name and identifying number				
12. Remarks: See attac					
		TE OF COMP			
I. Cesar V. Sierr				the statements ma	ade in this
•	the repair, modification or repla				
•	of the ASME Code and the Na		•		
National Board Certifica	ate of Authorization No63		e "VR" stamp		2006.
National Board Certifica	ate of Authorization No. 8	1to use th	e Bastamp	expires April 9,	2006.
4/22/03 NWS	Technologies, LLC	lisar	Sterraf	· Ma	nager, QA
Date	Repair Organization	Authori	zed representative		Title
·	CERTIFICA	TE OF INSPE	CTION		
I. Charles F. Toeg				Board of Boiler a	nd Pressure
Vessel Inspectors and	certificate of competency issue			orth Carolina and	
by Hartford Steam Bo		of Hartford,		inspected the repa	
	ed in this report on 22 APR 2				
	or replacement has been corr			ection XI of the of	the ASME
	Board Inspection Code "VR" a				
-, , , ,	te, neither the undersigned nor		•	• • •	
•	modification or replacement de		•		
arising from or connect	be liable in any manner for any		ry, property da	inage of loss of a	
		<u>()</u>			
4/22/03	Tokan les of stellige &		B # 8462, A, I	N, I NC# 1073	indiction P and )

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#### FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 2 131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968

11. Description of work:

NWS Traveler # 03-69 The valve was disassembled. The nozzle and disc were removed for NDE.

Both disc and nozzle were polished by NWS prior to installation.

Parts replaced during the repair include:Disc Holder Spiral Pins (2):MC 54407794Eductor Gasket:MC 56230481Inlet Studs (3):SLR

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

NWS Technologies, LLC Manager, QA (repair organization) · (authorized representati (title) NB# 8462, A,N,I NC# 1073 Commissions (NB (incl endorsements), jurisdiction,& no.) +

		PLAN NO, 2-1796
CROSBY	CROSBY VALVE WRENTH	B GAGE COMPANY AN, HASS Rulip Sup <sup>13</sup> 6/22/03
	I FOR SAFETY AND SAFETY RELIEF V by the Provisions of the ASME Co	
. s	DATA REPORT afety and Safety Relief Valves	
1. Manufactured By Crosby Valv	e & Gage Company, 43 Kendrick St Name and Address	., Wrentham, MA 02093
General	Electric Company, 175 Curt	/24/79 National Board No. N/A ner Ave.,
2. Manufactured For San Jos	se, CA 95125 Name and Address	Order No. 205-AJ986
	ic Power Supply System, Rich Name and Address	
4. Location of Plant Hanford	Reservation, Richland, Was	hington 99352
5. Valve Identification MPL #H	322-F013erial No. <u>N63790-00-01</u>	22 Drawing No. DS-A-63790 Rev. C
Type <u>Safety Relief</u> Safety, Safety Relief, Power Actuated		pe Size Inlet 6 Outlet 10 Inch Inch Inch
6. Set Pressure (psig) <u>117</u>		S75 <sup>0</sup> F Rated Temperature
Stamped Capacity 884	.,314 <u>@</u> 3 ZOverpressure — Bl	
Hydrostatic Test (psig) Inle	97 5 2370 Outlet 110	5 psig (Assembled Valve) 0 psig (Body Only)
Pressure Retaining Pieces	(Applicable t	to Valves for Closed Systems Only)
	Serial No.	Material Specification
Bar Stock & Forgings a. GHELINGK	Identification	Including Type or Grade
Body	<u></u>	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	<u>N93407-36-0097</u>	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. <b>NHXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</b>		
<b>XXXXXXXXXXX</b> Disc Insert	<u>N93185-37-0153</u>	ASME SA637 Gr. 718
Nozzle	N93184-33-0070	ASME SA182 Gr. F316
Disc Holder K55484-31-001	6 <u>N89714-31-0014</u>	AMS 5662B
Spring Washers K62858-36-00	K62856-36-0107 K62857-36-0121	ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0071	ASME SA193 Gr. B6
Spindle Point K62873-37-01		ASME SA564 Type 630
c. Spring K62858-36-0080	*N89722-0085	ASTM A304-66 Gr. 4161H_
d. Bolting		· · · · · · · · · · · · · · · · · · ·
e. XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	L35 N93213-0202	Stoody #6
Thrust Bearing Adapter	N93409-32-0068	ASME SA193 Gr. B6
Bonnet Stud	(BW19) N93207-1498 thru 1509	
Bonnet Stud Nut	(J87) N93210-1009 thru 1020	
Inlet_Stud	(BW21) N93216-1431 thru 1442	ASTM A193-71 Gr. B7 ASME SA193 Gr. B7 ASTM A194-71 Gr. 2H
Inlet Stud Nut	(BW22) N93218-1365 thru 1376	•••••••••••••••••••••••••••••••••••••••
Adjusting Bolt Button	N93411-33-0075	ASME SA193 Gr. B6

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Alve originally built against Crosby Order No. <u>N51727</u> , Assembly No. <u>N56000</u> . Valve modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached. N63790-00-0122
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, <u>1971</u> Edition, Addenda <u>No Addenda</u> , Code Case No. <u>1567 &amp; 1711</u> . Class <u>1</u> (Date) Date <u>II/S7/80</u> Signed Crosby Valve & Gage Co. by <u>Julue</u> (N Certificate Holder) Our ASME Certificate of Authorization No. <u>1878</u> to use the <u>NV</u> symbol expires <u>September 30, 1983</u> . (Date)
CERTIFICATION OF DESIGN
Design information on file at Crosby Valve & Gage Company
Design information on file at Crosby Valva & Gace Company
Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company 43 Kendrick Street, Wrentham, Massachusetts 02093
Design specifications certified by Boyd P. Brooks
PE State California Reg. No. 13655
Stress report certified by W.D. Greenlaw
PE State Massachusetts Reg. No14784
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 <u>Massachusetts</u> and employed by <u>Factory Mutual Systems</u><sup>\*</sup> of <u>Norwood</u>, <u>Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>1/9</u>, 19<u>S/</u> 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	129 19 81.				
Signed (	Joly Pettorin	_Commissions_	19/81		
	(Inspector)		(Nat'1. Bd.,	State, Prov. an	nd No.)

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



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/19/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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
822-G001A MS-RV-2A MS-RV-2A	WPPSS * Crosby Crosby	B22-G001A-P1 N63790-00-0054 N63790-03-0051 ** (N63790-00-0051) **	N/A N/A N/A	N/A N/A N/A	1983 1980 1981	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 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 twelve (12) existing standard (regular) nuts for the relief valve inlet joint.

2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.

3) Removed existing relief valve Serial No N63790-00-0054 with set pressure of 1185 Psig at rated temperature of 575° F.

4) Performed VT-1 visual examination on twelve (12) new "Superbolts" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.

5) Installed replacement relief valve with Serial No N63790-03-0051 with set pressure of 1185 Psig at rated temperature of 575<sup>0</sup> F. 6) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.

7) Installed sixteen (16) new "Superbolts" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.

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)\* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0051 was installed is Main Steam (MS) piping system B22-G001A-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement relief valve Serial No N63790-03-0051 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0051 was previously modified (upgraded) to Serial No N63790-03-0051 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs.

PLAN ENERGY NORTHWEST People · Vision · Bolutions	I No 2-1797
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other         Test Pressure: 1030 Psig       Test Temperature: 199.8° F         Component Design Pressure: 1250 Psig       Temperature: 575° F	
<b>9. Remarks:</b> 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0051, 2) See attached Modification) Code Data Report for relief valve Serial No N63790-00-0051, 3) * The test pressure and the test temperature on the rejoint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Rev Vessel Leakage Test".	relief valve inlet
	]
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement conforts to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       6/19/03	(PLE)
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Press.         Vessel inspectors and the State of Washington and employed by Hantford Steam Boiler Of Connect of Hantford, Connecticut have inspected the components described in this Owner's Report during period <u>5-1-07</u> to <u>6-30-02</u> and state to the best of my knowledge and belied Owner has performed examinations and taken corrective measures described in this Owner's F in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed implied, concerning the examinations and corrective measures described in this Owner's Report Furthermore, neither the Inspector nor his employer shall be liable in any manner for any person injury or property damage or a loss of any kind arising from or connected with this inspection. <u>M. M. J. M. M.</u>	ticut the f, the Report ed or rt. unal

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				P	AN N	10.2-17	97
FOR	OF NUCLE	PORT OF	REPA	R 🛃 . Elief I	REPLAC	SEMENT	6/1/03
1. Work performed by: N	WS Technolo 31 Venture Boulev				se Order #	0031323	6 Rev. 2
2. Work performed for: E	nergy Northwest -	Columbia G	enerating	Station			······
3/4. Owner - name, addres Station, North Power F			• •	ant <u>Er</u>	iergy Norti	hwest - Colun	nbia Generating
5. a: Repaired pressure re b: Name of manufactur c: Identifying nos.	er: Crosby Valve		).				
_HB-65-BP-FN (type)	new_s/n:	163790-03-0 (mfr's S/N)		N/A (NB#)	steam	<u>6 x 1(</u> (size)	
d: Construction Code:	ASME Sec. III D	• •	1971	N//	• •	N/A	_1
	(name/section/divis	lion)	(edition)	(adder	nda) (Co	ode Cases(s))	(Code Class)
6. ASME Code Section XI	applicable for inse	ervice inspec	ction:	19	989	<u> </u>	<u>N/A</u>
7 ACME Code Codien VI	used for masine			• ·	ition) 189	(addenda) N/A	(Code Case(s)) N/A
7. ASME Code Section XI	used for repairs, r	replacement	5.		ition)	(addenda)	(Code Case(s))
8. Construction Code used	l for repairs, repla	cements:		• •	971	N/A	<u>N/A</u>
				(ed	ition)	(addenda)	(Code Case(s))
9. Design responsibilities:	N/A						
10. Opening pressure: <u>1</u> Set-pressure adjustme		NWS Tech	nologies,	LLC	using	steam	
11. Description of work (in	clude name and identi	ifying number c	f replaceme	ent parts):	See attac	chment 1.	
12. Remarks: See attachn	ient 1.						
I Cesar V Sierra		RTIFICATE			-	etatomonte n	nade in this

I, <u>Cesa</u>	ar V. Sierra certify that to the	best of my knowle	dge and belief the state	ements made in this
report are corr	ect and the repair, modification or	replacement of the	pressure relief devices	s described above
conforms to Se	ection XI of the ASME Code and the	e National Board I	nspection Code "VR" a	nd "NR" rules.
National Board	d Certificate of Authorization No.	632 to use th	e "VR" stamp expires	April 3, 2006.
National Board	Certificate of Authorization No.	81 to use th	e "NR" stamp expires	April 9, 2006.
4/22/03	NWS Technologies, LLC	- Usan	Werner	Manager, QA
Date	Repair Organization	Author	zed representative	Title
	CERTI	FICATE OF INSPE	CTION V	
I, Charles	F. Toegel Jr. holding a valid co	mmission issued b	y The National Board c	of Boiler and Pressure
Vessel Inspect	tors and certificate of competency	issued by the juris	diction of North Car	olina and employed
by Hartford S	Steam Boller of CT	of Hartford	CT have inspected	the repair, modification
or replacement	t described in this report on 22 A	& Zoo3 and state	e that to the best of my	knowledge and belief,
this repair, mo	dification or replacement has beer	completed in acco	ordance with Section XI	of the of the ASME
Code and the I	National Board Inspection Code "	R" and "NR" rules		
By signing this	certificate, neither the undersigne	d nor my employei	makes any warranty, e	expressed or implied,
	s repair, modification or replaceme			
	er shall be liable in any manner fo			
	connected with this inspection.	M	••••••	-
4/22/03	Thanks I sol	oeth. N	B#8462, A <u>, N</u> , I NC	# 1073
Date	Inspector's Signatur		mmissions (NB (incl endors	ements), jurisdiction,& no.) ·

### FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 2 131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0051

11. Description of work:

NWS Traveler # 03-65

The valve was disassembled. The nozzle and disc were removed for NDE. The disc was replaced. The old disc was packaged for return to site.

New disc: N97499-33-0024 was installed.

Both disc and nozzle were polished by NWS prior to installation.

Other parts replaced during the repair include:

Disc Holder Spiral Pins (2):	MC 54407794
Eductor Gasket:	MC 56230461
Inlet Studs:	N/A

During the initial repair, accelerometer mounts were installed on the spindle and spring as directed by CGS engineering. The valve was tested to ensure mount integrity. During the jack and lap, accelerometers were installed on the mounts.

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

**NWS Technologies, LLC** Manager, QA (repair organization) (authorized representative) (title) NB# 8462, A,N,I NC# 1073 Commissions (NB (incl endorsements), jurisdiction,& no.) \* Inspector's S

-		funding 8
	CROSBY VALVI	
CROSBY		
	-] FOR SAFETY AND SAFETY RELIE by the Provisions of the ASME	
	BATA REPORT Safety and Safety Relief Value	•
. Manufactured By <u>Croeby Val</u>	we & Gage Company, 63 Kendrick Name and Address	St., Wrentham, MA 02093
	Electric Company, 175 Curt	A/24/79 National Board No. <u>N/A</u> net Ave., Order No. <u>205-A1986</u>
. Owner Washingtre Public	None and Address Power Supply System, Rich	land, Washington 99352
	Name and Address d Reservation, Richland, W	
Type Safety Relief	Orifice Size R	0051 Drawing Hc. <u>D5-A-63790 Rev.</u> C Pipe Size inlet 6 Outlet 10 lach inch inch
Solety, Salety Relief, Power Actuated	110c. Inch	<u> </u>
, Set Pressure (psig)[		Raced Temperature
Stamped Capacity891,250	0 A 3 20verpressure	Blowdown (psig) 27 to 117
Hudson	9	/J psig (Assempled ValVe)
Nydrostatic Test .prig) Inle	tOutlet_11	75 psig (Assembled Valve) 00 psig (Body Only)
essure Rataining Pieces	Applicabl	00 psig (Body Only) e to Valves for Closed Systems Only)
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FOR INFORMATION ONLY

PLAN NO. 2-1797

ZX00380611

	Valve originally built spainst 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.
	N 63099-00-0721
·••	The second s
Territoria de la companya	
	Valve originally built spainst Crosby Order No. N103600, Assembly No. N56000. Valve 3/1/0 and straight of the Disc Insert, Norrie, Bonnet Stud Nuts,
· •	
and a second	Bonnet, and Spindle Assembly, and adding as Adjusting Bolt Button Assembly. New serialization is required unless indicated by an asterisk.
	Original nameplate removed and new nameplate attached.
• 40,000,000 10,000,000,000,000,000 10,000,00	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this report are correct and that this value conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section
	III, Div. 1, 1971 Edition, Addends No Addends , Code Case No. 1567 & 1711
•	Rad 1/
•	Date 11-5-20 Signed Croeby Valve & Gage Co. by (C. C. Laurand) (W Certificate Wolder)
· •	Our ASHE Certificate of Authorization No1878to 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 Coupany
	43 Kendrick Street, Wrentham, Massachusetts 02093 Design specifications certified by <sup>1</sup> Boyd P. Brooks
	PE State California Reg. No 13655
	Stress report certified by W. D. Greenlaw
	PE State Massachusetts Reg. No. 14784
•	<sup>1</sup> Signature not required - list name only.
	CERTIFICATE OF SHOP INSPECTION
	I, the undersigned, helding a valid commission issued by the National Board of Boile' and Pressure Vessel Inspectors and the State or Province of <u>Massachusetts</u>
	and employed by Factory Mutual Systems of Norwood, Massachusetts
	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, meither the Inspector nor his amployer makes any warrant,
	expressed or implied, concerning the equipment described in this Data Report. Further- more, neither the Inspector mor his employer shall be 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 31
	Signed John Sillio Commissions MASS 1266
	(Inspector) (Nat'l. Bd., State, Prov. and No.).
	*Ariveright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.
	MAB
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	<b>a</b> 3 <b>b</b> 4 <b>c</b> 5 <b>c</b> 6
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#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/19/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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
822-G001A MS-RV-3A MS-RV-3A	WPPSS • Crosby Crosby	B22-G001A-P1 N63790-00-0056 N63790-03-0058 ** (N63790-00-0058) **	N/A N/A N/A	N/A N/A N/A	1983 1980 1980	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 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 twelve (12) existing standard (regular) nuts for the relief valve inlet joint.

2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.

3) Removed existing relief valve Serial No N63790-00-0056 with set pressure of 1195 Psig at rated temperature of 575° F.

4) Performed VT-1 visual examination on twelve (12) new "Superbolts" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.

5) Installed replacement relief valve with Serial No N63790-03-0058 with set pressure of 1195 Psig at rated temperature of 575<sup>0</sup> F. 6) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.

7) Installed sixteen (16) new "Superbolts" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0058 was installed is Main Steam (MS) piping system B22-G001A-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement relief valve Serial No N63790-03-0058 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0058 was previously modified (upgraded) to Serial No N63790-03-0058 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs.

PLAN No 2-1798 ENERGY NORTHWEST People : Vision : Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Test Temperature: 199.8 <sup>0</sup> F
Component Design Pressure: 1250 Psig Temperature: 575° F
<b>9. Remarks:</b> 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0058, 2) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N63790-00-0058, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
Prepared By Ruldip Singh - Program Lead Engineer (PLE) Signed By Ruldip Singh - Program Lead Engineer (PLE)
Date 6/19/03 Date 6/19/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford. Connecticut have inspected the components described in this Owner's Report during the period $\frac{\sqrt{-7-0}}{\sqrt{-0}}$ to $\frac{\sqrt{-70-0}}{\sqrt{-0}}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Inspector's Signature Commissions 7486 W/7486 N.2 W National Board, State, and Endorsements
Inspector's Signature     National Board, State, and Endorsements       Date $C - PC - O f$

PLAN NO. 2-1798 FORM NVR-1 REPORT OF REPAIR B REPLACEMENT B OF NUCLEAR PRESSURE RELIEF DEVICES

	103
NWS Technologies, LLC         Purchase Order #         00313236 Rev. 2           131 Venture Boulevard, Spartanburg, SC 29306	
2. Work performed for: Energy Northwest - Columbia Generating Station	
3/4. Owner - name, address and identification of nuclear power plant: <u>Energy Northwest - Columbia Generat</u> Station, North Power Plant Loop, Richland, WA 99352-0968	ng
5. a: Repaired pressure relief device: <u>Main Steam Safety Relief Valve</u> b: Name of manufacturer: <u>Crosby Valve &amp; Gage Co.</u> c: Identifying nos.	
HB-65-BP-FN new s/n: N63790-03-0058 N/A steam 6 x 10 19	80
	uilt)
d: Construction Code: ASME Sec. III Div. 1 1971 N/A N/A 1	
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Cla	is)
6. ASME Code Section XI applicable for inservice inspection: 1989 N/A N/A	
7. ASME Code Section XI used for repairs, replacements:	(\$))
(edition) (addenda) (Code Case	(S))
8. Construction Code used for repairs, replacements: 1971 N/A N/A	
(edition) (addenda) (Code Case	(\$))
9. Design responsibilities: N/A	
10. Opening pressure: <u>1195 psig</u> Set-pressure adjustment made at: <u>NWS Technologies, LLC</u> using <u>steam</u>	
11. Description of work (include name and identifying number of replacement parts): See attachment 1.	
12. Remarks: See attachment 1.	
CERTIFICATE OF COMPLIANCE	
I, <u>Cesar V. Sierra</u> certify that to the best of my knowledge and belief the statements made in this	
report are correct and the repair, modification or replacement of the pressure relief devices described above	1
conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.	1
National Board Certificate of Authorization No. <u>632</u> to use the "VR" stamp expires <u>April 3, 2006.</u> National Board Certificate of Authorization No. <u>81</u> to use the "NR" stamp expires April 9, 2006.	
4/22/03         NWS Technologies, LLC         Lical Milered         Manager, QA           Date         Repair Organization         Aprilorized representative         Title	-
CERTIFICATE OF INSPECTION	
I. Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure	
Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed	
Acasel make and dermodie of competendy issued by the Janearana and antimute and employed	
by Hartford Steam Boller of CT of Hartford, CT have inspected the repair, modification	ion
by Hartford Steam Boller of CT of Hartford, CT have inspected the repair, modification replacement described in this report on 22 ARIL 2003 and state that to the best of my knowledge and believed and	ion
by <u>Hartford Steam Boller of CT</u> of <u>Hartford, CT</u> have inspected the repair, modification or replacement described in this report on <u>22 ARIL Zoo3</u> and state that to the best of my knowledge and beliet this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME	ion
by <u>Hartford Steam Boller of CT</u> of <u>Hartford, CT</u> have inspected the repair, modification or replacement described in this report on <u>22AR(IZw3</u> and state that to the best of my knowledge and belier this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.	ion
by <u>Hartford Steam Boller of CT</u> of <u>Hartford, CT</u> have inspected the repair, modification or replacement described in this report on <u>22 ARILZ003</u> and state that to the best of my knowledge and belies this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied,	ion •
by <u>Hartford Steam Boller of CT</u> of <u>Hartford, CT</u> have inspected the repair, modification or replacement described in this report on <u>22 ARIL Zoo3</u> and state that to the best of my knowledge and belied this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned	ion •
by <u>Hartford Steam Boller of CT</u> of <u>Hartford, CT</u> have inspected the repair, modification or replacement described in this report on <u>22 AR(IZzo3</u> and state that to the best of my knowledge and beliet this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind	ion •
by <u>Hartford Steam Boller of CT</u> of <u>Hartford, CT</u> have inspected the repair, modification or replacement described in this report on <u>22 ARIL Zoo3</u> and state that to the best of my knowledge and belied this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned	ion •

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## FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 2 131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: <u>Energy Northwest - Columbia</u> Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0058

The S/N for this valve was <u>N63790-00-0058</u> The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

11. Description of work:

i

The valve was disassembled. The nozzle was removed and returned to site with the disc.

CGS machined the nozzle to the new flexi-disc dimensions.

NWS machined the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00.Disc S/N:N97499-33-0028andNozzle S/N:N97498-50-0150

were installed in the valve. .

Both disc and nozzle were polished by NWS prior to installation.

Other parts replaced during the repair include:

Disc Holder Spiral Pins (2):	MC 54407794
Eductor Gasket:	MC 56230461
Inlet Studs:	<b>N/A</b> <sup>+</sup>

NWS Traveler # 03-67

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

4/22/03	NWS Technologies, LLC	lecar Si		Manager, QA
Date	(repair organization)	(authorized rep	resentative)	(title)
<u>4/22/0</u> 3 /Date	Tenasles For	set h_	NB# 8462, A,N,I NC# 107	
/Date	inspector's Signature		Commissions (NB (incl endorse	ments), jurisdiction,& no.)

	PLAN NO, 2-179 theory &m 6/9/03	8
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	·	
	CROSBY CROSBY VALVE & GAGE COMPANY	1
· •	FORM NV-1 FOR SAFETY AND SAFETY RELIEF WIVES Q.C44D	
	As Required by the Provisions of the ASME Code Rules DATA REPORT	
	Safety and Satety Relief Valves	
	1. Manufactured By Crasby Valve & Gage Company, 43 Kendrick St., Vrencham, MA 02093 Mane and Addrese	
	Nodel Ho. <u>HB-65-BP-TR</u> Order No. <u>N94275</u> Contract Date <u>4/24/79National Board No. N/A</u> General Electric Company, 175 Curtner Ave., 2. Manufactured For <u>San Jose. CA 95125</u> Order No. <u>205-A1986</u>	
	Name and Address J. Owner Washington Public Power Supply System, Richland, Washington 99352	
	Name and Address 4. Location of Plant Hanford Reservation, Richland, Washington 99352	
	<ol> <li>Location of Finnt</li></ol>	
:	Type Safety Religf Orifice Size R Pipe Size - Inlet 6 Outlet 10 Safety, Safety Religf, Pilet, Inch Inch Inch Inch	
	Power Actusted     Set Pressure (psig) 1195 575 <sup>0</sup>	
	Roted Temperature Stamped Capacity 899,185 ¢ 3 TOverpressure — Blowdown (psig) 22 to 112	
•	Hydrostatic Test (reig) lalet_2370 Outlet_1100 paig (Body Only)	
· · ·	(Applicable to Valves for Closed Systems Only) Pressure Receining Pieces	
•	Serial No. Material Specification	
	ASTY A105-71 Gr. II	
	M93407-35-0040 ASTM A105-71 Gr. 11	1
N	BonnetASHE_SALOS_Gr, II	
•	SHEKANCELEN Disc Insert	
	Rozzie R93184-33-0062 ASHE SA182 Gr. Fj.	
	Disc Holder*K55484-35-0093 *889714-34-0094 ANS 56628	
•	Spring Washers K62858-35-0040 K62856-35-0066 ASTM A105-71 Gr. 11 ASME SA105 Gr. 11	
1	Adjusting Bolt 193410-33-0065 ASHE SA193 Gr. 86	}
	Spindle Point K62873-35-0058 4N89720-34-0070 ASTH A564-71 Type 630 c. Spring K62858-35-0040 4N89722-0016 ASTH A304-66 Gr. 4161H	1
	. d. Bolting	1
1	Spindle Ball K62873-35-0058 N93213-0058 Stellite #6	1
	Thrust Bearing Adapter         N93409-32-0060         ASHE SA193 Gr. B6           Bonnet Stud         (BW5, 117) N93207-0693 thru 0704         ASHE SA193 Gr. B7	1
	Bonnet Stud Nut (J87) N93210-0913 thru 0924 ASME SA194 Gr. 2H	
	Inlet Stud (BW6) N93216-0695 thru 0706 ASTH A193-7 Gr. 87 ASTH SA193 Cr. 87	1
·	Inlet Stud Mut (BW8) N93218-0699 thru 0710 ASHE SA194 Gr. 2H	1
	Adjusting Bolt Button K63618-33-0067 N93411-33-0067 645 N LASHE SA193 Gr. B6	
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SINN 63790 Lin	- 00- 00
L.I.L	lay and
Valve originally bilt egainst Crosby Order No. <u>N103600</u> , Assembly No. <u>N56000</u> . V. modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nu Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Was Bonnet, and Spindle Assembly, and adJing an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.	ts, hers,
CERTIFICATE OF COPPLIANCE	
We certify that the statements made in this report are correct and that this value conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, <u>1971</u> Edition, Addenda <u>No Addenda</u> , Code Case No. <u>1567.5.1711</u> Class <u>1</u> (Dete)	
Date 11-5-20 Signed Croeby Value & Gaze Co. by R. G. Glawmit	
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 Boyd P. Brooks	-   .
PE StateCaliforniaReg. No13655 Stress report cartified byW.D. Greenlaw	-
PE State Massachusetts Res. No. 14784	
<sup>1</sup> Signature not required - list name only.	
CERTIFICATE OF SHOP INSPECTION	
I. the undersigned, holding a valid commission issued by the National Board of Board Pressure Vessel Inspectors and the State or Province of <u>Massachusetts</u> and amployed by <u>Pactory Mutual</u> Systems <sup>a</sup> of <u>Norwood</u> . <u>Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>11/25</u> . 9 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 cartificate, neither the Inspector nor his employer makes any varrant, expressed or implied, critering the equipment described in this Dats Report. Further- more, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Date $(125 1950)$ .	
Signed (14 > 5: 1) 7/12 Commissions MASS 1266 (Inspectral) (Nat'1, Bd., State, Prov. and No.)	
*Arkeright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.	MAB
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# ENERGY NORTHWEST

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/19/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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
822-G001D MS-RV-3D MS-RV-3D	WPPSS * Crosby Crosby	B22-G001D-P1 N63790-03-0126 N63790-03-0057 ** (N63790-00-0057) **	N/A N/A N/A	N/A N/A N/A	1983 1981 1980	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-3D. The replacement work was performed as follows: 1) Removed twelve (12) existing standard (regular) nuts for the relief valve inlet joint.

2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.

3) Removed existing relief valve Serial No N63790-03-0126 with set pressure of 1195 Psig at rated temperature of 575° F.

4) Performed VT-1 visual examination on twelve (12) new "Superbolts" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.

5) Installed replacement relief valve with Serial No N63790-03-0057 with set pressure of 1195 Psig at rated temperature of 575<sup>0</sup> F. 6) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.

7) Installed sixteen (16) new "Superbolts" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0057 was installed is Main Steam (MS) piping system B22-G001D-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement relief valve Serial No N63790-03-0057 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0057 was previously modified (upgraded) to Serial No N63790-03-0057 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)         Test Description Color Pressure: 120 Peig         Test Temperature: 199.6° F         Component Design Pressure: 120 Peig         Test Temperature: 199.6° F         Component Design Pressure: 120 Peig         Test Temperature: 199.6° F         Component Design Pressure: 120 Peig         Test Temperature: 199.6° F         Component Design Pressure: 120 Peig         Temperature: 199.6° F         Component Design Pressure: 120 Peig         Temperature: 199.6° Editor XU pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Press see 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         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Fuel of 14 (0.3         Date         OLIPICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Bo		PLAN No 2-12 ENERGY NORTHWEST People: Vision - Solutions
Test Pressure: 193.9° F         Test Pressure: 193.9° F         Temperature: 193.9° F         Temperature: 575° F         Remarks: 1) See attached NV-1 (Preditation Colspan="2">Component Data Report for replacement relief valve Serial No N83790-03-0057, 2) See attached NV-1 (Preditation Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"         Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"         Colspan="2"	F	ORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
	ests Conduct	Test Pressure: 1030 Psig Test Temperature: 199.8° F
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By	dification) Code Da t was recorded dur	ta Report for relief valve Serial No N63790-00-0057, 3) * The test pressure and the test temperature on the relief valve ing ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Press
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Represented By		CERTIFICATE OF COMPLIANCE
Prepared By       Widty       Signed By       Widty       Kuldip Singh - Program Lead Engineer (PLE)         Date       G1903       Date       G1903         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut       of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $5 - 7 - 0 = 2$ and state to the best of my knowledge and bellef, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Multiput Total       Commissions       THEM / THEM MIT MIT MIT MIT MIT MIT MIT MIT MIT MI	to the rules of Type Code Sy Certificate Of	f the ASME Code, Section XI. Imbol Stamp: Not Applicable Authorization No.: Not Applicable
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Mashington and employed by Hartford Steam Boiler Of Connecticut         of Mashington and employed by Hartford Steam Boiler Of Connecticut         of Mashington and employed by Hartford Steam Boiler Of Connecticut         of Mashington and employed by Hartford Steam Boiler Of Connecticut         of Mashington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the         period S= 7-05         to 7-1-02         and state to the best of my knowledge and bellef, the         Owner has performed examinations and taken corrective measures described in this Owner's Report         In accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or         implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal         injury or property damage or a loss of any kind arising from or connected with	-	Juldip Ling's signed By Juldip Ling 5
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>5-7-03</u> to <u>7-1-03</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements National Board, State, and Endorsements	Date	Date6 19103
Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -7-03^{\circ}$ to $7-1-03^{\circ}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Min function. Inspector's Signature Commissions $7476607748600774860000000000000000000000$	<u></u>	CERTIFICATE OF INSERVICE INSPECTION
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.          M. IM. Example:       Commissions         Inspector's Signature       Commissions	Vessel inspect of Hartford, Co period <u>5-7</u> Owner has pe	tors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut ponnecticut have inspected the components described in this Owner's Report during the 2-03 to $2-1-02$ and state to the best of my knowledge and belief, the erformed examinations and taken corrective measures described in this Owner's Report
Inspector's Signature National Board, State, and Endorsements	By signing th implied, conc Furthermore,	is certificate neither the inspector nor his employer makes any warranty, expressed or erning the examinations and corrective measures described in this Owner's Report. neither the inspector nor his employer shall be liable in any manner for any personal
Date 7-1-03	<u> 1. 111.</u>	
	Data 7-1	-02

# FORM NVR-1 REPORT OF REPAIR REPLACEMENT OF NUCLEAR PRESSURE RELIEF DEVICES PLAN No.2-1799

						1 NO.2-1117
1. Work performed by:		logies, LLC levard, Spartanbur	-	urchase Or 9301		31 WRO # 008
2. Work performed for:						6/1/03
3/4. Owner - name, add Station, North Pow		-	-	Energy	Northwest - Co	lumbia Generating
5. a: Repaired pressur		Main Steam Safety	Relief Va	alve		
b: Name of manufac			·			
c: Identifying nos.		N63790-00-0057				
HB-65-BP-	FN new s/n:	N63790-03-0057	<u>N//</u>	<u>ste</u>	<u>am 6 x</u>	<u>10 1980 1980 </u>
(type)		(mfr's S/N)	(NB	#) (sen	•	ze) (yr.built)
d: Construction Cod	e: ASME Sec. III	Div. 1 197	1	<u>N/A</u>	1567 & 1711	1
	(name/section/di		(n)	(addenda)	(Code Cases(s))	
6. ASME Code Section	XI applicable for in	service inspection:	_	1989	<u>N/A</u>	N/A
7. ASME Code Section	XI used for repairs	, replacements:		(edition) 1989	(addenda) N/A	(Code Case(s)) N/A
	•	-	_	(edition)	(addenda)	(Code Case(s))
8. Construction Code us	sed for repairs, rep	lacements:		1971	N/A	N/A
	• • •		_	(edition)	(addenda)	(Code Case(s))
9. Design responsibilitie	es: <u>N/A</u>					
10. Opening pressure: Set-pressure adjust		NWS Technolog	ies. LLC	us	ing steam	
					·	
11. Description of work	(include name and ide	ntifying number of repla	cement pai	rts): <u>See a</u>	ttachment 1.	
12. Remarks: See attac	hment 1.	<u> </u>				
	C	ERTIFICATE OF C	OMPLIA	NCE		
I, Cesar V. Sierr	a certify that	to the best of my kn	owledge	and belief	the statements	made in this
report are correct and th	ne repair, modificati	ion or replacemtn of	f the pres	ssure relief	devices descril	bed above
conforms to Section XI	of the ASME Code	and the National Bo	Dard Insp	ection Cod	e "VR" and "NF	R" rules.
National Board Certifica	te of Authorization	No. 632 to u	ise the "	/R" stamp	expires Apri	il 3, 2003.
National Board Certifica				NR stamp		19, 2003.
1 hala		<i>n</i> .		1 Lans	n —	
	Technologies, LL( Repair Organization			representative		Manager, QA Tille
Date						1 4110
		ERTIFICATE OF IN				
I, Carl R. Enos		alid commission issu	•		Board of Boile	r and Pressure
Vessel Inspectors and c	ertificate of compet	ency issued by the	jurisdicti	on of	Tennessee	and employed
by Hartford Steam Bo	iler Inspection & I	nsurance Co. of H	artford, C	T have i	nspected the re	pair, modification
or replacement describe	d in this report on	(/19/00 and	state that	at to the be	st of my knowle	edge and belief,
this repair, modification						
Code and the National E		•				
By signing this certificate	•			kes anv wa	arranty, express	sed or implied.
concerning this repair, m		•	•		-	-
nor my employer shall b			•			-
arising from or connecte		• •				
	() $()$					
<u>6/19/00</u>	1ºart R	Inor	<u>NB #</u>	8460, A, N	I. I TN# 2236	;
Date	inspector's S	ignature	Commi	ssions (NB (in	ci endorsements).	jurisdiction & no :

# FORM NVR-1 Attachment (1 of 1)

	d by: NWS Technologies, LLC Purchase Order # C31331 WRO # 00 131 Venture Boulevard, Spartanburg, SC 29301	8
2. Work performe	d for: Energy Northwest - Columbia Generating Station	
3/4. Owner - nam	e, address and identification of nuclear power plant Energy Northwest - Columbia	
	ation, North Power Plant Loop, Richland, WA 99352-0968	
Valve S/N: I	N63790-03-0057	
•••	is valve was <u>N63790-00-0057</u> The two middle digits were changed to	)
ndicate the mo	odification of the valve to a flexi-disc design.	
1. Description		
The velve w		
	as disassembled. The nozzle was removed and returned to site with the	
disc.	as disassembled. The nozzle was removed and returned to site with the	
disc. WNP-2 mac	as disassembled. The nozzle was removed and returned to site with the chined the nozzle to the new flexi-disc dimensions.	
disc. WNP-2 mac NWS machin	as disassembled. The nozzle was removed and returned to site with the chined the nozzle to the new flexi-disc dimensions. ned the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00.	
disc. WNP-2 mac	ras disassembled. The nozzle was removed and returned to site with the chined the nozzle to the new flexi-disc dimensions. ned the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00. N97499-34-0031 and Nozzle S/N: N97498-33-0074	- 0074)
disc. WNP-2 mac NWS machin Disc S/N:	ras disassembled. The nozzle was removed and returned to site with the chined the nozzle to the new flexi-disc dimensions. ned the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00. <u>N97499-34-0031</u> and Nozzle S/N: <u>N97498-33-0074</u> (pre mod s/n N93184-33-	- 0074)
disc. WNP-2 mac NWS machin Disc S/N: were installe	ras disassembled. The nozzle was removed and returned to site with the chined the nozzle to the new flexi-disc dimensions. ned the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00. <u>N97499-34-0031</u> and Nozzle S/N: <u>N97498-33-0074</u> (pre mod s/n N93184-33- ed in the valve.	- 0074)
disc. WNP-2 mac NWS machin Disc S/N: were installe	ras disassembled. The nozzle was removed and returned to site with the chined the nozzle to the new flexi-disc dimensions. ned the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00. <u>N97499-34-0031</u> and Nozzle S/N: <u>N97498-33-0074</u> (pre mod s/n N93184-33-	- 0074)
disc. WNP-2 mac NWS machin Disc S/N: were installe Both disc an	ras disassembled. The nozzle was removed and returned to site with the chined the nozzle to the new flexi-disc dimensions. ned the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00. <u>N97499-34-0031</u> and Nozzle S/N: <u>N97498-33-0074</u> (pre mod s/n N93184-33- ed in the valve.	- 0074)

 Eductor Gasket:
 MC 56230461

 Inlet Studs (4):
 H/C: <u>N</u> B7 KMY

After reassembly, the valve set-pressure was certified using steam as the lift medium. Seat tightness was acceptable post-certification.

6/19/00	NWS Technologies, LLC	Verai terral	Manager, QA
Date	(repair organization)	(authorized representative)	(title)
6/19/00	Carl R. E.	NB # 8460, A, N, I	TN# 2236
Date	Inspector's Signature	Commissions (NB (incl )	endorsements), jurisdiction,& no.)

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		5-4-55
CROSBY		E GAGE COMPANY
- particular and a second s	WRENTH	1 A M , N A 5 5
		PLAN No. 2-1799
	FOR SAFETY AND SAFETY RELIEF y the Provisions of the ASME (	
Sa	DATA REPORT fety and Safety Relief Valves	
1. Henufactured By Crosby Valve	& Gage Company, 43 Kendrick S Name and Address	t., Wrentham, MA 02093
		4/24/79 National Board No. N/A
2. Manufactured For <u>San Jose, C</u>	ctric Company, 175 Curtne A 95125 Name and Address	r Avenue., Order No. 205-AJ986
3. Owner Washington Public P		and, Washington 99352
4. Location of Plant Hanford Re-		ington 99352
5. Valve Identification <u>MPL #B22</u> .	-F013 Seriel No. <u>N63790-00-0</u>	057 Drawing No. DS-A-63790 Re
Type Safety Relief		ipe Size Inlet 6 Outlet 10
Safety, Safety Relief, Pi Power Actuated	lot. Inchas	F H-Lach an Frinch Mast Sach
6. Set Pressure (psig)	L195	5750 F
0. Jet		Rated Temperature
Stamped Capacity 899,185	<u> </u>	Blowdown (psig) 2 % to
Hudrospecta Test (sets) Inlet	97 2270 0	5 psig (Assembled V
Hydrostatic Test (psig) Inlet_		to Valves for Closed Systems Only)
Pressure Retaining Pieces		
•	Serial No.	Material Specification
Bar Stock & Forgings a. Eretanya	Identification	Including Type or Grade
Body	<u>N93183-35-0076</u>	ASTM A105-71 Gr. II ASME SA105 Gr. II
		ASTM A105-71 Gr. II
Bonnet	<u>N93407-35-0039</u>	ASME SALO5 Gr. II
b. Larxixerxxxxxxxxxxx Karright Disc Insert	N93185-34-0089	ASME SA637 Gr. 718
supportanting sist instru		
Nozzle	<u>N93184-33-0061</u>	ASME SA182 Gr. F316
Disc Holder*K55484-35-0083	<u>*N89714-34-0093</u>	AMS 5662B
•••	K62856-25-0095	ASTM A105-71 Gr. II
Spring Washers K62858-35-0039	<u>K52857-35-0060</u>	ASME SA105 Gr. II
Adjusting Bolt	<u>N93410-33-0064</u>	ASME SA193 Gr. B6 .
Spindle Point K62873-35-0057	*N89720-34-0073	ASTM A564-71 Type 630 ASME_SA564 Type 630
c. SpringK62858-35-0039	*N89722-0015	ASTM A304-66 Gr. 4161 H
d. Bolting		ZX00380090
Spindle Ball K62873-35-0057	N93213-0057	Stellite #6
Thrust Bearing Adapter	N93409-32-0059	ASME SA193 Gr. B6
	17) N93207-0681 thru 0692	ASTM A193-71 Gr. B7
	87) N93210-0901 thru 0912	
	W6) N93216-0683 thru 0694	ACTN ATOT TO CHINA
		ASTM A194-71 GT 2H
Inlet Stud Nut (B	W8) N93218-0687 thru 0698	ASME SA194 Gr. 2H
Adjusting Bolt Button K63618-33-0066	N93411-33-0066	ASME SA193 Gr. BE

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K63618-33-0066

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.

N103790-00-00-7

#### CERTIFICATE OF COMPLIANCE

We certify that the statements made in this re to the rules of construction of the ASME Code III, Div. 1, 1971 Edition, Addenda No Class 1 Date 11-5-20 Signed Crosby Valve	for Nuclear Power Plant <u>o Addenda</u> , Code Case (Date) e & Gage Co. by	Components, Section No1567 & 1711
(N Certific	cate Holder)	
Our ASME Certificate of Authorization No	1878	to use the <u>NV</u>
symbol expires September 30, 1983 (Date)		

CERTIFIC	CATION OF DESIGN		
Design information on file at Crosby V			
Stress analysis report (Class 1 only) on 4 43 Kendrick Street, Wrentham, Massachu		v Valve & Gage C	ompany
Design specifications certified by	Boyd P. Brooks		
PE State California	Reg. No.	13655	
	W.D. Greenlaw		
PE State Massachusetts	Reg. No	14784	
Laignature not required - list name only.			elimit wiell

#### 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 <u>Massachusetts</u> and employed by <u>Factory Mutual Systems</u>\* of <u>Norwood</u>, <u>Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>12-9</u>, 19<u>60</u> 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 Commissions MIASS 1266 Signed (Nat'1. Bd., State, Prov. and No.) (Inspector)

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

ZX00380091



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/19/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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
822-G001B MS-RV-5B MS-RV-5B	WPPSS * Crosby Crosby	B22-G001B-P1 N63790-00-0062 N63790-03-0060 ** (N63790-00-0060) **	N/A N/A N/A	N/A N/A N/A	1983 1980 1980	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-5B. The replacement work was performed as follows: 1) Removed twelve (12) existing standard (regular) nuts for the relief valve inlet joint.

2) Removed sixteen (16) existing standard (regular) bolts for the relief valve outlet joint.

3) Removed existing relief valve Serial No N63790-00-0062 with set pressure of 1205 Psig at rated temperature of 575° F.

4) Performed VT-1 visual examination on twelve (12) new "Superbolts" nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.

5) Installed replacement relief valve with Serial No N63790-03-0060 with set pressure of 1205 Psig at rated temperature of 575<sup>0</sup> F.
6) Installed VT-1 visually examined twelve (12) new "Superbolts" nuts for the relief valve inlet joint. Note - None of the existing standard (regular) nuts were reused.

7) Installed sixteen (16) new "Superbolts" bolts for the relief valve outlet joint. Note - None of the existing standard (regular) bolts were reused.

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 -

 Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
 The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0060 was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system applicable to the relief valve outlet side is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement relief valve Serial No N63790-03-0060 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0060 was previously modified (upgraded) to Serial No N63790-03-0060 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs.

PLAN No 2-1800 ENERGY NORTHWEST People - Vision - Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Test Temperature: 199.8° F Component Design Pressure: 1250 Psig Temperature: 575° F
9. Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0060, 2) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N63790-00-0060, 3) * The test pressure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
[]
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
Prepared By Kuldip Singh - Program Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Date 6/19/03 Date 6/19/03
<b>CERTIFICATE OF INSERVICE INSPECTION</b> I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\frac{5-7-03}{2}$ to $\frac{(c-7)(-3)^2}{2}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>MM</u> <u>Commissions</u> Inspector's Signature       Commissions         Mational Board, State, and Endorsements
Date <u>6-30-07</u>

		P	LAN NO.	2-1800
F(	ORM NVR-1 REPORT OF REPA OF NUCLEAR PRESSURE		EMENT 🖬 S <u>fulo</u>	ip Sup 13
1. Work performed by:	NWS Technologies, LLC 131 Venture Boulevard, Spartanburg,	Purchase Order # SC 29306	00313236	Rev. 2
2. Work performed for:	Energy Northwest - Columbia Generatin	ng Station		
	Iress and Identification of nuclear power ( er Plant Loop, Richland, WA 99352-0968		hwest - Columb	ia Generating
5. a: Repaired pressure b: Name of manufac c: Identifying nos.	e relief device: <u>Main Steam Safety Re</u> turer: <u>Crosby Valve &amp; Gage Co.</u>	lief Valve		
d: Construction Code	(mfr's S/N)	N/A steam (NB#) (service) N/A (addenda) (Co	<u>6 x 10</u> (size) N/A ode Cases(s))	1980 (yr.built) 1 (Code Class)
6. ASME Code Section	XI applicable for inservice inspection:	1989	<u>N/A</u>	N/A
7. ASME Code Section	XI used for repairs, replacements:	(edition) 1989 (edition)	(addenda) <u>N/A</u> (addenda)	(Code Case(s)) N/A (Code Case(s))
8. Construction Code us	sed for repairs, replacements:	1971 (edition)	N/A (addenda)	(Code Case(s))
				• • • •
9. Design responsibilitie				
10. Opening pressure: Set-pressure adjust	1205 psig ment made at: <u>NWS Technologies</u>			
10. Opening pressure: Set-pressure adjust	1205 psig ment made at: <u>NWS Technologies</u> (include name and identifying number of replacen			
<ol> <li>Opening pressure: Set-pressure adjust</li> <li>Description of work</li> <li>Remarks: See attac</li> <li>Cesar V. Sierr report are correct and th conforms to Section XI of National Board Certifica</li> </ol>	1205 psig         ment made at:       NWS Technologies         (include name and identifying number of replacent of replacent and identifying number of replacent of replacent and identify that to the best of my known and the repair, modification or replacement of the ASME Code and the National Board the of Authorization No.         632       to use to fauthorization No.         81       to use to use the fauthorization No.         81       to use the fauthorization No.	APLIANCE Viedge and belief the the pressure relief de the TVR" stamp expl the "NR" stamp expl	statements ma evices described /R" and "NR" ru ires April 3, ires April 9,	d above Iles. 2006.
<ol> <li>Opening pressure: Set-pressure adjust</li> <li>Description of work</li> <li>Remarks: See attac</li> <li>Cesar V. Sierr report are correct and th conforms to Section XI of National Board Certificat</li> <li>National Board Certificat</li> <li>22/03 NWS</li> <li>Date</li> <li>Charles F. Toege</li> <li>Vessel Inspectors and of by Hartford Steam Bo or replacement describes</li> <li>this repair, modification Code and the National B</li> </ol>	1205 psig         ment made at:       NWS Technologies         include name and identifying number of replacent         hment 1.         CERTIFICATE OF COM         a       certify that to the best of my knowne repair, modification or replacement of the ASME Code and the National Board the of Authorization No.         632       to use         te of Authorization No.       632         Technologies, LLC       Lucent         Repair Organization       Autorization No.         El Jr.       holding a valid commission issuesterificate of competency issued by the ju         ertificate of competency issued by the ju       and stor replacement has been completed in an aboard Inspection Code "VR" and "NR" rul	APLIANCE MPLIANCE Medge and belief the the pressure relief de d Inspection Code "N the "VR" stamp exp the "NB" stamp exp www. horized representative PECTION d by The National Bo risdiction of <u>North</u> ate that to the best o coordance with Sector es.	statements ma evices described /R" and "NR" ru- ires April 3, ires April 9, Man ard of Boiler an <u>Carolina</u> and ected the repair f my knowledge on XI of the of th	d above lles. 2006. 2006. Title d Pressure employed r, modification e and belief, he ASME
<ol> <li>Opening pressure: Set-pressure adjust</li> <li>Description of work</li> <li>Remarks: See attac</li> <li>Cesar V. Sierr report are correct and the conforms to Section XI of National Board Certificat</li> <li>National Board Certificat</li> <li>National Board Certificat</li> <li>National Board Certificat</li> <li>Date</li> <li>Charles F. Toeget</li> <li>Vessel Inspectors and control of the National Board Certification</li> <li>Code and the National Board Certification</li> <li>Code and the National Board Certification</li> <li>Code and the National Board Certification</li> </ol>	1205 psig         ment made at:       NWS Technologies         (include name and identifying number of replacent         hment 1.         CERTIFICATE OF COM         a       certify that to the best of my knowne repair, modification or replacement of the ASME Code and the National Board to of Authorization No.         632       to use to of Authorization No.         631       to use to of Authorization No.         81       to use to of Authorization No.         82	APLIANCE Medge and belief the the pressure relief de d Inspection Code "Ve the "VR" stamp exp the "NR" stamp exp horized representative PECTION d by The National Bo risdiction of <u>North</u> and <u>CT</u> have insp tate that to the best o coordance with Sectiones. yer makes any warrance	statements ma evices described /R" and "NR" ru ires <u>April 9,</u> ires <u>April 9,</u> <u>Man</u> ard of Boiler an <u>Carolina</u> and ected the repair f my knowledge on XI of the of the nty, expressed ore, neither the	d above lles. 2006. 2006. 2006. ager, QA Title d Pressure employed r, modification e and belief, he ASME or implied, undersigned

## FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: <u>NWS Technologies, LLC</u> Purchase Order # 00313236 Rev. 2 131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant. <u>Energy Northwest - Columbia</u> Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0060

11. Description of work:

NWS Traveler # 03-68

The valve was disassembled. The nozzle and disc were removed for NDE. Both were replaced. The old parts was packaged for return to site.

New disc: N97499-33-0026 was installed.

New nozzle: N97498-53-0167

Both disc and nozzle were polished by NWS prior to installation.

Other parts replaced during the repair include:

Disc Holder Spiral Pins (2):	MC 54407794
Eductor Gasket:	MC 56230461
Inlet Studs:	N/A

During the initial repair, accelerometer mounts were installed on the spindle and spring as directed by CGS engineering. The valve was tested to ensure mount integrity. During the jack and lap, accelerometers were installed on the mounts.

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

**NWS Technologies, LLC** Manager, QA authorized representativ (repair organization) (title) NB# 8462, A,N,I NC# 1073 Commissions (NB (incl endorsements), jurisdiction,& no.)

		SIN INDSITU	
			PLAN NO. 2-1802,
	CROSBY		E & GAGE COMPANY THAM, MASS Butonponys 6(9/03
. [	•	FOR SAFETY AND SAFETY RELL the Provisions of the ASM	•••••
	Safe	DATA REPORT ety and Safety Relief Valvo	ts
	1. Manufactured By Crosby Valve &	Gage Company, 43 Kendrick Name and Address	k St., Wrencham, MA 02093
	General Ele 2. Manufactured For San Jose, C	ctric Company, 175 Cur	ther Ave., Order No. 205-AJ986
	3. Owner_ Washington Public Po		hland, Washington 99352
	4. Location of Plant Hanford Res		shington 99352
	5. Valve Identification <u>MPL #B22-</u>	<u>F013</u> Serial No. <u>N63790-00</u>	-0060 Drawing No. <u>DS-A-63790</u> Rev. C
•	Type <u>Safety Relief</u> Safety, Safety Relief, Pil Power Actuated		Pipe Size Inlet 6 Outlet 10 Inch Inch Inch
	6. Set Pressure (psig)120	5	5750 F Rated Temperature
	Stamped Capacity 906,621		- Blowdown (psig) 2% to 11%
	Hydrostatic Test (psig) Inlet	2370 Outlet_1	975 psig (Assembled Valve) 100 psig (Body Only)
1	Pressure Retaining Pieces	(Applicab	le to Valves for Closed Systems Only)
	Bar Stock & Forgings	Serial No. Identification	Material Specification Including Type of Grade
	Body	<u>N93183-35-0079</u>	ASTM A105-71 Gr. II ASME SA105 Gr. II
	Bonnet	<u>N93407-35-0042</u>	ASTM A105-71 Gr. II ASME SA105 Gr. II
-	P . XBULKI KROKOCINKO (KI KROKOCINKO) (KI KROKOCINKO (KI KROKOCINKO) (KI KROKOCINKO) (KI KROKOCINKO) (KI KROKOCINKO) (KI KROKOCINKO) (KI KROKOCINKO) (KI KROKOCINKO (KI KROKOCINKO) (KI KROKOCINCINKO) (KI KROKOCINKO) (KI KROKOCINKOCINKO) (KI KROKOCINKO) (KI KROKOCINKO) (KI KROKOCINKO) (KI KROKOCINKO) (KI KROKOCINKO) (KI KROKOCINKOCINKO) (KI KROKOCINKO) (KI KROKOCINKOCINKOCINKO) (KI KROKOCINKOCINKOCINKOCINKOCINKOCINKOCINKOCI	•	
	Superscreek Disc Insert	<u>N93185-34-0092</u>	ASME SA637 Gr. 718
· •	Nozzle	N93184-33-0064	ASME SA182 Gr. F316
	Disc Holder K55484-45-0185	N89714-37-0224	AMS 5662B ASTM A105-71 Gr. II
[^	Spring Washers K62858-35-0042	K62856-35-0098 K62857-35-0063	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 ASME SA564 Type 630
	c. Spring K62858-35-0042	*N89722-0018	ASTM A304-66 Gr. 4161H
	d. Bolting Spindle Ball e. XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N93213-0060	<u>7 X 0 0 3 8 0 1 5 3</u> Stellite #6
	Thrust Bearing Adapter	N93409-32-0062	ASME SA193 Gr. B6
·		W5) N93207-0717 thru 0	728 ASME SA193-71 Gr. B7
[		87) N93210-0937 thru 09	948 ASME SA194 Gr. 2H
1	Inlet Stud (B	W6, N93216-0721 thru 07	730, ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
		183 N93218-0723 Enru 0	ASME SA194 Gr. 2H
		NO3611 22 0060	YEAR CITUS 6- 25

Valve original Training	
Adjusting Bolt, and Thrust Bearing Adapter Bonnet, and Spindle Assembly, and adding a	a Adjusting bolt sutton Assembly Nave
Serialization is required unless indicated Original nameplate removed and new namepla	by an asterisk. te attached.
	NI63790-00-0060
CERTIFICATE O	F COMPLIANCE
We certify that the statements made in this rep to the rules of construction of the ASME Code in III, Div. 1, 1971 Edition, Addenda No Class 1 Date //-5-90 Signed Crosby Valve	for Nuclear Power Plant Components, Section Addenda, Code Case No. <u>_1567 &amp; 1711</u> . (Date)
Date //- 5 - 5 O Signed Crosby Valve (N Certifica	
Our ASME Cartificate of Authorization No	1878 to use the NV
symbol expires <u>September 30, 1983</u> . (Date)	• 
CERTIFICATION	
Design information on file at Crosby Valve &	
Stress analysis report (Class 1 only) on file a	· ·
43 Kendrick Street, Wrentham, Massachusett	s 02093 Boyd P Brooks
Design specifications certified by	
1	Reg. No13655 W.D. Greenlaw
	Reg. No. 14784
1Signature not required - list name only.	
	and istormation unly
CERTIFICATE OF SHO	OP INSPECTION
	terre the standard Dead of D the standard
I, the undersigned, holding a valid commission : Pressure Vessel Inspectors and the State or Prov	vince of <u>Massachusetts</u>
Pressure Vessel Inspectors and the State or Prov	vince of <u>Massachusetts</u> <u>Norwood, Massachusetts</u> this Data Report on <u>12-9</u> , 19 <u>00</u> belief, the N Certificate Holder has
Pressure Vessel Inspectors and the State or Prov and employed by Factory Mutual Systems* of have inspected the pump, or valve, described in and state that to the best of my knowledge and h constructed this pump, or valve, in accordance a Components. By signing this certificate, neither the Inspect expressed or implied, concerning the equipment of more, neither the Inspector nor his employer sha personal injury or property damage or a loss of this inspection.	vince of <u>Massachusetts</u> <u>Norwood, Massachusetts</u> this Data Report on <u>12-9</u> , 1900 belief, the N Certificate Holder has with the ASME Code for Nuclear Power Plant tor nor his employer makes any warrant, . described in this Data Report. Further- all be liable in any manner for any
Pressure Vessel Inspectors and the State or Provand employed by Factory Mutual Systems* of have inspected the pump, or valve, described in and state that to the best of my knowledge and h constructed this pump, or valve, in accordance with the components. By signing this certificate, neither the Inspect expressed or implied, concerning the equipment of more, neither the Inspector nor his employer shapersonal injury or property damage or a loss of this inspection. Date <u>A 9 19 80</u> .	vince of <u>Massachusetts</u> <u>Norwood, Massachusetts</u> this Data Report on <u>12-9</u> , 1900 belief, the N Certificate Holder has with the ASME Code for Nuclear Power Plant tor nor his employer makes any warrant, . described in this Data Report. Further- all be liable in any manner for any

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ZX00380154



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/15/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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

Component	Manufacturer	Serial No	Board No	I.D.	Bulit	Repaired, Replaced Or Replacement	Stamped (Yes Or No) Code Class
RCIC(13)-4CL2	WPPSS*	RCIC(13)-4CL2-P1	N/A	N/A	1983	·····	Yes, Code Class 2
RCIC-V-25	Borg Warner	94W S0006	N/A	N/A	1994	Replaced	Yes, Code Class 2
RCIC-V-25	Flowserve	E959R-1-3	N/A	N/A	2003	Replacement	Yes, Code Class 2
RCIC-V-26	Borg Warner	26413	N/A	N/A	1978	Replaced	Yes, Code Class 2
RCIC-V-26	Flowserve	E959R-1-1	N/A	N/A	2003	Replacement	Yes, Code Class 2
RCIC-V-54	Borg Warner	26409	N/A	N/A	1978	Replaced	Yes, Code Class 2
RCIC-V-54	Flowserve	E959R-1-2	N/A	N/A	2003	Replacement	Yes, Code Class 2

7. Description Of Work Performed: Replaced existing valves RCIC-V-25, RCIC-V-26, RCIC-V-54 and piping material associated with the valves. The replacement work was performed as follows:

1) Removed existing valve RCIC-V-25, Serial No 94W S0006.

- 2) Removed existing valve RCIC-V-26, Serial No 26413.
- 3) Removed existing valve RCIC-V-54, Serial No 26409.
- 4) Installed replacement piping material such as elbows, reducing insert, tee and pipe.

5) Installed replacement valve RCIC-V-25, Serial No E959R-1-3.

6) Installed replacement valve RCIC-V-26, Serial No E959R-1-1.

7) Installed replacement valve RCIC-V-54, Serial No E959R-1-2.

8) Made required socket welds.

9) Performed visual examination on the final socket welds. Visual examination results acceptable.

10) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

#### NOTES -

2) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valves RCIC-V-25, Serial No E959R-1-3, RCIC-V-26, Serial No E959R-1-1 and RCIC-V-54, Serial No E959R-1-2 were installed is Reactor Core Isolation Cooling (RCIC) piping system RCIC(13)-4CL2-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement valves RCIC-V-25, Serial No E959R-1-3, RCIC-V-26, Serial No E959R-1-1 and RCIC-V-54, Serial No E959R-1-2 are certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda requirements.

		_ E	NERGY			PLAN No
			ORTHWE	IST		
F	ORM NIS-2 OWI	NER'S REPORT	FOR REPAIF	RS OR REPL	ACEMEI	VTS (Back)
Tests Conduc	ted: Hydrostatic Test Pressure Component D		- <u></u>	al Operating Test Temp Temperatu	erature: <sup>o</sup>	
EPN No RCIC-V-25 RCIC-V-26	attached NPV-1 Code <u>Serial No</u> E959R-1-3 E959R-1-1 E959R-1-2	Data Report for the fo	Nowing replacem	ent valves:		
		CERTIFICA	TE OF COM	PLIANCE	<u> </u>	<u> </u>
We certify th	at the statements	s made in this Ov	vner's Report	are correct.	and this re	eplacement <i>conform</i>
to the rules	of the ASME Code	e, Section XI.				
	Symbol Stamp: No					
	f Authorization N ate: Not Applicable	O.: Not Applicable				
Expiration D	ale. Not Applicable					
	1	- tai			1	0.
Prepared By	A. A.	Supp 1	Signed	ву	way	1 Supp
Prepared By	A. A.	ram Lead Engineer (F	PLE)	Kuldip S	ingh - Progra	1 Sup 6
Prepared By Date	A. A.	ram Lead Engineer (F	Signed PLE) Date	Kuldip S	ingh - Progra	1 Sup 6 am Lead Engineer (PLE
	Kuldip Singh - Prog	ram Lead Engineer (F	PLE)	Kuldip S	ingh - Progra	1 Sup 6 am Lead Engineer (PLE 51 03
	Kuldip Singh - Prog	ram Lead Engineer (F	PLE)	Kuldip S	ingh - Progra	1 Sup 6 Am Lead Engineer (PLE 5[03
	Kuldip Singh - Prog	ram Lead Engineer (F	PLE)	Kuldip S	ingh - Progra	b Sturch am Lead Engineer (PLE 5[03
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Date I, the unders Vessel Inspe- described in state to the i corrective m ASME Code, By signing t implied, con Furthermore	Kuldip Singh - Prog TIS (03 TIS (03 Rectors and the State this Owner's Rep best of my knowle beasures describe , Section XI. his certificate neil cerning the examo , neither the Insp	CERTIFICATE O valid commission ate of port during the pu- edge and belief, t ed in this Owner's ther the Inspecto inations and cor-	Date Date F INSERVICE issued by th and e eriod and e eriod the Owner has s Report in ac r nor his emp rective measu ployer shall b	Kuldip S E INSPECTI The National B Employed by have s performed cordance w ployer makes ures describ the liable in ar	ON Doard of B ve inspect to examinat ith the req any warr ed in this by manned	oiler and Pressur ted the componen and tions and taken quirements of the ranty, expressed of Owner's Report. r for any personal
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Date , the unders Vessel Inspec- described in state to the in corrective ma ASME Code, By signing to implied, con Furthermore injury or pro- <u>Not Required</u> .	Kuldip Singh - Prog Kuldip Singh - Prog TIS (03 TIS (03 A sectors and the Standard Standa	CERTIFICATE O valid commission ate of port during the pre- edge and belief, t ed in this Owner's ther the inspecto plinations and com- ector nor his em a loss of any kin	Date Date DF INSERVIC: DF INSER	Kuldip S E INSPECTI the National B employed by hav s performed cordance with cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordanc	ON loard of B ve inspect to examinat ith the red any warn ed in this by mannel ied with th	Doiler and Pressur ted the component and tions and taken quirements of the ranty, expressed of Owner's Report. r for any personal his inspection.
Date I, the unders Vessel Inspective described in state to the in corrective manual ASME Code By signing to implied, con Furthermore injury or pro-	Kuldip Singh - Prog Kuldip Singh - Prog TIS (03 TIS (03 A sectors and the State this Owner's Rep best of my knowle this certificate neil cerning the example perty damage or	CERTIFICATE O valid commission ate of port during the pre- edge and belief, t ed in this Owner's ther the Inspecto inations and cor- ector nor his em a loss of any kin	Date Date DF INSERVIC: DF INSER	Kuldip S E INSPECTI the National B employed by hav s performed cordance with cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordance cordanc	ON loard of B ve inspect to examinat ith the red any warn ed in this by mannel ied with th	oiler and Pressur ted the componen and tions and taken quirements of the ranty, expressed of Owner's Report. r for any personal

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# PLAN NO. 2-1801

## 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 \_\_\_\_

1. Manufactured and car	tified by Flow	serve Corpo	ration, 701	First Street, V	Williamsport, PA	17701	
2. Manufactured for _Er			968, Mail	Drop E55, Rid	urchaser)	52-0968	<u></u>
3. Location of installation	_ Columbia C	Generating St	ation, Nor	th Powerplant	Loop, Richland	VA 993	352
4. Model No., Series No.		r-Globe	Drawing _	iname and add 78560	dress) RevI		CRNN/A
5. ASME Code, Section		(edition)		Summer '75 (addends date)	2		N/A. (Code Case no.)
6. Pump or valve	Valve	Nominal inlet	size	1"	Outlet size		
7. Material: Body	SA105	Bonnet	N/A	(in.) Disk	CoCr/Stl 6	(in.) Bolting ,	N/A
(a) Cert. Holder's Serial No.	(b) Nat'l Board No.		(c) Body Seria No.		(d) Bonnet Serial No.		(e) Disk Serial No.
E959R-1-1	N/A		5		N/A		7
E959R-1-2	N/A		2		N/A		. 8
<u>E959R-1-3</u>			4		N/A		9
	RCIC-	<u>v-25</u> ,	SIN	<u>E95</u>	<u>9R-1-3</u>		
				4	marp &		
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·							······
							<u> </u>

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

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 693

FORM NPV-1 (Back - Pg. 2 of \_\_\_\_)

1\_

				Certificate Holder's Serial No	E959R-1-1	<u>, -1-</u> 2 & -1-3
8.	Design conditions	3600	psi	.*F or valve pressure class	1500	(1)
9.	Cold working pressure	3600				
10.	Hydrostatic test	5400 psi	Disk differential test pressure	3960		_ psi
11.	Remarks: <u>Material</u>	: Backseats	SA564-630-1100; Ht. Code:	ONU		
					·	

CERTIFICATION OF DESIGN							
Design Specification certified by Design Report certified by	Richard L. Schlosser N/A	. P.E. State . P.E. State		-			

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	CERTIFICATE OF COM	APLIANCE
		t this pump or valve conforms to the rules for construction
of the ASME Code, Section III, Divi N Cartificate of Authorization No	N1712	Expire 4/15/04
Date 4. 2803 Name	Flowserve Corporation	SignedSDWMPA
	(N Certificate Holder)	(authorized representative)

CERT	TIFICATE OF INSPECTION
the State CAPTONINGS of Pennsylvania	have inspected the pump, or valve, described in this Data Report on to the best of my knowledge and belief, the Certificate Holder has con-
component described in this Data Report. Furthermore any personal injury or property damage of a loss of a	his employer makes any warranty, expressed or implied, concerning the re, neither the inspector nor his employer shall be liable in any prime for ny kind arising from or connected with this inspection.
Charles Young	[Nat'l. Bd. (incl. endorsementa) and state or prov. and no.]
1) For manually operated valves only.	

# PLAN NO. 2-1801

#### 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 \_\_\_\_

1.	Manufactured and ce	tified by Flow	serve Corpo	ration, 701	First Street,	Williamsport, PA	A 17701	
				inar	ne and address of	IN Certificate Holds	r)	
2.	Manufactured for _E	nergy Northwe	st, P.O. Box	968, Mail	Drop E55, Ric	chland, VA 993	52-0968	
	Insme and address of Purchaser) Location of installation Columbia Generating Station, North Powerplant Loop, Richland, VA 99352							
3.	Location of installatio	n <u>Columbia (</u>	senerating 5	ation, Nor	iname and ad	Loop, Richiano	, VA 39.	<u>352</u>
			C-Globe		78560		ł	CRN N/A
4.	Model No., Series No.	., or Type		Drawing _	78500	Rev1	<u> </u>	CRNN/A
5	ASME Code, Section	III. Division 1:	1974		Summer 75	2		N/A
ψ.			(edition)		(addenda date)	(class)		(Code Cese no.)
6.	Pump or valve	Valve	Nominal inlet	size	1"	Outlet size	<u> </u>	
		SA105		N/A	(in.)	0-0-041 (	(in.)	27/4
7.	Material: Body	5A105	Bonnet	<u>N/A</u>	Disk	CoCr/Stl 6	Bolting .	<u> </u>
	(a)	(b)		(c) Destu		(d) Rosson		(e)
	Cert. Holder's	Nat'l Board		Body Serial		Bonnet Serial		Disk Serial
	Serial No.	No.		No.		No.		No.
				5				7
	E959R-1-1 E959R-1-2	<u> </u>		2		<u>N/A</u>		
	E959R-1-3	N/A				N/A		Q
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\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 % × 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88)

This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 693

FORM NPV-1 (Back - Pg. 2 of \_\_\_)

				Certificate Holder's Serial No	E959R-1-1, -1-2 &	-1-3
8.	Design conditions	3600	psi	.*F or valve pressure class	1500 (1)	
9.	Cold working pressure	3600	psi at 100°F			
10.	Hydrostatic test	5400 ps	i. Disk differential test pressure	3960	psi	
11.	Remarks: Material	: Backseats	SA564-630-1100; Ht. Code:	ONU		
				<u></u>		

	CERTIFICAT	ion of design		
Design Specification certified by Design Report certified by	Richard L. Schlosser N/A	P.E. State P.E. State	-	

	CERTIFICATE OF COM	PLIANCE
	•	this pump or valve conforms to the rules for construction
of the ASME Code, Section III, Divisio N Certificate of Authorization No	N1712	Expire 4/15/04
م ام ال	Flowserve Corporation	_ Signed

		CERTIFICATE OF INSI	PECTION	
the State SEPIGARIA	ofPennsvl	Ivania	nal Board of Boiler and Pressure Vessel Inspe nd employed by <u>One Beacon America Inst</u>	Irance
7-2-021 h 4	Boston, Mass.	that to the best of m	ted the pump, or valve, described in this Data y knowledge and belief, the Certificate Holder tion III, Division 1.	Report of has con
	-	• •	kes any warranty, expressed or implied, conc	
			pector nor his employer shall be liable in any r om or connected with this inspection.	Lanar to
Date 4 Joe 3 Sig	no May W	- Commission	Pennsylvania 2392	č
	Charles Young		[Nat'l. Bd. (incl. endorsements) and state or prov	

# PLAN NO. 2-1801

## 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 cer	tified by Flow	serve Corpo	ration, 70	1 First Street, V	Williamsport, PA	17701	
	_				me and address of	N Certificate Holds	r) 50.0070	
2.	Manufactured for	ergy Northwe	st, P.O. Box	968, Mail	Drop ESS, Ric	hland, VA 993	52-0968	
		<b>.</b>		(name	and address of P	urchaser) Y Diskiesed	374 004	150
3.	Location of installation	_Columbia G	enerating St	ation, Not	th Powerplant	Loop, Richland	, VA 99.	552
			-Globe		fname and add		_	
4.	Model No., Series No.	, or Type	-01000	Drawing .	78560	RevH	<u> </u>	CRNN/A
			1074		Summer '75	~		N/A
5.	ASME Code, Section	III, Division 1:	1974			2		
		Valve	(edition)		(addenda date)	(ciass)	1.8	(Code Case no.)
6.	Pump or valve	V divc	Nominal inlet	size	]"	Outlet size	 (in.)	
		SA105		N/A		CoCr/Stl 6	••	N/A
7.	Material: Body	5/105	Bonnet	14/1	Disk		Bolting .	IN/A
	(2)	(b)		(c)		(d)		(e)
	Cert.	Nat'i		Body	/	Bonnet		Disk
	Holder's	Board		Seria	វ	Serial		Serial
	Serial No.	No.		No.		No.		No
	E959R-1-1	_N/A		5		N/A		7
	E959R-1-2	_N/A		2		N/A		88
	E959R-1-3	N/A		4		<u>N/A</u>		9
		·····						
			<u>=v- 3</u>		+~	80 7 1		
	······		5	AS	IN EG	<u>59R-1-</u>		
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\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8% × 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)

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FORM NPV-1 (Back - Pg. 2 of \_\_\_)

8. Design conditions       3600       psi       100       *F or valve pressure class       1500       (1)         9. Cold working pressure       3600       psi at 100*F       10       *F       100       10         10. Hydrostatic test       5400       psi.       Disk differential test pressure       3960       psi         11. Bemerks:       Material: Backseats       SA564-630-1100; Ht. Code: ONU       00       00	8. Design conditions psi psi eF or valve pressure class (pressure) 9. Cold working pressure fill temperature) 9. Cold working pressure fill temperature) 10. Hydrostatic test fill test pressure					Certificate Holder's Serial No	E959R-1-1, -1-2 & -1-
9. Cold working pressure       3600       psi at 100°F         10. Hydrostatic test       5400       psi. Disk differential test pressure       3960         Material: Backseats       SA 564-630-1100: Ht Code: ONU	9. Cold working pressure <u>3600</u> psi at 100°F 10. Hydrostatic test <u>5400</u> psi. Disk differential test pressure <u>3960</u> psi Material: Backseats SA 564-630-1100; Ht Code: ONU	<b>8.</b> D	esign conditions		psi	_•F or valve pressure class	1500 (1)
10. Hydrostatic test psi. Uisk differential test pressure psi	10. Hydrostatic testpsi. Disk differential test pressurepsi Material: Backseatepsi	9. C	old working pressure	3600	• • •		
11. Bemerks: Material: Backseats SA564-630-1100; Ht. Code: ONU	11. Remarks: Material: Backseats SA564-630-1100; Ht. Code: ONU	10. H	lydrostatic test	5400 psi	. Disk differential test pressur	3960	psi
		11. R	emarks:Material	: Backseats	SA564-630-1100; Ht. Code	: ONU	

	CERTIFICATION O	FDESIGN	
Design Specification certified by _ Design Report certified by	Richard L. Schlosser N/A	P.E. StateWA	•

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	CERTIFICATE OF COMP	LIANCE
	•	his pump or valve conforms to the rules for construction
of the ASME Code, Section III, Divi N Certificate of Authorization No	N1712	Expire 4/15/04
Date 4 2803 Name	Flowserve Corporation	signed SDwypy
	(N Certificate Holder)	teothorized representatival

of       Boston, Mass.       have inspected the pump, or valve, described in this Data Report         1-2-021-b       4-21-03       and state that to the best of my knowledge and belief, the Certificate Holder has c         structed 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 component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any personal injury or property damage of loss of any kind arising from or connected with this inspection.         Date       4-26-3       Signed		CERTIFICATE OF INSPECTION
component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any personal injury or property damage of loss of any kind arising from or connected with this inspection.	the State SX Province of ofBoston, Mass. 7-2-U2L & 4-24-03, and state	vania and employed by <u>One Beacon America Insurance</u> have inspected the pump, or valve, described in this Data Report on that to the best of my knowledge and belief, the Certificate Holder has con-
	component described in this Data Report. Furthe any personal injury or property damage of loss	ermore, neither the inspector nor his employer shall be liable in any prime for any kind arising from or connected with this inspection.
Charles Young	Charles Young	

(1) For manually operated valves only.

## ENERGY NORTHWEST

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/03/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 Bulit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(2)-1 RCIC-RV-17 RCIC-RV-17	WPPSS * Lonergan Lonergan	RCIC(2)-1-P1 137676-2-1 139918-1-1	N/A N/A N/A	N/A N/A N/A	1983 1994 1994	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing relief valve RCIC-RV-17. The replacement work was performed as follows: 1) Removed existing relief valve RCIC-RV-17, Serial No 137676-2-1.

2) Installed replacement relief valve RCIC-RV-17, Serial No 139918-1-1.

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve RCIC-RV-17, Serial No 139918-1-1was installed is Reactor Core Isolation Cooling (RCIC) piping system RCIC(2)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement valve RCIC-RV-17, Serial No 139918-1-1 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements.

	PLAN No 2-
FO	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducte	d: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
	attached NV-1 Code Data Report for the replacement relief valve RCIC-RV-17, Serial No 139918-1-1. 2) See attac ir For Valve RCIC-RV-17 Serial No 139918-1-1.
	CERTIFICATE OF COMPLIANCE
to the rules of	the statements made in this Owner's Report are correct and this replacement conforms the ASME Code, Section XI. mbol Stamp: Not Applicable
Certificate Of	Authorization No.: Not Applicable
Expiration Dat Prepared By _	Kuldip Singh - Plogram Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Date	6303 Date 6303
	CERTIFICATE OF INSERVICE INSPECTION
Vessel Inspect of Hartford, Co period <u>1 -/7</u> Owner has per	aned, holding a valid commission issued by the National Board of Boiler and Pressure tors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut meeticut have inspected the components described in this Owner's Report during the 2-02 to $2-1-02$ and state to the best of my knowledge and belief, the rformed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI.
By signing this implied, conce Furthermore, i	s certificate neither the Inspector nor his employer makes any warranty, expressed or erning the examinations and corrective measures described in this Owner's Report. neither the Inspector nor his employer shall be liable in any manner for any personal erty damage or a loss of any kind arising from or connected with this inspection.
<u></u>	Spector's Signature Commissions 7486 MIZ MS National Board, State, and Endorsements
Date <u>7-1</u>	-03

	110+1750	r + 2/J
	PLAN NO. 2-12	Boz
		Q C434A
*Revised 1-15-03 Metilides KNA 1-	15-43	Sheet 1 of 2
FORM NVR-1 REPORT OF REPAIR X, MODIF OF NUCLEAR PRESSURE		-
1. Work performed by ANDERSON GREENWOOD/CROS	BY 00313101	
(name of organization) 43 Kendrick St., Wrentham, MA 02		., etc.)
(address)	Poin pic i	
2. Work performed for <u>ENERGY NORTHWEST</u>	name and address)	<u> </u>
3. Owner ENERGY NORTHWEST	Suedif	Sup 3
( <u>n</u>	093 RCIC- RV- 1 name and address) Studyp	6)3103
(address 4. Name, address and identification of nuclear power plant <u>COLU</u>	) MBIA GENERATING STATION .	
5. z. Repaired pressure relief device <u>SAFETY VALVE</u>		
b. Name of manufacturer KUNKLE INDUSTRIES, INC./ LON		
NJL40JCE21-DG6122 c. Identifying nos139918-1-1	WATER 1X1	1994
	1 Bd. No.) (service) (size) W1974 -	(year built)
(name/section/division) (edition	) (addenda) (Code Case(s))	(Code Class)
	-* 1989 JUL4*None	2
		(Code Case(s))
ASME Code Section XI used for repairs, modifications, or replaced	1ents-1974 * 1989 - W74-*None	
. Construction Code used for repairs, modifications, or replacements	1974 (addenda) (addenda) (addenda)	
·	(edition) (addenda)	(Code Case(s))
Design responsibilities D Opening pressure <u>122</u> Elowdown (if applicable) <u>N/4</u> made at ANDERSONGREENWOOD/CROSBY using	A% Set pressure and blowdown at WATER	ijustment
(location)	(test medium)	•
1. Description of work: (include name and identifying number of repla CERTIFY THE CAPACITY 31 4 GPM AND ORIFICE .437	cement parts)	
		· · · · · ·
		•
. Remarks		
	· · ·	

	•			.1/30 2.3	3/ 3
	· · · ·	•		•	
					-434A
Form NVR-1 (Back)	<b>6</b>			Sлее	t 2 of 2
is an an an ar an ar ar an ar a	Certificate Holder's Serial	I Nos <u>I39918-1-1</u>	<u> </u>	.:	
				· · · · · · · · · · · · · · · · · · ·	
	CEDMIETCA 1				
•	<u>CEAIIFICAI</u>	<u>TE OF COMPLIANC</u>	<u>E</u>		
I. RATU-PATA	certify that the statem	ents made in this report ar	e correct and the repair	ar, modification	
replacement of the pressure re					
Board Inspection Code "VR"		-	•		
National Board Certificate of		to 84 to use the "VR"	stamp expires	N 14,2004	1
National Board Certificate of .	Authorization No	68 to use the "NR"	stamp expires DE	C 11 ,2003	
_					,
Date 11 December 01,	Signed Anderson Gr	ويتباديه والمستعدين والمستعلق والمتعادي والمت	1025	QA ENG M	MGR.
	(name of repa	air organization) (author	rized representative)	(title)	
Date 15 Tanunal Sig	med a		•		
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- 590 .#		a a			
- ::0* .*	<u>CERTIFICAT</u>	i I <u>E OF INSPECTION</u>			
<b>-</b>	3 N	, a <sup>r</sup> ,		,	
	olding a valid commission	issued by The National Bo			
KENNETH HOLSTROM , bo	olding a valid commission apetency issued by the juris	issued by The National Bo sdiction of <u>MASS</u>	SACHUSETTS a	nd employed by	· •
nspectors and certificate of con #Factory Mut	olding a valid commission npetency issued by the juris ual Insurance Co.	issued by The National Bo sdiction of	SACHUSETTS a Johnston, RI	nd employed by have	
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respectors and certificate of con *Factory Mut uspected the repair, modification est of my knowledge and belies f the ASME Codeand the Nati	olding a valid commission npetency issued by the juris ual Insurance Co. On or replacement describes f, this repair, modification onal Board Inspection Code	issued by The National Bo sdiction of	SACHUSETTS     a       Johnston, RI	nd employed by have nd state that to nee with Section	the XI
*Factory Mut *Factory Mut spected the repair, modification est of my knowledge and belies if the ASME Codeand the Nation y signing this certificate, neith	olding a valid commission npetency issued by the juris ual Insurance Co. On or replacement described f, this repair, modification onal Board Inspection Code or the undersigned nor my	issued by The National Bo sdiction of <u>MASS</u> of <u>1</u> d in this report on <u>/2</u> or replacement has been of <b>VR</b> <sup>*</sup> and "NR <sup>*</sup> rules employer makes any warr	ACHUSETTS a Johnston, RI - // . <u>0.2</u> a completed in accordan	nd employed by have nd state that to nce with Section uplied, concerni	the XI ng
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nspectors and certificate of com *Factory Mut nspected the repair, modification est of my knowledge and belief f the ASME Codeand the Nation ty signing this certificate, neith the repair, modification or replate the liable in any manner for any inspection.	olding a valid commission inpetency issued by the juris ual Insurance Co. On or replacement described f, this repair, modification onal Board Inspection Code or the undersigned nor my incement described in this re- personal injury, property d *1	issued by The National Bo sdiction of <u>MASS</u> of <u></u> d in this report on <u>2</u> or replacement has been of "VR" and "NR" rules. employer makes any warr eport. Furthermore, neither lamage or loss of any kind Date <u>Sig</u> Commissions	SACHUSETTS a Johnston, RI - // , <u>0.2</u> a completed in accordan canty, expressed or in er the undersigned non arising from or conn nod NI ANI	nd employed by have nd state that to nee with Section aphed, concernu r my employer sected with this whether the sector apheness of the sector appendix of the s	the IXI ng shall
nspectors and certificate of con *Factory Mut nspected the repair, modification est of my knowledge and belies f the ASME Codeand the National ty signing this certificate, neith the repair, modification or replate e liable in any manner for any ispection.	olding a valid commission inpetency issued by the juris ual Insurance Co. On or replacement described f, this repair, modification conal Board Inspection Code er the undersigned nor my accment described in this re personal injury, property d *1	issued by The National Bo sdiction of <u>MASS</u> of <u></u> d in this report on <u>2</u> or replacement has been of "VR" and "NR" rules. employer makes any warr eport. Furthermore, neither lamage or loss of any kind Date <u>Sig</u> Commissions	SACHUSETTS a Johnston, RI - // , 0.1 a completed in accordan canty, expressed or in er the undersigned no. arising from or common noc $M$ $M$ $A$ $-/1$	nd employed by have nd state that to nee with Section aphed, concernu r my employer sected with this whether the sector apheness of the sector appendix of the s	the IXI ng shall
nspectors and certificate of com *Factory Mut nspected the repair, modification est of my knowledge and belief f the ASME Codeand the Nation ty signing this certificate, neith the repair, modification or replate the liable in any manner for any inspection.	olding a valid commission inpetency issued by the juris ual Insurance Co. On or replacement described f, this repair, modification conal Board Inspection Code er the undersigned nor my accment described in this re personal injury, property d *1	issued by The National Bo sdiction of <u>MASS</u> of <u></u> d in this report on <u>2</u> or replacement has been of "VR" and "NR" rules. employer makes any warr eport. Furthermore, neither lamage or loss of any kind Date <u>Sig</u> Commissions	SACHUSETTS a Johnston, RI - // , 0.1 a completed in accordan canty, expressed or in er the undersigned no. arising from or common noc $M$ $M$ $A$ $-/1$	nd employed by have nd state that to nee with Section aphed, concernu r my employer sected with this	the IXI ng shall

FORM NV-1 CERTIFI	CATE HOLDERS' DAT				NNO. 2-1802
Asl	Required by the Provision	ons of the ASN	IE Code, Section	n III <b>A</b> rision 1	RELIEF VALVES
	Kunkle Industriles.	Inc.			
1. Manufactured and certified	by Lonergan Valve Divi	sion, 8722 Blu frame a	Efton Road, For nd address of MV Conduc	t Wayne, IN 46	80!
2. Manufactured for Washing	gton Public Power Supp	ly System, ACC	IS PAY MD 055,	P.O. Box 968,	Richland, WA 99352-0968
3. Location of installation Was	hington Public Power S			Complex, WHSE	1, North Power Plant Loop
4. Valve <u>NJL4QJCE21-DG012</u>			nome and address) of size1"	ť	Richland, WA 99352
8					fin.)
5. ASME Code, Section III, Div	rision 1:1974		974 da datel	2	N/A
Type <u>Spring</u> upring. Pilot or power spers Identification <u>139918-1-</u> tCert. Holder's	122	N/A	700 F	183	33 <sup>0</sup> min•F
Type <u>Spring</u> (spring, pilot er power spere	ted) (set pressure, psig)	(bluwdown, psi)	trated temp.	itydra. test, psig, ini	et)
Identification	1N/A	<u>A94006</u>	2 Rev. 0	<u> </u>	1994
		(dra	wing no.1	Mat'l. 6d. no.l	(year built)
B. Control ring settings	N/A	C-RV-I	7		·
9. Pressure retaining items:	KU		in Charles	in la	
		$\mathbf{Q}$	ushp &	613103	
<b>A</b>	Serial No. or		Mat'l. Sj	pec.,	Tensile
98	Identification		Including Type	e or Grade	Strength
	11592-4 17545-13 / 841TNT /		A-216 MCB A-216 MCB / SA-	-105 /	<u> </u>
	/01093		A-479 TY 316	102 /	<u>75 ksi</u>
	15486		A-479 TY 316		75 ks1
	01572		A-479 TY 316		
	12894-9 / ATJZ /		A-351 CE81 / SA	-105 /	
XOGOGOGOGOGOGOGO(Assy)	701093		A-479 TY 316		75 ks1
SCOOK Stem	11341		A-479 TY 316		<u>75_ksi</u>
	59991		STM A-313 TY 31		
BORGX Compression_Sci			A-479 TY 316		<u>75 ks1</u>
EDGODIGOL Geg Plug Sc			<u>A-479 TY 316</u>	·······	<u>75 ksi</u>
	370890		A-479 TY 316		75 ksi
10. Relieving capacity25,95	(steam or Ruid, Bully)	@ <u>10%</u>	Overpressure as	certified by the N	ational Board 01/25/85
	•				
11. Remarks: <u>* Spring ex</u>	compt from material req	uirments of N	0-2000 but meet	s.dcslgn.requi	rements of NC=3595.
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				<u> </u>	
r					
Design Specification certified by		RTIFICATION OF	DESIGN P.E. State -	KA.	Reg. no
Design Specification contined by			P.E. State		Rog. no
	CER	TIFICATE OF CO	APLIANCE		
We cartily that the statements a	nade in this report are correct	and that this velv	conforms to the n	les for constructio	mal the ASME Code, Section
fil, Division 1.					
4 •					
NV Certificate of Authorization	NoN-2853		Expire	- November J	18,_1994
1.10 01	Kunkle Industries,		igned _ Debic	C TATE	20
Date 6-29-94 Na	Ine Loncron Valve Div	( <u>15100)</u>	Hand _ Actions	Invitanting	in soniainet
* Supplemental information in form of factorial former former for the sector of the se	of here, sharches, or drawings m	er be used provided	II) size is 5% = 11, () fad at the tag of the f	2) informations in Hair	19.3 Himple 4 on this Data Report
is Encloyed on Afth Singut, 13) 64th	1 Brandf 19 tattillaridd) Brad Jrad Andred				
(12/68)	Tive form (E00042) m	way the utstanned from	the Order Dept., ASM	L, 27 Law Dove, Nor	2300, Fairtinfel, NJ 07007-2300

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1/23/34

o1	e undersigned, ho									
of	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	dies a vali	4			F INSPECTION	Descent Marco	of 1000-0000		Province
$\mathbf{z}$	Michigan			loyed byR	<u>SBI&amp;ICo.</u>		PTESSURE VESS	el inspecto		
	29.1991		of	Hartford.					cribed in this Da ted this value is	
with	the ASME Code,	Section III,	Division	1.						
Bys				ector nor his empl the inspector nor h						
a los				ed with this inspec						ty cannye o
Dete	June 29 1997	Sinned 5	1a	April i	som	_ Commissions /	NB9486	NIA	NIGIO	
			/	(Authorized Inspecto	n 1.		(Nat'l. 8d. (in		nts) and state or prov	, and no.)
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## FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/04/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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		Yes, Code Class 3
SW(21)-2	WPPSS*	SW(21)-2-P1	N/A	N/A	1983		Yes, Code Class 3

7. Description Of Work Performed: Replaced existing piping material. The replacement work was performed as follows:

1) Removed existing piping material such as elbows, reducing inserts, coupling, flange, tee and pipe.

- 2) Installed replacement piping material such as elbows, reducing inserts, coupling, flange, tee and pipe.
- 3) Made required socket welds.
- 4) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 5) installed studs and nuts for the flanged bolted joint.

#### NOTES -

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1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The U bolts, nuts and jam nuts (1/2 nuts) for supports for the above described replacement work were installed in accordance with ASME Section XI Plan No 2-1867.

	PLAN No 2-
	ENERGY
(EN)	NORTHWEST
Peop	is·Vision·Solutions
FORM NIS-2 OWNER S REPOR	T FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic 🦳 Pneumat	tic Nominal Operating Pressure None X
Test Pressure: Psig	Test Temperature: ° F
Component Design Pressure	e: Psig Temperature: <sup>o</sup> F
Remarks: None	
CERTIFIC	CATE OF COMPLIANCE
	Owner's Report are correct and this replacement conforms
to the rules of the ASME Code, Section XI.	
Type Code Symbol Stamp: Not Applicable	
Certificate Of Authorization No.: Not Applicable Expiration Date: Not-Applicable	
Prepared By Jundan Suns	Signed By Juldup Such
Kuldip Singh - Program Lead Engineer	
Date 6403	Date 6403
CERTIFICATE	OF INSERVICE INSPECTION
I, the undersigned, holding a valid commissi	ion issued by the National Board of Boiler and Pressure
I, the undersigned, holding a valid commissi	ion issued by the National Board of Boiler and Pressure and employed by
<i>I, the undersigned, holding a valid commissi</i> Vessel inspectors and the State of	ion issued by the National Board of Boiler and Pressure and employed by have inspected the components
I, the undersigned, holding a valid commissive Vessel Inspectors and the State of	ion issued by the National Board of Boiler and Pressure and employed by have inspected the components period to and
I, the undersigned, holding a valid commissive Vessel inspectors and the State of described in this Owner's Report during the state to the best of my knowledge and belief	ion issued by the National Board of Boiler and Pressure and employed by have inspected the components period to and f, the Owner has performed examinations and taken
I, the undersigned, holding a valid commissive Vessel inspectors and the State of described in this Owner's Report during the state to the best of my knowledge and belief	ion issued by the National Board of Boiler and Pressure and employed by have inspected the components period to and
I, the undersigned, holding a valid commission Vessel Inspectors and the State of described in this Owner's Report during the state to the best of my knowledge and belief corrective measures described in this Owner ASME Code, Section XI. By signing this certificate neither the Inspec	ion issued by the National Board of Boiler and Pressure and employed by
I, the undersigned, holding a valid commissive Vessel Inspectors and the State of described in this Owner's Report during the state to the best of my knowledge and belief corrective measures described in this Owner ASME Code, Section XI. By signing this certificate neither the Inspect implied, concerning the examinations and compared to the section of t	ion issued by the National Board of Boiler and Pressure and employed by
I, the undersigned, holding a valid commissive Vessel Inspectors and the State of	ion issued by the National Board of Boiler and Pressure and employed by
I, the undersigned, holding a valid commissive Vessel Inspectors and the State of	ion issued by the National Board of Boiler and Pressure and employed by
I, the undersigned, holding a valid commissive Vessel Inspectors and the State of	ion issued by the National Board of Boiler and Pressure and employed by
I, the undersigned, holding a valid commissive Vessel inspectors and the State of described in this Owner's Report during the state to the best of my knowledge and belief corrective measures described in this Owner ASME Code, Section XI. By signing this certificate neither the Inspect implied, concerning the examinations and con- Furthermore, neither the Inspector nor his e injury or property damage or a loss of any k Not Required - Replacement 1" NPS And Smaller	ion issued by the National Board of Boiler and Pressure and employed byhave inspected the components periodtoand f, the Owner has performed examinations and taken er's Report in accordance with the requirements of the stor nor his employer makes any warranty, expressed or corrective measures described in this Owner's Report. Employer shall be liable in any manner for any personal cind arising from or connected with this inspection.
I, the undersigned, holding a valid commissive Vessel Inspectors and the State of described in this Owner's Report during the state to the best of my knowledge and belief corrective measures described in this Owner ASME Code, Section XI. By signing this certificate neither the Inspect implied, concerning the examinations and con- Furthermore, neither the Inspector nor his e injury or property damage or a loss of any k	ion issued by the National Board of Boiler and Pressure and employed by have inspected the components periodtoand t, the Owner has performed examinations and taken er's Report in accordance with the requirements of the stor nor his employer makes any warranty, expressed or corrective measures described in this Owner's Report. Employer shall be liable in any manner for any personal clind arising from or connected with this inspection. 



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/31/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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.	<b>Year</b> Bullt	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		Yes, Code Class 3

7. Description Of Work Performed: Replaced Service Water (SW) supply piping to CAC-HR-1B. The replacement work was performed as follows:

1) Removed existing piping material; such as such as elbows, couplings and pipe.

2) Installed replacement piping material such as elbows, couplings and pipe.

3) Made required socket welds.

4) Performed visual examination on the final socket welds. Visual examination results acceptable.

5) Installed shear lugs.

6) Made required welds.

7) Performed visual examination on the final welds. Visual examination results acceptable.

7) Installed new support material such as U bolts with four (4) nuts for each U bolt and jam nuts (1/2 nuts).

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

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 requirements outlined in Code Case N-416-1.

	ENERGY NORTHWEST	N No 2-
	People · Vision · Solutions	
FO	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
	d: Hydrostatic Pneumatic Nominal Operating Pressure X Other Test Pressure: 215 Psig Test Temperature: 55° F Component Design Pressure: 309 Psig Temperature: 150° F	
e <i>marks:</i> None		
		<u>.                                    </u>
	CERTIFICATE OF COMPLIANCE	
o the rules of Type Code Sy Certificate Of J	the statements made in this Owner's Report are correct and this replacement cont the ASME Code, Section XI. mbol Stamp: Not Applicable Authorization No.: Not Applicable e: Not Applicable Guiden Signed By Guiden Surgery Kuldip Singh - Program Lead Engineer (PLE) 6 2 0 3 Date 6 2 03	(PLE)
Yessel Inspec f Hartford, Con Period <u>/2 -//</u> Dwner has per n accordance By signing this mplied, conce furthermore, i	CERTIFICATE OF INSERVICE INSPECTION ned, holding a valid commission issued by the National Board of Boiler and Pres- tors and the State of Washington and employed by Hartford Steam Boiler Of Conne necticut have inspected the components described in this Owner's Report during reg2 to $7-reg2$ and state to the best of my knowledge and bell rformed examinations and taken corrective measures described in this Owner's with the requirements of the ASME Code, Section XI. as certificate neither the inspector nor his employer makes any warranty, express pring the examinations and corrective measures described in this Owner's Repor- neither the inspector nor his employer makes any warranty, express pring the examinations and corrective measures described in this Owner's Repor- neither the inspector nor his employer shall be liable in any manner for any person- pring the analysis of any kind arising from or connected with this inspection.	cticut g the lef, the Report sed or ort. onal
<u>7. ////</u> in Date _7-/	Spector's Signature Commissions 748610/7486 wZ National Board, State, and Endorsem	nents



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/02/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced Service Water (SW) supply piping to CAC-HR-1A. The replacement work was performed as follows:

1) Removed existing piping material; such as such as elbows, couplings and pipe.

2) Installed replacement piping material such as elbows, couplings and pipe.

3) Made required socket welds.

4) Performed visual examination on the final socket welds. Visual examination results acceptable.

5) Installed shear lugs.

6) Made required welds.

7) Performed visual examination on the final welds. Visual examination results acceptable.

7) installed new support material such as U bolts with four (4) nuts for each U bolt and jam nuts (1/2 nuts).

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

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 requirements outlined in Code Case N-416-1.

PLAN No 2-1805 ENERGY NORTHWEST People - Vision - Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 215 Psig 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       Much Such Signed By         Kuldip Singh Program Lead Engineer (PLE)         Date       6)203
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{12-16-02}$ to $\underline{7-1-02}^{2}$ and state to the best of my knowledge and bellef, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Month Commissions         Commissions
Date 7-14-03



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/06/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Service Water (SW) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced existing piping material. The replacement work was performed as follows:

1) Removed existing piping material such as elbow and pipe.

2) Installed replacement piping material such as elbow and pipe.

3) Made required socket welds.

4) Performed visual examination on the final socket welds. Visual examination results acceptable.

NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

Prepared By		PLAN No 2-1
Test Pressure: Psig       Nominal Operating Pressure □ None ★         Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Test Temperature: ° F         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: Nex Applicable         Certificate Of Authorization No.: Not Applicable         Prepared By       Kuidip Singh - Program Lead Engineer (PLE)         Date       6 ( ⊆ [ 0 3         Date         (CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vase Import during the period         LECTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vase Import during the period         Made period         Inspector during the period more has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         Nucleign the sectificate neither the Inspector nor his employer makes any warranty, expressed or implide, concerning the examinations and correctiv	EN	ENERGY NORTHWEST
Test Pressure: Paig       Test Temperature: °F         Component Design Pressure: Paig       Temperature: °F         Remarks: None       CERTIFICATE OF COMPLIANCE         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable       Certificate Of Authorization Not: Not Applicable         Expiration Date: Not Applicable       Signed By         Mudip Singh: Proglam Lead Engineer (PLE)       Signed By         Kuidip Singh: Proglam Lead Engineer (PLE)       Signed By         Mudip Singh: Proglam Lead Engineer (PLE)       Signed By         Kuidip Singh: Proglam Lead Engineer (PLE)       Signed By         Mudip Singh: Proglam Lead Engineer (PLE)       Signed By         Kuidip Singh: Proglam Lead Engineer (PLE)       Kuidip Singh: Proglam Lead Engineer (PLE)         Date       6       6         CERTIFICATE OF INSERVICE INSPECTION       I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of	FORM NIS-2 OWNER'S REPORT	T FOR REPAIRS OR REPLACEMENTS (Back)
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Wathorization Mo.: Not Applicable         Prepared By       Wathorization Mo.: Not Applicable         Date       6 (203)         Nutdip Singh - Program Lead Engineer (PLE)         Date       6 (203)         Date       6 (203)         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of	Test Pressure: Psig	Test Temperature: ° F
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By	Remarks: None	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By		
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Kuldip Singh - Proglam Lead Engineer (PLE) Date	CERTIFIC	CATE OF COMPLIANCE
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	to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By Kuldip Singh - Program Lead Engineer	(PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Vessel Inspectors and the State of and employed by         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		
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. <u>Not Required - Replacement 1* NPS And Smaller</u> Inspector's Signature Commissions National Board, State, and Endorsements		
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		have inspected the components
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	state to the best of my knowledge and bellef, corrective measures described in this Owner ASME Code, Section XI. By signing this certificate neither the Inspect implied, concerning the examinations and co	period and to the Owner has performed examinations and taken r's Report in accordance with the requirements of the tor nor his employer makes any warranty, expressed or prrective measures described in this Owner's Report.
Inspector's Signature National Board, State, and Endorsements		
	Not Required - Replacement 1* NPS And Smaller	Commissions



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/20/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(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 Buiit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI-VX-264	Target Rock	9	N/A	N/A	1980	Repaired	Yes, Code Class 2

7. Description Of Work Performed: Repaired valve PI-VX-264. The repair work was performed as follows:

1) Cut valve body to bonnet seal weld.

2) Prepped body and bonnet cut surfaces.

3) Reinstalled the valve bonnet.

4) Made valve body to bonnet seal weld.

5) Performed visual examination on the final seal weld. Visual examination results acceptable.

6) Performed liquid penetrant (PT) examination on the final seal weld. Liquid penetrant (PT) examination results acceptable.

#### NOTES -

1) Disc in valve PI-VX-264, Serial No 9 was replaced in accordance with ASME Section XI Plan No 2-1821.

ENERGY NORTHWEST People - Vision - Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None X Test Pressure: Psig Component Design Pressure: Psig 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       We can be added and 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         Expiration Date: Not Applicable         Multip Singn-Program Lead Engineer (PLE)         Signed By       Signed By         Kuldip Singn-Program Lead Engineer (PLE)         Date       6/20/03
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period (-111-07) to (-50-07) and state to the best of my knowledge and bellet, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         M.M



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/03/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Residual Heat Removal (RHR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2A RHR(4)-1A RHR-RV-1A RHR-RV-1A	WPPSS * WPPSS * Crosby Crosby	RHR(1)-2A-P1 RHR(4)-1A-P1 N60597-00-0019 N60597-00-0018	N/A N/A N/A N/A	N/A N/A N/A N/A	1983 1983 1990 1990	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing relief valve RHR-RV-1A. The replacement work was performed as follows: 1) Removed existing relief valve RHR-RV-1A, Serial No N60597-00-0019.

2) Installed replacement relief valve RHR-RV-1A, Serial No N60597-00-0018.

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve RHR-RV-1A, Serial No N60597-00-0018 was installed is Residual Heat Removal (RHR) piping system RHR(1)-2A-P1 (For inlet side). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system in which the replacement valve RHR-RV-1A, Serial No N60597-00-0018 was installed is Residual Heat Removal (RHR) piping system RHR(4)-1A-P1 (For outlet side). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement valve RHR-RV-1A, Serial No N60597-00-0018 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda requirements.

	ENERGY NORTHWEST People - Vision - Bolutions
	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Te	ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9. R	lemarks: See attached NV-1 Code Data Report for the replacement relief valve RHR-RV-1A, Serial No N60597-00-0018.
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
	It is undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1(-4/-22

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CROSBY	CROSEY VA	LVE & GAGE COMPA
	W R	ENTHAM THAN TO HEAD & CERTIFIC
FORM 1	IV-1 FOR SAFETY AND SAFETY	RETITEF VALVES
A8 78	DATA REPORT	SME Code Rules
<del></del>	Safety and Safety Relief V	Lives
I." Manufactured By Crosby Valve	E & Gage Co., 43 Kendri Name and Address_	ck St., Wrentham, MA 02093
Nodel No. JR-WR Order No.		re_3/7/90_National Board No
Washington Pul	blic Power Supply Syste	m 8 Order No204649
	Name and Address	
3. Owner Washington Publ:	Name and Address	
4. Location of Plant Hanford	<u> </u>	Thedip Surph 6/3/03
		0018 Drawing No DS-C-60597 Rev. 1
		280_ Pipe Size Inist_3/4_Outlet_
Safery.Safery Relief. Pilot. Por	ver Actuated	inch Inch I
6. Set Pressure (PSIC)500		480 Raied Temperature
Stamped Capacity 20 GPM WTR	70°F - 9 10 - Overpr	essure Blowdown (PSIG) _15Z of SP
	750 Com	
Hydresdatic Test (PSIG) Inter		
7. The material, design, construction at		. 17
	nd workmanship comply with ASME 74,Addends DateSur	. 1/
	74,Addends DateSur	. 17
Class 2 Edition 19 Pressure Containing of Pressure Ref	74,Addends DateSur summ Components Serial No.	mer 1975, Case No. 1567
Class <u>2</u> Edition <u>19</u> Pressure Containing of Pressure Ref 2. Castings	74,Addends DateSur	mer 1975,Case No.1567
Class <u>2</u> Edition <u>19</u> Pressure Containing or Pressure Ref 2. Castings Body	74,Addends DateSur summ Components Serial No.	mer 1975, Case No. 1567
Class <u>2</u> Edition <u>19</u> Pressure Containing of Pressure Ref 2. Casungs Body <u>KERNEK</u> Cylinder	74,Addends DateSur sining Components Serial No Identification	mer 1975, Case No. 1567 Material Specification Including Type or Grade
Class <u>2</u> Edition <u>19</u> Pressure Containing or Pressure Ref 2. Castings Body	74,Addends DateSur sining Components Serial No Identification	mer 1975, Case No. 1567 Material Specification Including Type or Grade
Class <u>2</u> Edition <u>19</u> Pressure Containing or Pressure Ref 2. Castings Body <u>NACCONE</u> Cylinder b. Bar Stock and Forgings	N91850-37-0028	mer 1975, Case No. 1567 Material Specification Including Type or Grade
Class <u>2</u> Edition 19 Pressure Containing of Pressure Ref 2. Castings Body <u>KERRER</u> Cylinder b. Bar Stock and Forgings Support Rods	Addends Date_Sur sining Components Serial No. Jdentification N91851-34-0025 N91850-37-0028 N91855-46-0092	mer 1975, Case No. 1567 Material Specification Including Type or Grade ASME SA 216 Gr. WCB
Class <u>2</u> Edition 19 Pressure Containing of Pressure Ref 2. Castings Body MERENEX Cylinder b. Bar Stock and Forgings Support Rods XMERENEX Base	74	<u>Material Specification</u> <u>Including Type or Grade</u> <u>ASME SA 216 Gr. WCB</u> <u>ASME SA 479 Type 316</u>
Class <u>2</u> Edition <u>19</u> Pressure Containing or Pressure Ref a. Casungs Body <u>KERNEK</u> Cylinder b. Bar Stock and Forgungs Support Rods <u>XERVEX</u> Base Disc	N91851-34-0025         N91855-46-0092         N92220-36-0085         N92221-34-0027	ASME SA 479 Type 316 ASME SA 193 Gr. B6 ASME SA 193 Gr. B6
Class <u>2</u> Edition 19 Pressure Containing or Pressure Res a. Castings Body KERNEK Cylinder b. Bar Stock and Forgings Support Rods XXREEN Base Disc Spring Washers	74	ASME SA 479 Type 316 ASME SA 193 Gr. B6
Class <u>2</u> Edition 19 Pressure Containing or Pressure Res a. Castings Body MEDER Cylinder b. Bar Stock and Forgings Support Rods XXEENEX Base Disc Spring Washers Adjusting Bolt	N91851-34-0025         N91855-46-0092         N92220-36-0085         N92221-34-0027	ASME SA 479 Type 316 ASME SA 193 Gr. B6 ASME SA 193 Gr. B6
Class <u>2</u> Edition 19 Pressure Containing or Pressure Res a. Castings Body MEDER Cylinder b. Bar Stock and Forgings Support Rods XXEENEX Base Disc Spring Washers Adjusting Bolt	N91851-34-0025         N91855-46-0092         N92220-36-0085         N92221-34-0027	ASME SA 479 Type 316 ASME SA 193 Gr. B6 ASME SA 193 Gr. B6

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/31/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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)-28 RHR(4)-18 RHR-RV-18 RHR-RV-18	WPPSS * WPPSS * Crosby Crosby	RHR(1)-2B-P1 RHR(4)-1B-P1 N60597-00-0003 N60597-00-0020	N/A N/A N/A N/A	NA NA NA NA	1984 1973 1979 1993	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing relief valve RHR-RV-1B. The replacement work was performed as follows: 1) Removed existing relief valve RHR-RV-1B, Serial No N60597-00-0003.

Installed replacement relief valve RHR-RV-1B, Serial No N60597-00-0020.

## NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve RHR-RV-1B, Serial No N60597-00-0020 was installed is Residual Heat Removal (RHR) piping system RHR(1)-2B-P1 (For inlet side). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system in which the replacement valve RHR-RV-1B, Serial No N60597-00-0020 was installed is Residual Heat Removal (RHR) piping system RHR(4)-1B-P1 (For outlet side). This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement valve RHR-RV-1B, Serial No N60597-00-0020 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda requirements.

PLAN No 2-1810 ENERGY NORTHWEST Paople - Vision - Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure 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 RHR-RV-1B, Serial No N60597-00-0020.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Mulcip Singh - Program Lead Engineer (PLE)         Date       \$121 03    Date
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/-19-02 to 6-90 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         M.M. T.T.M.       Commissions 14.00/74.01 MJ
Inspector's Signature National Board, State, and Endorsements Date <u>6-30-03</u>

<i>i</i>				• •						
			CROSBY V	ALVE & GE CO	MPANY					
Î	CROSB	V	-	WRENTHAM. MA						
			•		a.c. 40:-1					
			PLAN	1 No. 2-1810						
F										
	FORM N	V-I, FOR SAI	FETY AND SAL	FETY RELIEF VALV	ES fuldiponch					
	As Re	quired by the	Provisions of th	e ASME Code Rules	5133/03					
	DATA REPORT RHR-RV-IB									
		Safety c	and Safety Relie	f Valves						
		د میں دی ہوتی کہ تاکی جو رکنی کر ایک ہوتی کہ ترکی کی تکریک کی تکریک کی تکریک کی تک کر کر کر کر کر کر کر کر کر ایک کر								
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	Model No.JR-WR	_ Order NoNV3	000057Contrac	t Date 16 MAR 1993 Nation	al Board No					
2.	Manufactured tor WASHIN	IGTON PUBLIC P	OWER SUPPLY	Order No	231121 C/N 2					
E_			and Address)							
3.	OwnerWASHINGT	ON PUBLIC POW	ER SUPPLY RICHL	AND .WA 99352						
8_			(Name and Address)		~					
<b>4</b> .	Location of Plant WNP-2	OPS WHS COM	LEX.WHS #1 NOR	TH POWER PLANT LOOP.R	ICHLAND WA					
5.	Valve Identification_SPAR	E	Serial No. N605	97-00-0020 Drawing No.D	S-C-60597 REV.E					
	TypeRELIEF									
	(Safety, Safety Relief, I	Pilot, Power Actuate	Orifice Size <u>_0,28(</u> (inch							
6.	Set Pressure_ 500		1	50 F						
	Stamped Canadity 20 GPM	WTR @ 70 DEC	Rated 1	Temperature Isure — Blowdown (psig)						
	Hydrostatic Test (PSIG) Inlet	750	Complete Valve	Blowdown (psig)4	125 PSIG					
7.	The material, design, constru	uction and workman	ship comply with AS	ME Code, Section I"						
3	Class_2Edition_1974.	•								
-										
		Id	Serial No. entification	Material Specification Including Type or Grad						
a. b.	Castings		·	weeding type or erd						
	Body Bonnet		`	c==						
Ь.	Bar Stock & Forgings									
	Support Rods Nozzle				8					
	Disc		855-48-0095	ASME SB164 CL.A						
c. d	Spring Washers		220-39-0094 220-39-0095	ASME SA193 GR.BE						
	Adjusting Bolt	_N92	221-36-0031	ASME SA193 GR.BE						
c.	Spindle Spring		219-42-0038 119-0030	ASME SA193 GR. B	6 🗐					
с. d.	Spring Bolting	<u>_NA3</u>		ASTM B166	目					
0.	Other Pieces			· · · · · · · · · · · · · · · · · · ·						
	BASE		850-41-0034	ASME SA479 T316						
	CYLINDER	<u>N91</u>	851-37-0028	ASME SA216 GR. W	ICB					
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0.5.446-1 We certify that the statements made in this report are correct. by Laurence Date 17 Que Signed Crosby Valve & Gage Company 93 Manufacturer Certificate of Authorization No. 1878 expires 30 SEP 95 **CERTIFICATE OF SHOP INSPECTION** I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusatts, and employed by Arkwright Boston Manufacturers Mutual Insurance Company have inspected the equipment described in this Data Report on August 37 , 1993 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 System** オーマン 10 2.7 Date, . MA-1418 Signer Commissions (Nat'l. Bd., State, Prov. and No.) (Inspector) 10

# ENERGY NORTHWEST

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

hr. . .

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/13/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

- (b) Denois Organization D.O. Ma. Job Ma.
- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (c) Type Code Symbol Stamp: Not Applicable
- (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable
- 4. Identification Of System: Residual Heat Removal (RHR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-RV-1A Disc Disc	Crosby Crosby Crosby	N60597-00-0018 N91855-46-0092 N91855-51-0102	N/A N/A N/A	N/A N/A N/A	1990 N/A N/A	Replaced Replacement	Yes, Code Class 2 No, Code Class 2 No, Code Class 2

7. Description Of Work Performed: Replaced disc for relief valve RHR-RV-1A. The replacement work was performed as follows: 1) Removed existing disc Serial No N91855-46-0092 from the relief valve.

2) Installed replacement disc Serial No N91855-51-0102 in the relief valve.

			P	LAN No 2-
	(E <sub>N</sub> Per	ENERGY NORTHWES	5 <b>T</b>	
FO	RM NIS-2 OWNER'S REPO	RT FOR REPAIRS	S OR REPLACEMENTS (Back	c)
ests Conducte	d: Hydrostatic Pneum Test Pressure: Psig Component Design Pressu		Operating Pressure No Test Temperature: <sup>o</sup> F Temperature: <sup>o</sup> F	ne 🔀
<b>lemarks:</b> None				
	CERTIF	ICATE OF COMP	LIANCE	
to the rules of Type Code Syl Certificate Of J Expiration Dat Prepared By	the ASME Code, Section XI. mbol Stamp: Not Applicable Authorization No.: Not Applicable P: Not Applicable	e Signed E	Ruldip Singh - Program Lead Engi	)
<u> </u>	CERTIFICAT	E OF INSERVICE	INSPECTION	<u> </u>
Vessel Inspect of Hartford, Cor period <u>2-10-</u> Owner has per in accordance By signing this implied, conce Furthermore, r	ors and the State of Washing inecticut have inspected the -23 to 4-30-03 formed examinations and ta with the requirements of the certificate neither the Inspector rning the examinations and neither the Inspector nor his	oton and employed components desci- and state to to then corrective me ASME Code, Sec ector nor his emplo corrective measur employer shall be	National Board of Boiler and F by Hartford Steam Boiler Of Co ribed in this Owner's Report du the best of my knowledge and i asures described in this Owne tion XI. Dyer makes any warranty, expr es described in this Owner's R liable in any manner for any po or connected with this inspecti	nnecticut uring the belief, the er's Report ressed or Report. ersonal
	That-	Commission	ns 148410 / 7486 11 I	ns
<u>J. 1117</u> Iri: Date 6-30	spector's Signature		National Board, State, and Endo	rsements

# ENERGY NORTHWEST

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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/06/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 RHR(4)-1B RHR-RV-25B RHR-RV-25B	WPPSS * WPPSS * Lonergan Lonergan	RHR(1)-2B-P1 RHR(4)-1B-P1 509258-76-1 128261-1-1	N/A N/A N/A N/A	N/A N/A N/A N/A	1984 1983 1979 1993	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2 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 509258-76-1.

2) Performed VT-3 visual examination on the existing studs for the relief valve outlet (discharge) joint. VT-3 visual examination results acceptable.

3) Performed VT-3 visual examination on the existing nuts for the relief valve outlet (discharge) joint. VT-3 visual examination results acceptable.

4) Installed replacement relief valve RHR-RV-25B, Serial No 128261-1-1.

5) Reinstalled VT-3 visually examined existing studs for the relief valve outlet (discharge) joint

6) Reinstalled VT-3 visually examined existing nuts for the relief outlet valve (discharge) joint.

7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

# NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system applicable to the replacement relief valve RHR-RV-25B, Serial No 128261-1-1inlet side is Residual Heat Removal (RHR) piping system RHR(1)-2B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system applicable to the replacement relief valve RHR-RV-25B, Serial No 128261-1-1 outlet side is Residual Heat Removal (RHR) piping system RHR(4)-1B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement relief valve RHR-RV-25B, Serial No 128261-1-1 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements.

						and the second
	^				PL	AN NO. 2-1812
•		FORM NV-1 CERTIFICATE HOLES	DATA F	REPORT FOR PRESSUR of the ASME Code, Sect		IM RELIEF VALVES
<b>2</b>		kunkle Industri		the Asime Code, Sect		on 1 Pg. 1 of _2_
1	Į.	Manufactured and certified by Lobergan Value		, 8222 Bluffton Road E	OFT WAVE	66809 Juldy Sup
		Manufactured for Washington Public Power S		•	bland, WA 99	352
1595	3.	Location of installation Nashington Public Pou	er Suppl			North Power Plant Loop 1, Richland, WA 99352
	۱.	Valve Orifice size121	.9	Nom. inlet size1**		ntlet size
E.			tin.)	Winter 1974	(in.) 2	(m.)
, 00 100	5.	ASME Code, Section III, Division 1: 1974		ieddenda datel	(class)	NA
сл «	5.	Type Spring 488 (set pressure, said)	N/A	358 <sup>0</sup> F	732	at •F
7	۲.	Identification 128261-1-1, 128261-1-2 N	/٨	A920112 Rev. 4	N/A	1993
		(Cert. Holder's serial no.) (C	RN)	Herowing no.) Et 3-Y-H BJC NM Ey	(Nat'l. 8d. no.)	lyear built)
8	١.	Control ring settings <u>2 notches down</u>	0.1.0	RV-25B SIN	12821	61-1-1
9	<b>.</b>	Pressure retaining items:	KHK	-RV-25B SIN	1120 2.	
		Serial No. or		Mat'l.	Spec	Tensile
		Identification		Including Ty		Strength
		Body R2135-2, -3		ASHE SA-216 WCB		70KSI
		Bonnet or Yoke		ASME SA-216 WCB		70KSI
		SCOCOOPROGGAS Plus Screw 30091		ASME SA-479 TY3	6	
		11/002 0 1/				
		Nozzle <u>H6283-9, -14</u>		<u>ASPE SA-351 CF8</u>		<u>70KSI</u>
		Disk9E6313		<u>ASME_SA-479_TY31</u>	16	75KSI
		женерососсоссар <u>H7069-7, -22</u>		ASME_SA-216 WCB	<u></u>	70KSI
		EpocoaRing Pin Screw 30091		ASHE SA-479 TY31	6	75KSI
		concellug Body/Bornet 73028		ASME SA-479 TY31		75KSI
		Botting Studs8866612		ASME_SA-193_GR.		125851
		Other ItemsNut, Stud 6014728		<u>ASME_SA-194_GR.</u>	<u>ZH</u>	<u>N/A</u>
		75.1				
10.	•	Relieving capacity	0	0 Overpressure a	s certified by the	National Board 4/16/85
		£# 3 - * - 7L		() The second se		(Date)
		None 24 C . A. 194				
11.	•	Remarks:				
			_			···
						<u></u>
				· · · · · · · · · · · · · · · · · · ·		
						······································
	-					
		David M Roci	CERTIFIC	ATION OF DESIGN	L/A	260/1
Des	si	gn Specification certified by David M. Bosi		P.E. State _		Reg. no
Des	SĤ	gn Report certified byN/A		P.E. State _	_N/A	_ Reg. noN/A
				· · · · · · · · · · · · · · · · · · ·		
		C	CERTIFICAT	E OF COMPLIANCE		
We	: c	certify that the statements made in this report are con	rect and the	It this valve conforms to the ru	les for construct	ion of the ASME Code, Section
		vision 1.				
	-					
NV	C	Certificate of Authorization No. <u>N-2853</u>		Expires	November	18, 1994
		· Kunkle Indust		· · · · · · · · · · · · · · · · · · ·	1	· <b>_</b>
Dat	te	<u>8-19-93</u> Name Lonergan Valu		signed Signed	S Heller	ser
		HIV Certifica	se Holderi		lauthorized #	Gresentalive)
• Su	up	plemental information in form of lists, sketches, or drawing:	may be use	d provided {1} size is 8% × 11, {2	) information in iter	ns I through 4 on this Data Report

\*Supplemental information in form of lists, sketches, or drawings may be used provided {1} size is 8% × 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

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	FORM NV-1 (Back - Pg. 2 of Certificate Holder's Serial No. 128261-1-2
	CENTIFICATE OF INSPECTION
ĺ	1. the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Michigan</u> and employed by <u>HSBI &amp; I Co.</u>
96	of Hartford, CT have inspected the value described in this Data Report on
015	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.
BDI	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described
8	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
UZ6008[	a loss of any kind arising from or connected with this inspection
Ľ	a toss of any kind arising from or connected with this inspection Date <u>8-19-93</u> Signed <u>Line Aug</u> Commissions <u>AB 1444</u> (N(3)A), <u>M(L)</u> 402 (Augustised Properties)

.



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/31/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(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 RRC-V-20 RRC-V-20	WPPSS * Target Rock Target Rock	RRC(51)-4-P1 8 7	N/A N/A N/A	N/A N/A N/A	1983 1998 1998	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing valve RRC-V-20. The replacement work was performed as follows:

1) Removed existing valve RRC-V-20, Serial No 8.

2) Installed replacement valve RRC-V-20, Serial No 7.

3) Installed new cap screws and nuts for support associated with valve RRC-V-20.

# NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the new replacement valve RRC-V-20, Serial No 7 was installed is Reactor Recirculation Cooling (RRC) piping system RRC(51)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

2) The new replacement valve RRC-V-20, Serial No 7 is certified to comply with ASME Section III, Code Class 1, 1980 Edition with Winter 1981 Addenda requirements.

	PLAN No 2 ENERGY
(Ey)	
FORM NIS-2 OWNER'S REPORT	T FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic Pneumati Test Pressure: Psig Component Design Pressure	Test Temperature: ° F
Remarks: See attached NPV-1 Code Data Report for the	replacement valve RRC-V-20, Serial No 7.
CERTIFIC	CATE OF COMPLIANCE
We certify that the statements made in this C to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable	Owner's Report are correct and this replacement conforms
Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable	
Prepared By Julaip Suip Kuldip Singh - Program Lead Engineer	(PLE) Signed By Kuldin Sinch - Profram Lead Engineer (PLE)
Date 5/31/03	Date5 31 03
	· · ·
CERTIFICATE	OF INSERVICE INSPECTION
Vessel Inspectors and the State of	on issued by the National Board of Boiler and Pressure and employed by
described in this Owner's Benort during the	have inspected the components period to and
state to the best of my knowledge and belief, corrective measures described in this Owner ASME Code, Section XI.	l, the Owner has performed examinations and taken or's Report in accordance with the requirements of the
implied, concerning the examinations and co Furthermore, neither the inspector nor his en	tor nor his employer makes any warranty, expressed or orrective measures described in this Owner's Report. mployer shall be liable in any manner for any personal find arising from or connected with this inspection.
Not Required - Replacement 1" NPS And Smaller	Commissions     National Board, State, and Endorsements
Inspector's Signature Date	

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

# Pg. 1 of 2

1.	Manufactured a		et Rock: 1966E Broad e and address of N Cer	hollow Rd.: E. Farmingdal ificate Holder)	e. NY 11735
2.	Manufactured fo		ublic Power Supply Sy ess of Purchaser)	stem: Richland, WA	
3.	Location of insta		North Power Plant Loop name and address)	: Richland, WA	····
١.	Model No., Serie	es No., or Type9	6T-001 Drawing	<u>96T-001</u> Rev. <u>B</u>	CRN <u>N/A</u>
5.	ASME Code, Se	•		linter 1981 1 da date) (class)	None (Code Case no.)
5.	Pump or valve _	Valve Nomina	al inlet size <u>l</u> (in.)	Outlet siz	e1(in.)
	Material: Body	_SA479_316	Bonnet <u>SA479 XM</u>	-19 Disc <u>SA479 348</u>	Bolting <u>SA453 660</u>
	(a) Cert. Holder's Serial No.	(b) Nat'l Board	(c) Body Serial	(d) Bonnet Serial No:	(e) Disc Serial No.
	3enai 140. 7	No. N/A	No. 2	70	63
	8	····	7	71	64
	N/A		N/A	N/A	N/A
		<u> </u>			······································
				·	

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

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300 REPRINT 6/93

# FORM NPV-1 (BACK - Pg. 2 of \_2\_)

	Certificate Holder's Serial No. 7 & 8
8.	Design conditions <u>1550</u> psi <u>575</u> °F or valve pressure class <u>N/A</u> (1) (pressure) (temperature)
9.	Cold working pressure 3600 psi at 100 °F
10.	Hydrostatic test <u>6575</u> psi. Disc differential test pressure <u>N/A</u> psi
11.	Remarks:Indicator Tube, SA479 316, S/N 4679, 4680
	Clamp Ring, SA479 XM-19, S/N 299, 293
	Flange & Stub End SA182 F316 S/N 13 through 16
[	CERTIFICATION OF DESIGN
D	esign Specification certified by <u>Abbas A. Mostala</u> P.E. State <u>WA</u> Reg. No. <u>28777</u>
De	esign Report certified byS. KaridasP.E. StateNY Reg. No . 056047

# **CERTIFICATE OF COMPLIANCE**

We certify that the st construction of the A N Certificate of Auth	SME Code, Se	ction III, Division 1.	et and that this pump or v	valve conforms to the :	rules for
Date <u>4/14/98</u>	Name (N Certifi	Target Rock	Signed Signed R. E. Glaz (authorized rep	tier, Manager, Q.E. resentative)	

# **CERTIFICATE OF INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of <u>New York</u> and employed by <u>Commercial Union Ins.</u> of <u>Boston. MA</u> have inspected the pump, or valve, described in this Data Report on <u>M//6/95</u> 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.

N.Y. STATE COMMISSION NO. 2288 Kelan Commissionso COMMISSIONED IN PENN., OHIO & CONN. Date 7 Signed// (Nat'l. Bd. (incl. endorsements) and state or prov. and no.) (Authorized Inspector)

(1) For manually operated valves only.



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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/25/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 Bulit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(21)-2 SW-RV-001A SW-RV-001A	WPPSS * Crosby Crosby	SW(21)-2-P1 N67441-00-0001 N67441-00-0003	N/A N/A N/A	N/A N/A N/A	1983 1983 1991	Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work Performed: Replaced existing relief valve SW-RV-001A. The replacement work was performed as follows: 1) Removed existing relief valve SW-RV-001A, Serial No N67441-00-0001. 2) Installed embeddement effective SW-RV-001A. Serial No N67441-00-0001.

2) Installed replacement relief valve SW-RV-001A, Serial No N67441-00-0003.

### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve SW-RV-001A, Serial No N67441-00-0003 was installed is Service Water (SW) piping system SW(21)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement valve SW-RV-001A, Serial No N67441-00-0003 is certified to comply with ASME Section III, Code Class 3, 1974 Edition with Summer 1975 Addenda requirements.

ENERGY ENERGY NORTHWEST People - Vision - Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Component Design Pressure: Psig Test Temperature: ° F
9. Remarks: See attached NV-1 Code Data Report for the replacement relief valve SW-RV-001A, Serial No N67441-00-0003.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       6/25/03    Date
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>1/17-02</u> to <u>6-30-07</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         MM

. . . . . . . . . . . . .

WREATHAR, HASS         FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES         As required by the Provisions of the ASHE Code Rules         DATA REPORT         Safety and Safety Relief Valves         Intermed By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, MA 02093         Name and Address         Nodel No., JR-WR, Order: No. N06360	C-R-O-S-		VALVE & GAGE COMPA
As required by the Provisions of the ASUE Code Rules DATA REPORT SLICEV and SLICE Role Valves DATA REPORT L Manufactured By Crosby Valve 6 Gage Co., 43 Rendrick St., Wrentham, MA 02093 Model No. JR-MR. Order No. <u>N06360</u> Contract Date <u>317190</u> National Board No Washington Public Power Supply System Manufactured For PD Rox 965 Richland. MA 99352-9666 Order No. 204649 Name and Address Ovar Washington Public Power Supply System Rase and Address Covar Washington Public Power Supply System Rase and Address Covar Washington Public Power Supply System Rase and Address Covar Washington Public Power Supply System Rase and Address Covar Washington Public Power Supply System Rase and Address Covar Washington Public Power Actuated Rase (PSIC) 275 Rase and Address Support Rase Retaining Components Casungs Retified Prover Retaining Components Support Rods NYMEY Base			W.R.EHTHAM, M.A.3.3
Statey and Satey Relief Values         1. Manufactured By Crosby Value & Gage Co., 43 Kendrick St., Wrentham, MA 02093         Model No., JR-WR. Order: No. 806360       Contract Date 3/7/90 National Board No         Washington Public Power Supply System         2. Manufactured For PO Box 965 "Richland: NA. 99352-0968       Order No. 204649         2. Manufactured For PO Box 965 "Richland: NA. 99352-0968       Order No. 204649         3. Owner       Washington Public Power Supply System         Name and Address       Name and Address         3. Owner       Washington Public Power Supply System         Name and Address       SW - EV - DO / A         4. Location of Plant       Hanford II         Staty Staty Statey Relief       Order No. 867441-00-0003 Drawing No. DS-C-67441 Rev.         Type       Relief         Statey Satety Statey Relief. Pilot. Power Actuated       Bach         Statey Satety Satety Relief.		FORM NV-1 FOR SAFETY AND As required by the Provision	SAFETY RELIEF VALVES Q.C44 s of the ASHE Code Rules
Model NoJR-WR_Order No. N06360       Contract Date 3/7/90       National Board No         Washington Public Power Supply System       Name and Address       Order No. 204649         Name and Address       Name and Address       Order No. 204649         S. Owner Washington Public Power Supply System       Name and Address       User No. 204649         A. Location of Plant       Hanford II       SW-RV-CO/A       User No.         S. Valve Identification MPL E12BOO1       Serial No. N67441-00-0003       Drawing No. DS-C-67441 Rev.         Type       Relief       Order Actuated       Inch       Inch         S. Valve Identification MPL E12BOO1       Serial No. N67441-00-0003       Drawing No. DS-C-67441 Rev.         Type       Relief       Order Actuated       Inch       Inch         S. Set Pressure (PSIC)       275       480°       Dessign Rated Temperature         Stamped Capacity       15 GPM WTR ? 70°F       0       z Overpressure — Blowdown (PSIC)       152 of S         The material. design. construction and workmanship comply with ASME Code. Section III.       171         Class       3       Edition       1974       Addenda Date       Substerial Specification Including Type or Grade         Body       NSESI-35-0026       ASME SA 216 Gr. WCE       ASME SA 193 Gr. 86       NESE-46-0021			
Model NoJR-WR_Order No. N06360       Contract Date 3/7/90       National Board No         Washington Public Power Supply System       Name and Address       Order No. 204649         Name and Address       Name and Address       Order No. 204649         S. Owner Washington Public Power Supply System       Name and Address       User No. 204649         A. Location of Plant       Hanford II       SW-RV-CO/A       User No.         S. Valve Identification MPL E12BOO1       Serial No. N67441-00-0003       Drawing No. DS-C-67441 Rev.         Type       Relief       Order Actuated       Inch       Inch         S. Valve Identification MPL E12BOO1       Serial No. N67441-00-0003       Drawing No. DS-C-67441 Rev.         Type       Relief       Order Actuated       Inch       Inch         S. Set Pressure (PSIC)       275       480°       Dessign Rated Temperature         Stamped Capacity       15 GPM WTR ? 70°F       0       z Overpressure — Blowdown (PSIC)       152 of S         The material. design. construction and workmanship comply with ASME Code. Section III.       171         Class       3       Edition       1974       Addenda Date       Substerial Specification Including Type or Grade         Body       NSESI-35-0026       ASME SA 216 Gr. WCE       ASME SA 193 Gr. 86       NESE-46-0021	1. Manufactured By Crosby	Valve & Gage Co., 43	Kendrick St., Wrentham, MA 02093
Washington Public Power Supply System         2. Manufactured For PO Box 965 Richland: WA: 99352-0968 Order No. 204649         Name and Address         3. Owner			
Name and Address           Name and Address           3. Owner	Washir	gton Public Power Supp	ply System
Name and Address         SW-RV-DOIA         TypeRelief         Descip       Dist SWRV-DOIA         MPL E12B001       Serial No. N57441-00-0003 Drawing No. DS-C-67441 Rev.         TypeRelief       Dist Size		Name and Address	
S. Valve identification in 2 1120002       Serial No.       Serial No. <td>3. Owner Washington</td> <td>Public Power Supply Sy</td> <td>rstem</td>	3. Owner Washington	Public Power Supply Sy	rstem
S. Valve identification in 2 1125002       Serial No.       Serial No. <td>Location of Plant</td> <td>anford IT</td> <td>SW-RV-001A Swar</td>	Location of Plant	anford IT	SW-RV-001A Swar
TypeReliefNiet: 3/4 Outlet, Safety Safety Relief. Pilot. Power Actuated	MPL E	12B001 Carial No. N674	41-00-0003 Drawing No. DS-C-67441 Rev.
ABOO       275       480°         Stamped Capacity       15 GPM WTR @ 70°F       e       10 z OverpressureBlowdown (PSIG) _ 15Z of S         Hydrestatic Test (PSIG) falet       750       Complete Valve225         The material. design. construction and workmanship comply with ASME Code. Section III.       171         Class			
Set Pressure (PSIC)       275       480°         Stamped Capacity       15 GPM WTR ? 70°F       e       10 z Overpressure — Blowdown (PSIG)       15Z of S         Hydrostatic Test (PSIG) [nlet       750       Complete Valve       225         The material. design. construction and workmanship comply with ASME Code. Section III.       171         Class       3       Edition       1974         Addenda Date       SURMER 1975       , Case No       1567         Pressure Containing or Pressure Retaining Components       Material Specification       1667         a. Castings       Serial NO.       Material Specification       16010ding Type or Geade         Body         Serial NO.       Material Specification          Bast Stock and Forgings       Support Rods        ASME SA 216 Gr. WCB         b. Bar Stock and Forgings       Support Rods        ASME SA 479 Type 316         MXWENE Base       N91855-45-0029       ASME SA 193 Gr. B6         Disc       N91855-45-0029       ASME SA 193 Gr. B6         Adjusting Bolt       N9221-35-0029       ASME SA 193 Gr. B6	Type <u>Relief</u> Safety Safety Rehef.F	Pilot, Power Actuated	
Stamped Capacity 15 GPM WTR ? 70°F       0       10       z Overpressure			480 <sup>0</sup>
Hydrestatic Test (PSIG) Inlet     750     Complete Valve     225       The material. design. construction and workmanship comply with ASME Code. Section III.     171       Class     3     Edition     1974     ,Addenda Date     SUNMER 1975     ,Case No.     1567       Pressure Containing or Pressure Retaining Components     .	Stamped Courses 15 GPM	WTR @ 70°F _ 10	
The material design. construction and workmanship comply with ASME Code. Section III.       171         Class       3       Edition       1974       Addenda Date       SUMMER 1975       , Case No. 1567         Pressure Containing or Pressure Retaining Components       Serial No.       Material Specification       Including Type or Grade         Body	Stampen Caliacity	¥	w weeks and the second of a second
Class <u>3</u> Edition <u>1974</u> , Addenda Date <u>SUNMER 1975</u> , Case No. <u>1567</u> Pressure Containing or Pressure Retaining Components 2. Castings <u>Serial No.</u> 2. Castings <u>Serial No.</u> 3. Castings <u>Serial No.</u> 4. Castings <u>Serial No.</u> 3. Castings <u>Serial No.</u> 4. Castings <u>Serial No.</u> 5. Cast No. <u>1567</u> 3. Cast No. <u>1567</u> 3. Cast No. <u>1567</u> 4. Casting Specification Including Type or Grade Body <u>NEXENSAL Cylinder</u> <u>N91851-35-0026</u> <u>ASME SA 216 Gr. WCB</u> 5. Bar Stock and Forgings Support Rods <u>ASME SA 479 Type 316</u> Disc <u>N91855-46-0091</u> <u>ASME SB 164 CL. A</u> Spring Washers <u>N92221-35-0029</u> <u>ASME SA 193 Gr. B6</u> Adjusting Bolt <u>N92221-35-0029</u> <u>ASME SA 193 Gr. B6</u>			
Class       3       Edition       1974       Addenda Date       SUNMER 1975       , Case No.       1567         Pressure Containing or Pressure Retaining Components       Serial No.       Material Specification       Including Type or Grade         a. Castings       Serial No.       Material Specification       Including Type or Grade         Body	Hydrostatic Test (PSIG) Jale	750	Complete Valve 225
Material Specification Including Type or Grade         Body       Material Specification Including Type or Grade         Body       N91851-35-0026       ASME SA 216 Gr. WCB         NKöhkki Cylinder       N91851-35-0026       ASME SA 216 Gr. WCB         b. Bar Stock and Forgings       Support Rods       ASME SA 479 Type 316         NKöhkki Base       N91855-45-0091       ASME SB 164 CL. A         Disc       N91855-45-0091       ASME SA 193 Gr. B6         Adjusting Bolt       N9221-35-0029       ASME SA 193 Gr. B6			rish ASIST Code Section III
Serial No.       Material Specification         Body       Including Type or Grade         Body       N91851-35-0026         ASME SA 216 Gr. WCB         b. Bar Stock and Forgings         Support Rods         NXMMYNe Base         N91855-45-0032         ASME SA 479 Type 316         Disc         N91855-45-0031         ASME SB 164 CL. A         N2220-37-0033         ASME SA 193 Gr. B6         ASME SA 193 Gr. B6         N92221-35-0029         ASME SA 193 Gr. B6	. The material, design, constr	uction and workmanship comply w	with ASME Code. Section III. 171
a. Castings       Menufication       Including Type or Grade         Body	The material design, construction of the material design construction of the second se	uction and workmanship comply w on 1974 ,Addenda Dat	with ASME Code. Section III. 171
NBI851-35-0026       ASME SA 216 Gr. WCB         b. Bar Stock and Forgings       Support Rods         Support Rods       N91850-39-0032         NNME SA 479 Type 316         Disc       N91855-46-0091         Spring Washers       N92221-35-0029         Adjusting Bolt       N92221-35-0029         N92221-35-0029       ASME SA 193 Gr. B6         N92221-35-0029       ASME SA 193 Gr. B6	. The material design, construction of the material design construction of the second se	uction and workmanship comply w on <u>1974</u> , Addenda Dat sure Retaining Components	The SUMMER 1975 Case No. 1567.
N91851-35-0026         ASME SA 216 Gr. WCB           b. Bar Stock and Forgings         Support Rods           Support Rods	The material, design, constru- Class <u>3</u> Editi Pressure Containing or Pres	uction and workmanship comply w on <u>1974</u> , Addenda Dat sure Retaining Components Serial No.	Nith ASME Code. Section III. 171 171 171 171 171 171 171 17
b. Bar Stock and Forgings         Support Rods         NYAFYH: Base       N91850-39-0032         ASME SA 479 Type 316         Disc       N91855-46-0091         ASME SB 164 CL. A         Spring Washers       N92220-37-0089         Adjusting Bolt       N92221-35-0029         ASME SA 193 Gr. B6         N92221-35-0029       ASME SA 193 Gr. B6	The material, design, construct Class <u>3</u> Editi Pressure Containing or Pres a. Castings	uction and workmanship comply w on <u>1974</u> , Addenda Dat sure Retaining Components Serial No.	Nith ASME Code. Section III. <u>SUMMER 1975</u> , Case No. <u>1567</u> Material Specification
Support Rods         N91850-39-0032         ASME SA 479 Type 316           NXXXXXX Base         N91855-46-0091         ASME SB 164 CL. A           Disc         N91855-46-0091         ASME SB 164 CL. A           Spring Washers         N92220-37-0089         ASME SA 193 Cr. B6           Adjusting Bolt         N92221-35-0029         ASME SA 193 Cr. B6	The material, design, constru- Class <u>3</u> Editi Pressure Containing or Pres a. Castings Body	uction and workmanship comply w on 1974,Addenda Dat sure Retaining Components Serial No. identification	Nith ASME Code. Section III. <u>SUMMER 1975</u> , Case No. 1567 Material Specification Including Type or Grade
NY/WE Base         N91850-39-0032         ASME SA 479 Type 316           Dise         N91855-46-0091         ASME SB 164 CL. A           Spring Washers         N92220-37-0089         ASME SA 193 Gr. B6           Adjusting Bolt         N92221-35-0029         ASME SA 193 Gr. B6	The material design constru- Class <u>3</u> Editi Pressure Containing or Pres a. Castings Body XMGHX& Cylinder	uction and workmanship comply w on 1974,Addenda Dat sure Retaining Components Serial No. identification	Nith ASME Code. Section III. 171 SUMMER 1975 , Case No. 1567 Material Specification Including Type or Grade
Spring Washers         N9220-37-0089         ASME SA 193 Gr. B6           Adjusting Bolt         N92221-35-0029         ASME SA 193 Gr. B6	The material design, constru- Class <u>3</u> Editi Pressure Containing or Pres a. Castings Body XXXMAX Cylinder b. Bar Stock and Forgings	uction and workmanship comply w on 1974,Addenda Dat sure Retaining Components Serial No. identification	Nith ASME Code. Section III. 171 SUMMER 1975 , Case No. 1567 Material Specification Including Type or Grade
Adjusting Bolt N92221-35-0029 ASME SA 193 Gr. B6	The material, design, construct Class <u>3</u> Editi Pressure Containing or Press a. Castings Body XEGENAL Cylinder b. Bar Stock and Forgings Support Rods	uction and workmanship comply w on <u>1974</u> , Addenda Dat sure Retaining Components Serial No. Identification <u>N91851-35-0026</u>	SUMMER 1975
Adjusting Bon	The material. design. constru- Class <u>3</u> Editi Pressure Containing or Press a. Castings Body XEGENE Cylinder b. Bar Stock and Forgings Support Rods XEGENE Base	nction and workmanship comply w on <u>1974</u> , Addenda Dat sure Retaining Components Sertal No. Identification <u>N91851-35-0026</u> <u>N91855-46-0091</u>	ASME SA 216 Gr. WCB
Spindle K51719-40-0035 N92219-40-0035 ASME SA 193 Gr. B6	The material. design. constru- Class <u>3</u> Editi Pressure Containing or Pres a. Castings Body XECHARGE Cylinder b. Bar Stock and Forgings Support Rods XECHARGE Base Disc	nction and workmanship comply w on <u>1974</u> , Addenda Dat sure Retaining Components Sertal No. Identification <u>N91851-35-0026</u> <u>N91855-46-0091</u>	with ASME Code. Section III.       171         :eSUMMER 1975, Case No.       1567         Material Specification       Including Type or Grade        ASME SA 216 Gr. WCB      ASME SA 479 Type 316        ASME SB 164 CL. A      ASME SB 164 CL. A
	. The material design, constru- Class <u>3</u> Editi Pressure Containing or Press a. Castings Body XNAMAX Cylinder b. Bar Stock and Forgings Support Rods XNAMAY Base Disc Spring Washers	N91855-46-0091 N91855-46-0091 N92220-37-0088	with ASME Code. Section III.       171         SUMMER 1975       , Case No.         Material Specification Including Type or Grade         ASME SA 216 Gr. WCB         ASME SA 479 Type 316         ASME SB 164 CL. A         ASME SA 193 Gr. B6
	. The material design constru- Class <u>3</u> Editi Pressure Containing or Pres a. Castings Body XNGEX& Cylinder b. Bar Stock and Forgings Support Rods XNGEX Base Disc Spring Washers Adjusting Bolt	N91855-45-0091 N92221-35-0029	with ASME Code. Section III.       171         SUMMER 1975       , Case No.         Material Specification Including Type or Grade         ASME SA 216 Gr. WCB         ASME SA 479 Type 316         ASME SB 164 CL. A         ASME SA 193 Gr. B6

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		Serial No. or	
		Identification	Including Type or Grade
c. Sp	ring	NX4691-0005	ASTM B 166
d. Bi	olting		
. Ot	her Parts such as Pilot Compon	icat3	
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- <u></u>			
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-	·····		
	stify that the statements made is	med Crosby Valve & Gage C	0. By Lauren Shine
Date		med Crosby Valve & Gage C Manufacturer	
Date	an_15_19_9/Sig	med Crosby Valve & Gage C Manufacturer	
Date	an_15_19_9/Sig	CERTIFICATE OF SHOP INSPECTIO	ber 30, 1992
Date	I. the undersigned. holdi Pressure Vessel Inspector Arkurright_futu	CERTIFICATE OF SHOP INSPECTION and the State of Province of Massial Insurance Company	DN National Board of Boiler and and employed by
Date	I. the undersigned. holdi Pressure Vessel Inspector Arkurfight Mutu inspected the equipment d state that to the best of m	CERTIFICATE OF SHOP INSPECTION and the State of Province of Massian CERTIFICATE OF SHOP INSPECTION and the State of Province of Massian al Insurance Company described in this Data Report on y knowledge and belief, the Manufact	DN National Board of Boiler and and employed by <u>Additional Board of Boiler and</u> have <u>Additional Board of Boiler and</u> have
Date	I. the undersigned. holdi Pressure Vessel Inspector <u>Arkuright Mutu</u> inspected the equipment di state that to the best of m ment in accordance with th By signing this certificat pressed or implied, concer the inspector nor his empli	CERTIFICATE OF SHOP INSPECTION and the State of Province of Massial Insurance Company described in this Data Report on	ON National Board of Boiler and and employed by <u>have</u> <u>16</u> <u>1976</u> and turer has constructed this equip- ection [1]. Hoyer makes any warranty, es- Data Report. Furthermore. neither any personal injury or property
Date	I. the undersigned. holdi Pressure Vessel Inspector Arkurfight Mutu inspected the equipment di state that to the best of m ment in accordance with th "By signing this certificat pressed or implied, concer the inspector nor his empli damage or a loss of any ki	CERTIFICATE OF SHOP INSPECTION ing a valid commission issued by the rs and the State or Province of Massial Insurance Company described in this Data Report on be applicable Subsections of ASME S the applicable Subsections of ASME S the neither the Inspector nor his empliming the equipment described in this over shall be hable in any manner (or ind arising from or connected with this 	ON National Board of Boiler and 
Date	I. the undersigned. holdi Pressure Vessel Inspector Arkurfight Mutu inspected the equipment di state that to the best of m ment in accordance with th "By signing this certificat pressed or implied, concer the inspector nor his empli damage or a loss of any ki	CERTIFICATE OF SHOP INSPECTION Annulacturer 378 expires Septeministical issued by the rs and the State or Province of Mass all Insurance Company escribed in this Data Report on _/- by knowledge and belief, the Manufact the applicable Subsections of ASMES ité, neither the Inspector nor his empliming the equipment described in this over shall be liable in any manner for ind arising from or connected with this 19 <u>S</u> Factory MANUELES	ON National Board of Boiler and 

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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/25/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No .: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(22)-2 SW-RV-001B SW-RV-001B	WPPSS * Crosby Crosby	SW (22)-2-P1 N67441-00-0002 N67441-00-0004	N/A N/A N/A	N/A N/A N/A	1983 1983 1991	Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 3

7. Description Of Work Performed: Replaced existing relief valve SW-RV-001B. The replacement work was performed as follows: 1) Removed existing relief valve SW-RV-001B, Serial No N67441-00-0002.

2) Installed replacement relief valve SW-RV-001B, Serial No N67441-00-0004.

# NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve SW-RV-001B, Serial No N67441-00-0004 was installed is Service Water (SW) piping system SW(22)-2-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement valve SW-RV-001B, Serial No N67441-00-0004 is certified to comply with ASME Section III, Code Class 3, 1974 Edition with Summer 1975 Addenda requirements.

PLAN No 2-1815 ENERGY NORTHWEST People · Vision · Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
B Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure 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 SW-RV-001B, Serial No N67441-00-0004.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By
Date 6/24/03 Date 6/23/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\frac{1/-19-02}{0}$ to $\frac{7-1-02}{0}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 74/86 W/74/86 N I ms National Board, State, and Endorsements
Date 7-1-03

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		PLAN No. 2-1815
C.R-0-S-8-1		LVE & GAGE COMPA
FORM	NV-1 FOR SAFETY AND SAFET squired by the Provisions of the	TY RELIEF VALVES Q.C44C ASME Code Rules
:	DATA REPORT Safety and Safety Relief	
1. Happfactured By Crosby Valve	E & Gage Co., 43 Kendi	ick St., Wrentham, MA 02093
Model NoJR-WR Order No_B Washington 2 Manufactured For PO Box 968	Name and Address 114550 Contract D Public Power Supply S Richland, WA 99352-	ate <u>11/20/90</u> National Board No ystem 0968 Order No. <u>213219</u>
3. OwnerWashington Publ	Name and Address	
3. Owner washington rubi	Name and Address	44 
4. Location of Plant Hanfor	d 2	
5. Valve identification E12B001	Serial No.N67441-00-	0004 Drawing No. DS-C-67441 Rev.
Type Relief	Orifice Size	0.280 Pipe Size Inlet 3/4 Outlet_ Inch Inch Inch
	••••••	inch inch inch 480 <sup>0</sup>
6. Set Pressure (PSIG)		Design Rated Temperature
Stamped Capacity 15 GPM WTR	@ 70°F e 10 = Over	ressure Blowdown (PSIG)152 of S
Hydrosiane Test (PSIG) Inlet	750 Cor	aplete Valve 225
7. The material, design, construction an	d workmanship comply with ASk	E Code. Section III.
Class 3 Edition 1974	4,Addenda DateSu	mmer_1975,Case No
Pressure Containing or Pressure Rel	Lining Components	
a. Castings	Serial No. Identification	Material Specification Including Type or Grade
Body		
EXENX Cylinder	<u>N91851-36-0027</u>	ASME SA 216 Gr. WCB
b. Bar Stock and Forgings		
Support Rods		
Support Rods XXXXXK Base	N91850-40-0033	ASME SA 479 Type 316
	N91855-47-0093	ASHE SB 164 C1. A
XXXXX Base	N91855-47-0093 N92220-38-0090 N92220-38-0092	ASME SB 164 C1. A ASME SA 193 Gr. 86
XXXXX Base Disc	N91855-47-0093 N92220-38-0090 N92220-38-0092 N92221-35-0030	ASME SB 164 C1. A ASME SA 193 Gr. 86 ASME SA 193 Gr. 86
XXXXXK Base Disc Spring Washers	N91855-47-0093 N92220-38-0090 N92220-38-0092	ASME SE 164 C1. A ASME SA 193 Gr. B6
XXXXIK Base Disc Spring Washers Adjusting Bolt	N91855-47-0093 N92220-38-0090 N92220-38-0092 N92221-35-0030 N92219-41-0036	ASME SE 164 C1. A ASME SA 193 Gr. 86 ASME SA 193 Gr. 86 ASME SA 193 Gr. 86
XXXXIK Base Disc Spring Washers Adjusting Bolt	N91855-47-0093 N92220-38-0090 N92220-38-0092 N92221-35-0030 N92219-41-0036	ASME SB 164 C1. A ASME SA 193 Cr. 86 ASME SA 193 Gr. 86

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and party

GAGE COMPANY	CROSBY VALVE &
	Serial No. or
e. Spring.	Identification Including Type or Grade
d. Bolting	
e. Other Parts such as Pilot Component	······
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We certify that the statements made in th	ats report are correct.
We certify that the statements made in th	
	Also report are correct. <u>Crosby Valve &amp; Gage Co.</u> <u>Manufacturer</u> <u>Manufacturer</u>
Date March 27, 19 _9/ Signed	Crosby Valve & Gage Co. By Summer fine
	Crosby Valve & Gage Co. By Summer fine
Date March 27, 19 _9/ Signed	Crosby Valve & Gage Co. By Summer fine
Date March 22, 19 91 Signed Certificate of Authorization No187	<u>Crosby Valve &amp; Gage Co.</u> <u>Manufactures</u> <u>8</u> exputes <u>September 30, 1992</u>
Date Mars 22, 19 91 Signed Certificate of Authorization No. 1875 CER	Crosby Valve & Gage Co. Nanufacturer B exputs September 30, 1992 CTIFICATE OF SHOP INSPECTION A Valid commission usaged by the Valueral Brand of Bouler and
Date March 22, 19 91 Signed Certificate of Authorization No. 1875 GER I. the undersigned, holding a Pressure Vessel (nspectors a <u>Arburtight Mutual</u>	Crosby Valve & Gage Co. By Zurner fine Manufacturer B expires September 30, 1992 CTIFICATE OF SHOP INSPECTION a valid commission issued by the National Board of Boiler and ind the State or Province of Mass and employed by Insurance Company have
Date March 22, 19 91 Signed Certificate of Authorization No. 1874 I. the undersigned, holding a Pressure Vessel inspectors a <u>Arkarright Mutual</u> inspected the equipment desci- state that to the best of my kn	Crosby Valve & Gage Co. By Annuelle for the second state of Province of Mass. and employed by Insurance Company and employed by Insurance Company bave state of Province of Mass. and employed by Insurance Company bave state of the second state of
Date March 22, 19 91 Signed Certificate of Authorization No. 1875 I. the undersigned, holding a Pressure Vessel (inspectors a <u>Arburright Mutual</u> inspected the equipment desci- state that to the best of my kn ment in accordance with the a "By signing this certificate, a	A Crosby Valve & Gage Co. By Connect of Manufacturer Manufacturer B expires September 30, 1992 CTIFICATE OF SHOP INSPECTION a valid commission issued by the National Board of Boiler and and the State or Province of Mass. and employed by Insufance Company have mibed in this Data Report on March 22 19 % and nowledge and belief, the Manufacturer has constructed this equip- topplicable Subsections of ASME Section III. Resther the Inspector nor his employer makes any varianty exp
Date March 22, 19 91 Signed Certificate of Authorization No. 1875 I. the undersigned, holding a Pressure Vessel inspectors a <u>Arburtight Mutual</u> inspected the equipment desci- state that to the best of my kn ment in accordance with the a By signing this certificate, a pressed or implied, concerning the inspector nor his employed	A CTOSBY Valve & Gage Co. By Connect of Manufacturer Manufacturer B expires September 30, 1992 CTIFICATE OF SHOP INSPECTION a valid commission issued by the National Board of Boiler and and the State or Province of Mass. and employed by Insufance Company have where the first of the Manufacturer has constructed this equip- toplicable Subsections of ASME Section III. neither the Inspector nor his employer makes any varianty. ea- g the equipment described in this Data Report. Furthermore, neither r shall be liable in any manner for any personal in ure or provence of the subsection of the sub
Date March 22, 19 91 Signed Certificate of Authorization No. 1873 CER I. the undersigned, holding a Pressure Vessel inspectors a <u>Arburright Mutual</u> inspected the equipment desci- state that to the best of my kr ment in accordance with the a "By signing this certificate, a pressed or implied, concerning the inspector nor his employed damage or a loss of any kind a	A Crosby Valve & Gage Co. By Counserver free for the inspector nor his employer makes any varianty, ez- g the equipment described in this Data Report. Furthermore, neither r shall be liable in any manner for any personal injury or property arising from or connected with this inspection.
Date March 22, 19 91 Signed Certificate of Authorization No. 1874 CER I. the undersigned, holding a Pressure Vessel inspectors a Arkaright Mutual inspected the equipment desci- state that to the best of my kin ment is accordance with the a By signing this certificate. I pressed or implied, concerning the inspector nor his employed damage or a loss of any kind a	A Crosby Valve & Gage Co. By Annual Manufacturer Manufacturer <u>B</u> expires September 30, 1992 CTIFICATE OF SHOP INSPECTION a valid commission issued by the National Board of Boiler and ind the State or Province of <u>Mass</u> and employed by <u>Insurance Company</u> bave inded in this Data Report on <u>Masc 5 22</u> 19 <u>19</u> and nowledge and belief, the Manufacturer has constructed this equip- toplicable Subsections of ASME Section III. neither the Inspector nor his employer makes any varianty, es- g the equipment described in this Data Report. Furthermore, neither r shall be liable in any manner for any personal injury or property arising from or connected with this inspection. . 19 <u>91</u> Factory Mutual System <u>MA-1919</u>
Date March 22, 19 91 Signed Certificate of Authorization No. 1873 CER I. the undersigned, holding a Pressure Vessel inspectors a <u>Arburright Mutual</u> inspected the equipment desci- state that to the best of my kr ment in accordance with the a "By signing this certificate, a pressed or implied, concerning the inspector nor his employed damage or a loss of any kind a	A Crosby Valve & Gage Co. By Counserver free for the inspector nor his employer makes any warranty, ez- g the equipment described in this Data Report. Furthermore, neither r shall be liable in any manner for any personal injury or property arising from or connected with this inspection.
Date March 22, 19 91 Signed Certificate of Authorization No. 1874 I. the undersigned, holding a Pressure Vessel Inspectors a <u>Arkaright Mutual</u> inspected the equipment desci- state that to the best of my kin- ment in accordance with the a By signing this certificate. I pressed or implied, concerning the inspector nor his employed damage or a loss of any kind a Date March 22 Mutual	A Crosby Valve & Gage Co. By Annual Manufacturer Manufacturer 8 expires September 30, 1992 ATIFICATE OF SHOP INSPECTION a valid commission issued by the National Board of Boiler and and the State or Province of Magg. and employed by Insurance Company bave tribed in this Data Report on March 20 19 % and moviedge and belief. the Manufacturer has constructed this equip- toplicable Subsections of ASME Section III. neither the Inspector nor his employer makes any varianty. ex- g the equipment described in this Data Report. Furthermore. neither r shall be liable in any manner for any personal injury or property arising from or connected with this inspection. 19 91 Factory Mutual System MA-1418
Date March 22, 19 91 Signed Certificate of Authorization No. 1874 I. the undersigned, holding a Pressure Vessel Inspectors a <u>Arkaright Mutual</u> inspected the equipment desci- state that to the best of my kin- ment in accordance with the a By signing this certificate. I pressed or implied, concerning the inspector nor his employed damage or a loss of any kind a Date March 22 Mutual	A <u>Crosby Valve &amp; Gage Co.</u> <u>Nanufacturer</u> <u>B</u> expires <u>September 30, 1992</u> <u>Crosby Valve &amp; September 30, 1992</u> <u>Company</u> <u>Company</u> <u>Commission</u> issued by the National Board of Boiler and <u>Company</u> <u>Commission</u> issued by the National Board of Boiler and <u>Commission</u> issued by the National Board of Boiler and <u>Commission</u> issued by the National Board of Boiler and <u>Commission</u> <u>Company</u> <u>Commission</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u> <u>Company</u>

# ENERGY NORTHWEST

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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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 Bulit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CIA-V-52A	Borg Warner	25910	N/A	N/A	1977	Repaired	Yes, Code Class :

7. Description Of Work Performed: Repaired valve CIA-V-52A. The repair work was performed as follows:

1) Cut valve body to bonnet seal weld.

2) Prepped body and bonnet cut surfaces.

3) Reinstalled the valve bonnet.

4) Made valve body to bonnet seal weld.

5) Performed visual examination on the final seal weld. Visual examination results acceptable.

6) Performed liquid penetrant (PT) examination on the final seal weld. Liquid penetrant (PT) examination results acceptable.

Date: 06/06/03 Sheet: 1 Of 1 Unit: Not Applicable

PLAN No 2-18
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None X Test Pressure: Psig 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 Juldip Suph signed By Undip Quich
Kuldip Singh - Program Lead Engineer (PLE)     Kuldip Singh - Program Lead Engineer (PLE)       Date     6     6     03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $(1-15-c2)$ to $(x/3c/27)$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal
injury or property damage or a loss of any kind arising from or connected with this inspection.
Image: Commissions     Physical (17416 tr. I fr)       Inspector's Signature     Commissions       Date     (-30-03)
Date 6-30-03



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/04/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(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-V-588	Borg Warner	25898	N/A	N/A	1977	Repaired	Yes, Code Class 2

7. Description Of Work Performed: Repaired valve CIA-V-58B. The repair work was performed as follows:

1) Cut valve body to bonnet seal weld.

2) Prepped body and bonnet cut surfaces.

3) Reinstalled the valve bonnet.

4) Made valve body to bonnet seal weld.

5) Performed visual examination on the final seal weld. Visual examination results acceptable.

6) Performed liquid penetrant (PT) examination on the final seal weld. Liquid penetrant (PT) examination results acceptable.

			VERGY			PLAN No 2-181
			ORTHWE	ST iena		
F	ORM NIS-2 OW	NER'S REPORT	FOR REPAIR	S OR REPLAC	EMENTS (B	ack)
ests Conduc	ted: Hydrostatic Test Pressure Component D			l Operating Pre Test Temperat Temperature: '	ture: ° F	None X
lemarks: None	e					
		CERTIFICA	TE OF COM	PLIANCE		
rules of the / Type Code S Certificate O	ASME Code, Seci Symbol Stamp: No f Authorization N	Applicable	ner's Report	are correct and	this repair COI	nform <del>s</del> to the
Expiration D. Prepared By	ate: Not Applicable	ram Lead Engineer (P	Signed	By Kuldip Singh	Program Lead	Engineer (PLE)
Date	6403		Date	6	403	
	(	CERTIFICATE O	F INSERVICI	INSPECTION		
Vessel Inspe of Hartford, C period <u>//-/</u>	ctors and the Sta connecticut have in 9-02 to 4	valid commission te of Washington aspected the com アロークデ	and employe ponents des _ and state to	d by Hartford Ste cribed in this Ov the best of my	eam Boiler Of vner's Repor knowledge a	Connecticut t during the nd beilef, the
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Date 4-3	Inspector's Signature				ard, State, and E	
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/20/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Diesel Cooling Water (DCW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 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
DCW-HX-1B1	American Standard	8-20004-02-2	29368	N/A	1976	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced studs and nuts for heat exchanger DCW-HX-1B1. The replacement work on the channel/tube sheet bolted joint and back channel/tube sheet bolted joint was performed as follows:

# End Cover Plate To Stationary Channel Bolted Joint

- 1) Removed existing studs and nuts.
- 2) Installed twenty eight (28) replacement studs.
- 3) Installed fifty six (56) replacement nuts.
- 4) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

# End Cover Plate To Floating Channel (Packed End) Bolted Joint

1) Removed existing studs and nuts.

2) Installed twenty eight (28) replacement studs.

3) Installed fifty six (56) replacement nuts.

4) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. Leakage was observed during the pressure test and was evaluated to be acceptable.

PLAN No 2-1818
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Test Pressure: 212 Psig Test Temperature: 55° F Component Design Pressure: 150/300 Psig Temperature: 300/300° F
<b>9. Remarks:</b> 1) Component design pressure of 150 Psig and design temperature of 300 <sup>0</sup> F is for heat exchanger DCW-HX-1B1 shell side. 2) Component design pressure of 300 Psig and design temperature of 300 <sup>0</sup> F is for heat exchanger DCW-HX-1B1 channel side.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Image: Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       6/20/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\frac{25}{17/23}$ to $\frac{07/16/23}{2}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Jahn Scimpton Commissions 803211 Acin Inspector's Signature National Board, State, and Endorsements Date 07/16/03

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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/04/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (c) Type Code Symbol Stamp: Not Applicable
- (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable
- 4. Identification Of System: Diesel Cooling Water (DCW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 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
DCW-HX-1B2	American Standard	8-20004-01-2	29366	N/A	1976	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced studs and nuts for heat exchanger DCW-HX-1B2. The replacement work on the bolted joints was performed as follows:

# End Cover/Stationary Channel Bolted Joint

1) Removed existing studs and nuts.

- 2) Installed twenty eight (28) replacement studs.
- 3) Installed fifty six (56) replacement nuts.

4) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

# End Cover/Floating Channel (Packed End) Bolted Joint

1) Removed existing studs and nuts.

2) Installed twenty eight (28) replacement studs.

3) Installed fifty six (56) replacement nuts.

4) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

PLAN No	2-1810
	2-1013
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       Other       Other         Test Pressure: 209 Psig       Test Temperature: 54° F         Component Design Pressure: 300 Psig       Temperature: 300° F	
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	
Prepared By Jul and Sund Signed By Julan Sund	
Kuldip Singh Program Lead Engineer (PLE)     Kuldip Singh - Program Lead Engineer (PLE)       Date     6 4 0 3	
	_
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -77-07^2$ to $\frac{6-70-07}{2}$ and state to the best of my knowledge and belief, the	
Owner has performed examinations and taken corrective measures described in this Owner's Repo in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or	ort
implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be 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     747610/7484     rvz       National Board, State, and Endorsements	<u>م</u>
Date 6-30-07	

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No .: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Condensate (COND) 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
COND(20)-1 COND-V-1060 COND-V-1060	WPPSS ** Borg Warner Borg Warner	COND(20)-1 16986 53254	N/A N/A N/A	NA NA NA	N/A 1978 1980	Replaced Replacement	No, Code Class 2 * Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing valve COND-V-1060. The replacement work was performed as follows: 1) Removed existing valve COND-V-1060, Serial No 16986.

2) Installed replacement piping material such as pipe and pipe cap.

3) Installed replacement valve COND-V-1060, Serial No 53254.

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) The existing piping system in which the replacement valve COND-V-1060, Serial No 53254 was installed is Condensate (COND) piping system COND(20)-1. This piping system is certified to comply with ASME Section III, Code Class 2 \*, 1971 Edition with Winter 1973 Addenda requirements.

2) The replacement valve COND-V-1060, Serial No 53254 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda requirements.

3) \* Valve COND-V-1060 is installed in a Non ASME Code stamped piping system COND(20)-1. In accordance with Columbia Generating Station's Design Specification (DS) Division 15, Section 15B.1, Page 30, Paragraph 4.1.1, this piping system is required to be in general compliance with ASME Section III, Code Class 2 requirements. General compliance is defined as meeting the intent of ASME Section III, Code Class 2 requirements without requiring the ASME Code stamp. In view of this, the purpose of the ASME Section XI plan was to capture and implement ASME Section III, Code Class 2 requirements such as material, welding, NDE, etc during replacement work. The "Construction Code" and "Replacement Code" of ASME Section III 1971 Edition with Winter 1973 Addenda was implemented for this replacement work in order to be consistent with the mandatory Code for Contract 215 ASME Code Stamped piping systems.

4) \*\* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

Date: 02/22/03 Sheet: 1 Of 1 Unit: Not Applicable

			RGY		PLAN No 2
			THWES	Г •	
FOI	RM NIS-2 OWNER'S	s report for	REPAIRS (	OR REPLACEN	IENTS (Back)
est <b>s</b> Conducted	l: Hydrostatic Test Pressure: Psig Component Design	Pneumatic	<b>-</b> Te	perating Press est Temperature emperature: ° F	
<b>emarks:</b> See atta	ched NPV-1 Code Data F	Report for the replace	ment valve CON	ID-V-1060, Serial Ne	o 53254.
		CERTIFICATE (	OF COMPLI	ANCE	
to the rules of t Type Code Syn Certificate Of A Expiration Date	he ASME Code, Sec <b>bol Stamp:</b> Not Applic uthorization No.: No	c <i>tion XI.</i> cable	-	17. 8	is replacement <i>conforms</i>
Prepared By	(uldip Singh - Pilogram Le	ad Engineer (PLE)	_ Signed By	Kuldip Singh - Pi	ogram Lead Engineer (PLE)
Date			_ Date		
	CERI	TIFICATE OF IN	SERVICE IN	ISPECTION	
		commission iss	ued by the N and emp	ational Board o loyed by	f Boiler and Pressure
state to the bes corrective mea ASME Code, So By signing this	ection XI. certificate neither ti	and bellef, the O this Owner's Rep he inspector noi	l wner has pe port in accor his employe	to to to to to to to to to to to to to t	requirements of the arranty, expressed or
Furthermore, n	ning the examination either the inspector rty damage or a loss	nor his employe	er shall be lla	able in any man	ner for any personal

FORM NPV				EPORT FOR NU ASME Code, Sec			LYES'
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2. Manufactured for	Boves &	Crsil/G.K.	<u>R.I., P.O.</u>	Box 1040, R	tchland, 1	Tashington	<b>9</b> 9
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(8) (9) The valve 8 condemant  temperatu 8. Design Conditions 7. Cold Working Press 8. Pressure Retaining Mark No (a) Castings	s. hotata re prasso 3600 Press Pieces	d water, et (Brief description re fating o 500 pei st 1	100 Itemperature) 00°F.	id modia which tad with a H is stated h 	tinclade WR and By source of source of the source of the s	N/A	
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(8) (9) (10) The valve E condensat  E experator 6. Design Conditions 7. Cold Working Press 8. Pressure Retaining Mark No (a) Costings Gate - N <sup>4</sup>	Solo Code	d entar. At (Brief description The Fating o pei pei	100 If annual for whith 100 If annual starts 000F.	id modia which tad with a P for Supernet was de is stated b 	in finclade WR and Bir infor. Inter .	N/A	
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Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1(2" x 11", (2) information in kerns 1, 2 and 5 on this Data Report is included on each sheet, and (2) each sheet is numbered and number of sheets is recorded at top of this form.

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

1. 1.

Date: 06/20/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(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 Bulit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI-VX-264 Disc Disc	Target Rock Target Rock Target Rock	9 N/A 978	N/A N/A N/A	N∕A N∕A N∕A	1980 1980 1991	Replaced Replacement	Yes, Code Class 2 No, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced disc in valve PI-VX-264, Serial No 9 The replacement work was performed as follows: 1) Removed existing disc from the valve.

2) Installed new replacement disc Serial No 978 in the valve.

NOTES -

1) The remaining work such as cut valve body to bonnet seal weld, make valve body to bonnet seal weld, etc was performed in accordance with ASME Section XI Plan No 2-1807.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS	(Back)
ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Test Pressure: Psig Test Temperature: <sup>o</sup> F Component Design Pressure: Psig Temperature: <sup>o</sup> F	None X
Remarks: See attached N-2 Code Data Report for the new replacement disc, Serial No 978	
CERTIFICATE OF COMPLIANCE	<u>,</u>
We certify that the statements made in this Owner's Report are correct and this replace to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable	ment <i>conforms</i>
Expiration Date: Not Applicable Prepared By Ulaip Sup Signed By Ulaip	Supp
Kuldip Singh - Program Lead Engineer (PLE)     Kuldip Singh - Program Lead       Date     6/20/03	ad Engineer (PLE)
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler of Hartford, Connecticut have inspected the components described in this Owner's Rep period $(-15-0)$ to $(-20-0)$ and state to the best of my knowledge Owner has performed examinations and taken corrective measures described in this in accordance with the requirements of the ASME Code, Section XI.	Of Connecticut ort during the and belief, the
By signing this certificate neither the Inspector nor his employer makes any warranty implied, concerning the examinations and corrective measures described in this Own Furthermore, neither the Inspector nor his employer shall be liable in any manner for injury or property damage or a loss of any kind arising from or connected with this in	er's Report. any personal
1. M. Forto Commissions 7416 W/ 74180	
Inspector's Signature National Board, State, an	a Endorsements

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						AN NO.21821			
		CODIL							
	FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES* As Required by the Provisions of the ASME Code, Section III 6 Not to Exceed One Day's Production Pg. 1 of								
		A		visions of the ASME Co		6/1			
			Not to Exce	ed One Day's Product	lon	Pg. 1 of2			
		Manufastured and certified by	Target Rock Corp;	1966E Broadhollo	w Rd; E. Far	mingdale, NY 11735			
		Wash	hington Public Po	wer Supply System		WA 99352			
	Z.	Manufactured for		theme and address of Purc		<u></u>			
	3.	Location of installation	-2; North Power P	lant Loop; Richla	nd, WA 99352	) 			
	4.	Type: 202337-1	SA-479 316	75 KSI	N/A	1991			
		ldrawing no.}	(met'l. apec. no.) 1974	(tanale strength)		lyear built)			
	5.	ASME Code, Section III, Division	1:iedition)	Winter 1975	2	ICode Cese no.)			
	6.	Fabricated in accordance with Co	onst. Spec. (Div. 2 only)	N/A Revisio	n <u>N/A</u>	Date N/A			
	-	Spare Parts	for completed v	alve assembly Mod	el Nos.				
	1.			dire disclosif floor					
		79TT-001 an	nd 83TT-001						
		Disc Assemb							
	8.	Nom. thickness (in.) <u>N/A</u>	Min. design thickness (in.	) <u>N/A</u> Dia. 1D (It & in	.) <u>N/A</u> Len	gth overall (ft & in.)N/A			
	9.	When applicable, Certificate Hold	ders' Data Reports are attai	ched for each item of this re	port:				
	1	ſ <u>···</u> ·····	·····			<u></u>			
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		Contal Alumbas	Broad Ma	e e e e e e e e e e e e e e e e e e e		Deced No.			
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(when applicable) Ambient \*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8% × 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.

		CERTIFICATI	on of design		
Design specifications	castified by	S. Rifaey/S. Fox		P.E. State	WA Ber 00 17626/16
an	continue of a	(when applicabl			••y, ••v, <u></u>
<b>)esign report* certifi</b>	ed by	(when applicable)	· · · · · · · · · · · · · · · · · · ·	P.E. State	Reg. no
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IPT Certificate of Au	havitation No	1948	Expir	12-12	-92
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)ato <u>7/30/9/</u>	NameTa	irget Rock Corporati	on Signed	- Jular S	ad representative)
					A. Manager
		CERTIFICATE	OF INSPECTION		
, the undersigned, ho New York	Iding a valid com	nission issued by the National B the Commercial Unio	card of Boller and Pre	ssure Vessel Inspecto	rs and the State or Province of
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/13/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(1)-4CL2 RCIC(50)-1 RCIC-PCV-15 RCIC-PCV-15	WPPSS * WPPSS * Fisher Controls Target Rock	RCIC(1)-4CL2-P1 RCIC(50)-1-P1 6056568 1	N/A N/A 2365 N/A	N/A N/A N/A N/A	1984 1983 1977 2003	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing valve RCIC-PCV-15. The replacement work was performed as follows: 1) Removed existing valve RCIC-PCV-15, Serial No 6056568.

- 2) Removed existing valve RCIC-V-50, Serial No 921S0404. This valve was reused by removing it from one location and installing it at a different location.
- 3) Installed replacement piping material such as reducing insert, reducing coupling and pipe.
- 4) Installed replacement valve RCIC-PCV-15, Serial No 1.
- 5) Reinstalled existing valve RCIC-V-50, Serial No 921S0404.
- 6) Made required socket welds.
- 7) Performed visual examination on the final socket welds. Visual examination results acceptable.
- 8) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.
- 9) Installed restricting orifice plate for RCIC-RO-9.
- 10) Installed studs and nuts associated with restricting orifice RCIC-RO-9 bolted flanged joint.
- 11) Installed material such as U bolts and jam nuts for the existing support.

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve RCIC-PCV-15, Serial No 1 was installed is Reactor Core Isolation Cooling (RCIC) piping system RCIC(1)-4CL2-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement valve RCIC-PCV-15, Serial No 1 is certified to comply with ASME Section III, Code Class 2, 1995 Edition with 1996 Addenda requirements.

4) 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 requirements outlined in Code Case N-416-1.

5) 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 requirements outlined in Code Case N-416-1.

	PLAN No ENERGY NORTHWEST People - Vision - Bolution -	2-18
FC	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
ests Conducte	d: Hydrostatic Pneumatic Nominal Operating Pressure X None Test Pressure: 1350/98 Psig Test Temperature: 88/88° F Component Design Pressure: 1500/100 Psig Temperature: 170/170° F	
l <b>emarks:</b> See a	tached NPV-1 Code Data Report for the replacement valve RCIC-PCV-15, Serial No 1.	
	CERTIFICATE OF COMPLIANCE	
to the rules of Type Code Sy Certificate Of	t the statements made in this Owner's Report are correct and this replacement conforms the ASME Code, Section XI. mbol Stamp: Not Applicable Authorization No.: Not Applicable te: Not Applicable te: Not Applicable Signed By	; )
	CERTIFICATE OF INSERVICE INSPECTION	
Vessel Inspect of Hartford, Co period <u>4-76-</u> Owner has pe in accordance By signing the implied, conc Furthermore,	aned, holding a valid commission issued by the National Board of Boiler and Pressure tors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut nnecticut have inspected the components described in this Owner's Report during the $-\underline{c'\cdot p}$ to $\underline{(e-1)(p-2)(p^2)}$ and state to the best of my knowledge and belief, the rformed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI. Is certificate neither the Inspector nor his employer makes any warranty, expressed of eming the examinations and corrective measures described in this Owner's Report. neither the Inspector nor his employer shall be liable in any manner for any personal erty damage or a loss of any kind arising from or connected with this inspection.	e ort
	Spector's Signature Commissions 746600. 7486 200 100	<u>~5</u>
Date <u>6-10</u>	-07	

# 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

		lation <u>Columbia</u> (name s No., or Type <u>03</u>	e and address	)				
	ASME Code, Section III, Division 1:		<u>1995</u> (edition)	<u>199</u>	6	2 (class)	None (Code Case no.	
	Pump or valve	Valve		•	•	. ,	tlet size _	
	Material: Body _	SA 105	Bonnet	SA479 316	_ Disc	N/A	Bolting	<u>N/A</u>
	(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	ES	(c) Body Serial No.	(d) Bonnet Serial No.		(e) Disc Serial No.	
	1	N/A		464	8		N	/A
		VALVE	RCIC -					
				Qu	wip S	mp's		
			<u></u>		511	3103		
			<u> –</u>				<u> </u>	
-			·					

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

(12/88) This form (E00037) may be obtained from the Order Dept , ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300 REPRINT 6/93

# FORM NPV-1 (BACK - Pg. 2 of 2)

			Centificate Holder:	s Serial No	03Z501-001 s/n 1	
<ol> <li>Design conditions</li> <li>Cold working pres</li> </ol>			ature) <sup>°</sup> F or valve pre	essure class _	<u>N/A</u>	('
10. Hydrostatic test	3350	psi. Disc differe	ntial test pressure	<u>N/A</u>		ps
11. Remarks:		······				
	· · · · · · · · · · · · · · · · · · ·	CERTIFICATIO	N OF DESIGN		,	7
Design Specification	certified by	Jack R. Cole, Jr	P.E. State	<u></u>	Reg. No. 0020653	
Design Report certifie	ed by	Adele M. DiBiasic	P.E. State	<u>NY</u>	Reg. No. <u>065348</u>	-
	atements made in t		COMPLIANCE	or valve conf	orms to the rules fo	
construction of the AS	·		Expir	es 12	2/12/2004	
			Signed			-
	·····			· · · · · · · · · · · · · · · · · · ·		7
and the State of Provi	ince of <u>New</u>	York	National Board of Boil and employed by _ valve, described in this	OneBeacor	n America Ins.Co.	s   -

of <u>Boston, MA</u> have inspected the pump, or valve, described in this Data Report on <u> $\frac{4/3}{2003}$ </u> 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 4-3-05 Signed Yuu NY 2597 Commissions (Nat'l. Bd. (inc I. endorsements) and state or prov. and no.) Authorized Ins pector)

(1) For manually operated valves only.



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/19/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW-V-10A	Anchor Darling	1N260	N/A	N/A	1977		Yes, Code Class 1

7. Description Of Work Performed: Replaced existing stuffing box with hinge pin cover for valve RFW-V-10A. The replacement work was performed as follows:

- 1) Remove existing studs and nuts form the valve stuffing box.
- 2) Removed existing stuffing box from the valve.
- 3) Performed VT-1 visual examination on six (6) new replacement studs for the hinge cover. VT-1 visual examination results acceptable.
- 4) Performed VT-1 visual examination on six (6) new replacement nuts for the hinge cover. VT-1 visual examination results acceptable. 5) Installed new replacement hinge pin cover on the valve.
- 6) Installed VT-1 visually examined new replacement studs for the hinge pin cover.
- 7) Installed VT-1 visually examined new replacement nuts for the hinge pin cover.

8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

Test Pressure:       1030 Psig       Test Temperature:       199.8° F         Component Design Pressure:       2790 Psig       Temperature:       100° F         Remarks: * The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI pressure       XI pressure	
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other       Test Temperature: 199.8°F         Component Design Pressure: 2790 Paig       Test Temperature: 199.8°F         Remarks: 'The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI pressure with the was performed in accordance with PPM No OSP-RPV-R801 'Reactor Pressure Vessel Leakage Test'.         Remarks: 'The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI pressure with the was performed in accordance with PPM No OSP-RPV-R801 'Reactor Pressure Vessel Leakage Test'.         Remarks: 'The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI pressure Vessel Leakage Test'.         Remarks: 'The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI pressure Vessel Leakage Test'.         Remarks: 'The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI pressure Vessel Leakage Test'.         Remarks: 'The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Prepared BY       Lide Engineer (PLE)         Date       G 19 0.3         Date       G 19 0.3         Date       G 19 0.3	PLAN No 2-18 ENERGY NORTHWEST People - Vision - Solutions
Test Pressure: 1030 Psig       Test Temperature: 193.8 <sup>3</sup> F         Component Design Pressure: 2730 Psig       Temperature: 100° F         Remarks: 'The test pressure and the test temperature on the hinge pin cover tolked joint was recorded during ASME Section XI pressure which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable       Signed By       Signed By       Signed P         Prepared By       Signed Applicable       Kuldip Singh - Program Lead Engineer (PLE)         Date       6 [19] 0.3       Date       6 [19] 0.3         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Handrod Steam Boiler O Connecticut of Hardrod. Connecticut have inspected the components described in this Owner's Report fung the period <u>H 412 - 0 to 1 </u>	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Which was performed in accordance with PPM No OSP-RPV-R801 <sup>®</sup> 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 ASIME Code, Section XI.         Type Code Symbol Statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASIME Code, Section XI.         Optimized Symbol Statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASIME Code, Section XI.         Optimized Symbol Statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASIME Code, Section XI.         Prepared By	Test Pressure: 1030 Psig Test Temperature: 199.8° F
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh Program Lead Engineer (PLE)         Date       G [19] 0.3         Date       G [19] 0.3         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\frac{H^2 - 0^2}{2}$ to $\frac{2 - C^2}{2}$ and state to the best of the Source or my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implicit, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implicit, concerning the examinations and torrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implicit, concerning the examinations and corrective m	<b>Remarks:</b> * The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI press t which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh Program Lead Engineer (PLE)         Date       G [19] 0.3         Date       G [19] 0.3         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\frac{H^2 - 0^2}{2}$ to $\frac{2 - C^2}{2}$ and state to the best of the Source or my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implicit, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implicit, concerning the examinations and torrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implicit, concerning the examinations and corrective m	
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	CERTIFICATE OF COMPLIANCE
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $41-22-03$ to $7-1-07$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mispector's Signature Commissions $7416074366$ MI m National Board, State, and Endorsements	to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By Kuldip Singh Program Lead Engineer (PLE) Kuldip Singh Program Lead Engineer (PLE)
Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>41-77-05</u> to <u>7-1-07</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>MIMINE</u> Inspector's Signature <u>Commissions</u> <u>241 MU/74156</u> <u>MT</u> <u>M</u> National Board, State, and Endorsements	CERTIFICATE OF INSERVICE INSPECTION
Inspector's Signature National Boárd, State, and Endorsements	Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $47-22-03$ to $7-7-07$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 _ / - / - / - / - / - / - / - / - / - /	Inspector's Signature National Board, State, and Endorsements
	Date

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/19/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW-V-10B	Anchor Darling	1N257	N/A	N/A	1977		Yes, Code Class 1

7. Description Of Work Performed: Replaced existing stuffing box with hinge pin cover for valve RFW-V-10B. The replacement work was performed as follows:

1) Remove existing studs and nuts form the valve stuffing box.

- 2) Removed existing stuffing box from the valve.
- 3) Performed VT-1 visual examination on six (6) new replacement studs for the hinge cover. VT-1 visual examination results acceptable.
- 4) Performed VT-1 visual examination on six (6) new replacement nuts for the hinge cover. VT-1 visual examination results acceptable.
- 5) Installed new replacement hinge pin cover on the valve.

6) Installed VT-1 visually examined new replacement studs for the hinge pin cover.

7) Installed VT-1 visually examined new replacement nuts for the hinge pin cover.

8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

PLAN No 2-1	824
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
ests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other         Test Pressure: 1030Psig       Test Temperature: 199.8° F         Component Design Pressure: 2790 Psig       Temperature: 100° F	
Remarks: * The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI press which was performed in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".	sure
CERTIFICATE OF COMPLIANCE	7
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable	
Prepared By       Muldip Singh - Rogram Lead Engineer (PLE)       Signed By       Muldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Rogram Lead Engineer (PLE)       Date       6/29/03	
CERTIFICATE OF INSERVICE INSPECTION	7
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $4-22-03$ to $7-2-03$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or	
implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 745/2162 - 2 T minute Signature	
Date <u>7-1-03</u>	

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/31/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 Summer 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-HX-1B	Delta Southern	35009-74-2	3490	N/A	1974		Yes, Code Class 2

- 7. Description Of Work Performed: Fabricated spare tube plugs for heat exchanger. The work was performed as follows 1) Cut bar material to machine spare the tube plugs See Note 1.
  - 2) Machined eighteen (18) spare tube plugs to the required dimensions See Note 1.

#### NOTES -

1) Residual Heat Removal heat exchanger RHR-HX-1B tubes were due for eddy current (EC) examination during R-16 outage. ASME Section XI Plan No 2-1825 was issued to machine tube plugs and also to plug tubes in case eddy current (EC) examination revealed unacceptable condition of the tube(s). In anticipation to plug the tubes eighteen (18) tube plugs were machined. The eddy current (EC) examination revealed no unacceptable condition of the tube(s). The tube plugs machined in accordance with ASME Section XI Plan No 2-1825 are being stored in the warehouse inventory for future use.

In view of the above, this NIS-2 form is being issued to close this plan since there is no other mechanism to close and vault the plan. Inspector's signature is not required on this NIS-2 form since no repair and replacement work was performed on permanent plant equipment under this plan.

PLAN No 2-182
ENERGY NORTHWEST
People · Vision · Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F
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 Jul dif Such Signed By Juldup Sup 7
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 53103 Date 53103
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut
of Hartford, Connecticut have inspected the components described in this Owner's Report during the
period $3^{-}3^{-}2^{-}3^{-}$ to $7^{-}(-2)^{-}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report
in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or
implied, concerning the examinations and corrective measures described in this Owner's Report.
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
1. 11. Tant Commissions 7486-W /74184 WI WS
Inspector's Signature Commissions View View View View View View View View
Date 7-1-07

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/30/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 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
MS-V-22A	Rockwell	JV-2	81	N/A	1973	Banlagad	Yes, Code Class 1
Pilot disc Pilot disc	Rockwell Rockwell	6033641-154 215585-35	N/A N/A	N/A N/A	1989 1990	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1
Main disc	Rockwell	6053657-156	N/A	N/A	1989	Replaced	Yes, Code Class 1
Main disc	Rockwell	6053657-157	N/A	N/A	1989	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced existing parts for valve MS-V-22A. The replacement work was performed as follows 1) Removed existing pilot disc (stem disc) Serial No 6033641-154 from the valve.
  - 2) Removed existing main disc (piston disc) Serial No 6053657-156 from the valve.

3) Performed VT-3 visual examinations on the exposed surfaces of the existing studs for the valve body to bonnet joint. VT-3 visual examination results acceptable.

4) Performed VT-3 visual examinations on the existing nuts for the valve body to bonnet joint. VT-3 visual examination results acceptable.

5) Performed VT-3 visual examinations on the valve body accessible internal surfaces. VT-3 visual examination results acceptable.

6) Performed VT-3 visual examinations on the valve bonnet accessible internal surfaces. VT-3 visual examination results acceptable.

7) Installed replacement pilot disc (stem disc) Serial No 215585-35 in the valve.

8) Installed replacement main disc (piston disc) Serial No 6053657-157 in the valve.

9) Reinstalled VT-3 visually examined existing nuts for the valve body to bonnet joint.

10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

#### NOTES -

1) Company name changed from Rockwell International to Edward Valves, Inc.

2) See ASME Section XI Plan No's 2-1875, 2-1876 and 2-1877 for additional work performed on valve MS-V-22A.

PLAN No 2-1826
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 964 Psig Test Temperature: 530° F Component Design Pressure: 1250 Psig Temperature: 575° F
<b>9. Remarks:</b> See attached N-2 Code Data Reports for the following replacement parts:         Part Description       Serial No         Pilot disc (stem disc)       215585-35         Main disc (piston disc)       6053657-157
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Multip Singh - Program Lead Engineer (PLE)         Date       7/1/03    Date
<b>CERTIFICATE OF INSERVICE INSPECTION</b> I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $(-7-0)^2$ to $(7-1-0)^2$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Image: Signature     Commissions     7486 cc/7486     N I msp       Inspector's Signature     National Board, State, and Endorsements       Date     7-1-03

FORM	NZ CERTIFICATE NOI DE	RS' DATA REPORT FOR IDEN	TICAL
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Part or Appurtenance Serial Number	Board No.	Part or Appurtenance Senal Number	Board Number
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Serial Number	Board No.	Senal Number	Board Number
Serial Number (1) <u>2/5585 - 35</u> (2) <u>2/5585 - 36</u>	Board No.		Board Number
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Serial Number (1) <u>2/5585 - 35</u> (2) <u>2/5585 - 36</u>	Board No.	Senal Number (26) (27)	Board Number
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	CERTIFICATE OF SHOP COMPLIANCE
e certify	that the statements made in this report are correct and that this (these) Par +s
	to the rules of construction of the ASME Code, Section III.
	Icase of Authorization No
<u>د</u>	7/18/50 Name Edward Valves Enc. signed Recench
	I UNIT Caralizata madam Isuthenzes representativer
	CERTIFICATE OF SHOP INSPECTION
he unde	resigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of
	Arding and employed by The Hartford Steam Builer Inspection & Insurance Company for J CT have inspected these items described in this Data Report on 9-18-70, and state that to the
	Interpret on have inspected uses thins describes in this bats report on ?? A survey, and state that to the innoveloge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code. Sector
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signing	this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described
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	kind arising from or connected with this inspection.
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	18-70 Signed States Commissions NC1083

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Int · certified by	Indext       Salathiel Liell Address III       P. E. state_NCReg. no4187
hat the statements made in this report are correct and that this (these)_Parts	Atements made in this report are correct and that this (these)_Parts
the rules of construction of the ASME Code, Section III. International Corp. Signed II/25/91 CERTIFICATE OF SHOP INSPECTION Signed, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or pro- in the Carolina and employed by HSBI & I CO. Ord. CI have inspected these items described in this data report on <u>4-7-87</u> and state that to the knowledge and bellef, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Each part listed has been authorized for stamping on the date shown above. this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment a this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or mage or loss of any kind arising from or connected with this inspection. 2-89 Signed Commissions Mathematicated these international data in the inspection.	of construction of the ASME Code, Section III. Authorization no. <u>N-1563</u> Expires <u>11/25/91</u> Name Rockwell International Corp. Signed <u>How Authorization</u> (NMT Confisse Hoter) Signed <u>How Authorization</u> CERTIFICATE OF SHOP INSPECTION Diding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or pro- Irolina and employed by <u>HSBI &amp; I Co.</u> I have inspected these items described in this data report on <u>4-2-87</u> , and state that to the e and bellef, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, i listed has been authorized for stamping on the date shown above. Ilcate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment a report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or cass of any kind arising from or connected with this inspection. Signed <u>Commissions</u> <u>MC1083</u>
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this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or mage or loss of any kind arising from or connected with this inspection. 2-8-1 Signed Commissions NC1083	licate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment a report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or css of any kind arising from or connected with this inspection. Signed
this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or mage or loss of any kind arising from or connected with this inspection.	a report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or oss of any kind arising from or connected with this inspection. Signed
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/01/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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.	<b>Year</b> Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW(1)-4B RFW-V-45B RFW-V-45B	WPPSS * Borg Warner Borg Warner	RFW(1)-4B-P2 16800 921S0427	N/A N/A N/A	N/A N/A N/A	1983 1977 1993	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing valve RFW-V-45B. The replacement work was performed as follows: 1) Removed existing valve RFW-V-45B, Serial No 16800.

2) Prepped pipe cut end on as needed basis for rewelding.

3) Performed liquid penetrant (PT) examination on the pipe prepped surfaces. Liquid penetrant (PT) examination results acceptable.

4) Installed replacement valve RFW-V-45B, Serial No 921S0427.

5) Made required socket weld.

6) Performed visual examination on the final socket weld. Visual examination results acceptable.

7) Performed liquid penetrant (PT) examination on the final socket weld. Liquid penetrant (PT) examination results acceptable.

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve RFW-V-45B, Serial No 921S0427 was installed is Reactor Feed Water (RFW) piping system RFW(1)-4B-P2. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement valve RFW(1)-4B-P2 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

		PLAN No 2-
	E <sub>N</sub>	
FC	ORM NIS-2 OWNER'S REPO	RT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducte	ed: Hydrostatic Pneuma Test Pressure: Psig Component Design Pressu	atic Nominal Operating Pressure None X Test Temperature: ° F Temperature: ° F
? <b>emarks:</b> See at	tached NPV-1 Code Data Report for t	he replacement valve RFW-V-45B, Serial No 921S0427.
	CERTIF	ICATE OF COMPLIANCE
to the rules of Type Code Sy Certificate Of .	t the statements made in this the ASME Code, Section XI. mbol Stamp: Not Applicable Authorization No.: Not Applicable te: Not Applicable	e
Prepared By _	Kuldip Singh - Program Lead Engine	er (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Date	7/1/03	Date 7/1/03
	CERTIFICAT	E OF INSERVICE INSPECTION
		sion issued by the National Board of Boiler and Pressure and employed by
described in t state to the be corrective me ASME Code, t By signing thi implied, conce Furthermore,	his Owner's Report during th est of my knowledge and beli asures described in this Own Section XI. 's certificate neither the Inspe erning the examinations and neither the Inspector nor his	have inspected the components
	erry camage of a loss of any	
	eplacement 1" NPS And Smaller hspector's Signature	CommissionsNational Board, State, and Endorsements

. . . .

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# ドレイト No. 2-1027 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 \_\_\_\_

						•				
1	. Manufactured and c	BR/I ertified by 2300	P INTERN EAST VE	ATIONAL, IN RNON AVENUE	C. PU		n los angi 90058	eles oper	ATIONS	
				(na	me and	address of N C	Certificate Hold	ier)		
2	2. Manufactured for	ASHINGTON PUE	LIC POR	R SUPPLY SI	STEL	WNP-2 OPS	RES CONPL	EX, WES	1, RICHLAND, 1	ZA 99352
	. –			(nam	e and ad	idress of Purch	isser)			
3	3. Location of installati	Ion <b>HASHINGTON</b>	PUBLIC I	OHER SUPPLY		The and address		TEX, NES	#1, RICHLAND,	KA 99352
4	. Model No., Series N	o., or Type	GLOBE	Drawing		<u> 16590 ·</u>	Rev	<u>K</u>	CRN_R/A	
5	5. ASME Code, Sectio	n III, Division 1:				ER 1973	1	<u></u> .	N/A	_ SEE REMARKS
			ledit	uon)		da datej	(class	·	(Code Case no.)	
6	. Pump or valve	VALVE	Nominal i	nlet size	<u>3/4</u> (in.)	Ou	rtlet size	<u>3/4</u>		
7	. Material: Body	<u>SA-105</u>	Bonnet _	N/A		STELL Disk ALLO	LITE 6 ALL I 6	DY 1 Bolting .	N/A	
	(a)	(b)		(c)			(d)		(e)	
	Cert.	Nat'l		Body	1		Bonnet		Disk	
	Holder's	Board		Seria	đ		Serial		Serial	
	Serial No.	No.		No.			No.		No.	
_	92150427	N/A		224452	51725		R/A	2	17876 SN20*	-
_	92150428	R/A	••••••••••	224452			R/A		17876 SN27*	-
	92150429	R/A		224452	5114		R/A	2	17876 SN24*	
_	92150430	N/A		301285	SK2		R/A	2	24091 SN18**	-
_	92150431	R/A		2244521	<u>975</u>		N/X	2	24091 5113**	-
	92150432	N/A		301285	<b>SN6</b>		<u> </u>	2	17876 SN18*	-
_	92150433	<u>N/A</u>		2244523	SN7		R/A	2	17876 SN17*	-
_	92150434	<u>N/A</u>	<u> </u>	2244523	SN8		R/A	2	17876 SN16*	-
	92150435	<u> </u>		224452	SN9		<u>N/a</u>	2	17876 SN22*	_
<	92150436	N/A			SN10		<u>N/A</u>	2	17876 SN25*	-
			<u> </u>							-
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\* 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)

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

•					Certifi	cate Holder's Se	rial No	1HR1 921504	
8.	Design conditions	3600 (pressure)	µəi	100 perature)	.°F or va	ive pressure cla	ss	1500#	
9.	Cold working pressure	3600	psi at 100*	F	•				
10.	Hydrostatic test54	00-5450 psi.	Disk differential	test pressure		3960	4010		psi
		EAT MATERIAL:	01-564 WD 63						
11.	Remarks:				_	CERT HOLDER	's sn: 1	ACKSEAT	SNE
11.	11011181 KB				eat sn:	CERT HOLDER 921S0433		BACKSEAT 225647 SN	
11.	CERT HOLDER'S SN:	BACKSEAT SN:	CERT HOLDER'S	SN: BACKS	eat sn: 7 sn9				4
11.	CERT HOLDER'S SN: 92150427	BACKSEAT SN: 225647 SNS	CERT HOLDER'S 92150430	SN: BACKS 22564	eat sn: 7 sa9 7 sa1	92150433		225647 SN	4 10
11.	CERT HOLDER'S SN: 92150427 92150428	BACKSEAT SN: 225647 SN5 225647 SN8 225647 SN3 MANUPACTURED	CERT HOLDER'S 92150430 92150431 92150432 70 THB 1974 E	SN: BACKS 22564 22564 22564 22564	EAT SN: 7 SN9 7 SN1 7 SN2 ADDENDA	92150433 92150434 92150435 92150435 92150436 CODE EFFECT	IVITY D	225647 SN 225647 SN 225647 SN 225647 SN 225647 SN 225647 SN	4 10 6 7 RECONC

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mp or valve conforms to the rules for construction

CERTI	FICATE OF INSPECTION
the State or Province ofCALIFORNIA	ed by the National Board of Boiler and Pressure Vessel Inspectors and and employed by <u>*ARKHRIGHT MUTUAL INS, CO.</u>
of	have inspected the pump, or valve, described in this Data Report on the best of my knowledge and belief, the Certificate Holder has con-
structed this pump, or valve, in accordance with the A	ASME Code, Section III, Division 1. *FACTORY HUTHAL ENGINEERING ASSOCIATION
	his employer makes any warranty, expressed or implied, concerning the
component described in this Data Report. Furthermore any personal injury or property damage or a loss of an	a, neither the inspector nor his employer shall be liable in any manner for y kind arising from or connected with this inspection.
Date 3/31/93 Signed	Commissions 1225 CA
(Authorized Inspector)	[Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

(1) For manually operated valves only.



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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 05/13/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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.	<b>Ye</b> ar 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		Yes, Code Class

7. Description Of Work Performed: Fabricated new restricting 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) Final finished the orifice plate surfaces.
- 4) Marked the required information on the handle (paddle).

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The new fabricated orifice plate RCIC-RO-9 was installed in accordance with ASME Section XI Plan No 2-1822.

ENERGY NORTHWEST People - Vision - Bolution =
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure 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
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have Inspected the components described in this Owner's Report during the period <u>4-12-05</u> to <u>7-1-05</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>MIM</u> <u>MIM</u> Inspector's Signature <u>Commissions</u> <u>Date</u> <u>7-MIS</u>



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/25/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Residual Heat Removal (RHR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2A	WPPSS*	RHR(1)-2A-P1	N/A	N/A	1983		Yes, Code Class 2
RHR(1)-2B	WPPSS ·	RHR(1)-2B-P1	N/A	N/A	1984	**********************	Yes, Code Class 2
RHR(1)-2C	WPPSS*	RHR(1)-2C-P1	N/A	N/A	1983	+=++++=======================	Yes, Code Class 2
RHR(4)-1A	WPPSS*	RHR(4)-1A-P1	N/A	N/A	1983		Yes, Code Class 2
RHR(4)-1B	WPPSS*	RHR(4)-1B-P1	N/A	N/A	1983	**********	Yes, Code Class 2
RHR(9)-1	WPPSS*	RHR(9)-1-P1	N/A	N/A	1983	**********************	Yes, Code Class 2
RHR(2)-1	WPPSS *	RHR(2)-1-P1	N/A	N/A	1983		Yes, Code Class 2

7. Description Of Work Performed: Machined undersized pins for supports. The work was performed as follows:

1) Machined nine (9) pins for Pin Size No 1.

2) Performed visual examination on the final machined surfaces. Visual examination results acceptable.

3) Machined three (3) pins for Pin Size No 2.

4) Performed visual examination on the final machined surfaces. Visual examination results acceptable.

5) Machined sixteen (16) pins for Pin Size No 3.

6) Performed visual examination on the final machined surfaces. Visual examination results acceptable.

7) Machined ten (10) pins for Pin Size No 4.

8) Performed visual examination on the final machined surfaces. Visual examination results acceptable.

9) Machined one (1) pin for Pin Size No 5.

10) Performed visual examination on the final machined surfaces. Visual examination results acceptable.

# NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The machined undersized pins were installed when the existing snubbers were replaced with rigid struts for the following supports: RHR-373, RHR-414, RHR-416, RHR-419, RHR-983N, RHR-218, RHR-403, RHR-449, RHR-454, RHR-503, RHR-946N, RHR-947N, RHR-954N, RHR-183, RHR-906N, RHR-210, RHR-993N and RHR-401.

3) The machined undersized pins were installed for the above listed supports in accordance with ASME Section XI work plans 2-1831, 2-1833, 2-1834 and 2-1835.

4) ASME Section III, Code Class NF(2) for the pins. ASME Section III, Code Class NF(1) pins for ASME Section III, Code Class NF(2) application.

People · Vision · Solutions FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F       Component Design Pressure: Psig       Temperature: ° F
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 Judip Sup Signed By Julan Sunos
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 62603 Date 62603
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut
of Hartford, Connecticut have inspected the components described in this Owner's Report during the
period $4-9-07$ to $6-30-07$ and state to the best of my knowledge and belief, the
Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
implied, concerning the examinations and corrective measures described in this Owner's Report.
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
injury or property damage or a loss of any kind arising from or connected with this inspection.
is the Fill and and and
Inspector's Signature Commissions 748610/71186 nºJ INS
Date 6-70-07
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

#### 1. Owner: Energy Northwest

**Address:** Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **2.** *Plant:* Columbia Generating Station Date: 06/26/03 Sheet: 1 Of 2 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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	Name Of	Manufacturer's	National	Other	Year	Repaired,	ASME Code
Component	Manufacturer	Serial No	Board	I.D.	Built	Replaced Or	Stamped
•			No			Replacement	(Yes Or No)
							Code Class
RHR(1)-2A	WPPSS ·	BHR(1)-2A-P1	N/A	N/A	1983		Yes, Code Class 2
RHR(1)-2B	WPPSS	RHR(1)-2B-P1	N/A	N/A	1984		Yes, Code Class 2
RHR-373(S)	Pacific Scientific	228	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-373(R)	Lisega	NR-1234-1-1	N/A	N/A	1992	Replacement	No. Code Class***
RHR-414(N)(S)	Pacific Scientific	2353	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-414(S)(S)	Pacific Scientific	2586	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-414(N)(R)	Lisega	NR-1234-2-21	N/A	N/A	1992	Replacement	No. Code Class***
RHR-414(S)(R)	Lisega	NR-1234-2-28	N/A	N/A	1992	Replacement	No, Code Class***
RHR-416(T)(S)	Pacific Scientific	9906	N/A	N/A	1981	Replaced	No, Code Class**
RHR-416(B)(S)	Pacific Scientific	9934	N/A	N/A	1981	Replaced	No, Code Class**
RHR-416(T)(R)	Lisega	NR-1234-3-3	N/A	N/A	1992	Replacement	No. Code Class***
RHR-416(B)(R)	Lisega	NR-1234-3-21	N/A	N/A	1992	Replacement	No, Code Class***
RHR-419(E)(S)	Pacific Scientific	4432	N/A	N/A		Replaced	Yes, Code Class**
RHR-419(W)(S)	Pacific Scientific	4475	N/A	N/A		Replaced	Yes, Code Class**
RHR-419(E)(R)	Lisega	NR-1234-2-2	N/A	N/A	1992	Replacement	No, Code Class***
RHR-419(W)(R)	Lisega	NR-1234-2-15	N/A	N/A	1992	Replacement	No, Code Class***
RHR-983N(S)	Pacific Scientific	2141	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-983N(R)	NPS	NA-2765-002-13	N/A	N/A	1990	Replacement	Yes, Code Class***
RHR-218(E)(S)	Pacific Scientific	308	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-218(W)(S)	Pacific Scientific	104	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-218(E)(R)	Lisega	NR-1234-2-2	N/A	N/A	1992	Replacement	No, Code Class***
RHR-218(W)(R)	Lisega	NR-1234-2-15	N/A	N/A	1992	Replacement	No, Code Class***
RHR-403(S)	Pacific Scientific	621	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-403(R)	Lisega	NR-1234-1-2	N/A	N/A	1992 -	Replacement	No, Code Class***
RHR-449(S)(S)	Pacific Scientific	2534	N/A	N/A	1978	Replaced	Yes, Code Class**
RHR-449(N)(S)	Pacific Scientific	2532	N/A	N/A	1978	Replaced	Yes, Code Class**
RHR-449(S)(R)	NPS	NA-2765-002-11	N/A	N/A	1990	Replacement	Yes, Code Class***
RHR-449(N)(R)	NPS	NA-2765-002-14	N/A	N/A	1990	Replacement	Yes, Code Class***
RHR-454(S)	Pacific Scientific	2118	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-454(R)	NPS	NA-2765-002-3	<u>N/A</u>	N/A	1990	Replacement	Yes, Code Class***

7. Description Of Work Performed: Replaced existing snubbers with rigid struts for supports RHR-373, RHR-414, RHR-416, RHR-419, RHR-983N, RHR-218, RHR-403, RHR-449, RHR-454 and RHR-503. The replacement work was performed as follows:

1) Removed existing snubbers from the supports.

2) Installed replacement rigid struts for the supports reusing the existing parts.

3) Installed new under sized pins.

Continued On Sheet 2 of 2

			ST	PLAN No 2-18
		People Vision Bolut	an s	
FOR	M NIS-2 OWNER'S RI	EPORT FOR REPAIR	IS OR REPLACEME	ENTS (Back)
	Hydrostatic Pro Test Pressure: Psig Component Design Pro		al Operating Pressur Test Temperature: Temperature: ° F	
Remarks: See attac Support No RHR-983N RHR-449(S) RHR-449(N) RHR-449(N) RHR-454	thed NF-2 Code Data Reports <u>Serial No</u> NA-2765-002-13 NA-2765-002-11 NA-2765-002-14 NA-2765-002-3	s for the following replaceme	ent rigid struts:	
	CEI	RTIFICATE OF COM	PLIANCE	
to the rules of th Type Code Sym	he statements made in the ASME Code, Section bol Stamp: Not Applicable sthorization No.: Not App Not Applicable	n XI. Dicable	1.3	replacement <b>conforms</b>
Prepared By	uldip Singh - Program Lead E	Signed		gram Lead Engineer (PLE)
Date	6 26 03	Date		603
Vessel Inspecto of Hartford, Conn period <u>4-30</u> Owner has perfe in accordance w By signing this	CERTIFIE ed, holding a valid con rs and the State of Wa ecticut have inspected ormed examinations a with the requirements of certificate neither the I ning the examinations	Ishington and employed the components des modes and state to not taken corrective mon of the ASME Code, Se Inspector nor his emp	the National Board of a by Hartford Steam cribed in this Owner to the best of my know the best of my know the best of my know the best of my know the best of the best of the the best of the best of the best of the the best of the best of the best of the the best of the best of the best of the the best of the best of the best of the the best of the best of the best of the the best of the best of the best of the the best of the best of the best of the best of the the best of the best of the best of the best of the the best of the best of the best of the best of the best of the the best of the best of the best of the best of the best of the the best of the br>the best of the best of the best of the best of the best of the the best of the best of the best of the best of the best of the the best of the best of the best of the best of the best of the the best of the best of the best of the best of the best of the the best of the best of	Boiler Of Connecticut 's Report during the wledge and belief, the in this Owner's Report rranty, expressed or
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/26/03 Sheet: 2 Of 2 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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-503(S)	Pacific Scientific	8687	N/A	N/A	1981	Replaced	No, Code Class**
RHR-503(R)	NPS	NA-2765-003-4	N/A	N/A	1990	Replacement	Yes, Code Class***

### 7. Description Of Work Performed:

## **Continuation From Sheet 1 of 2**

4) Torqued the rigid strut assemblies to the required torque values.

5) Verified that the replacement rigid struts were properly installed and that all fasteners were secure.

6) Perform VT-3 visual examination on the supports to satisfy ISI (PSI) requirements. VT-3 visual examination results acceptable.

#### NOTES -

- 1) (S) Snubber
- 2) (R) Rigid strut
- 3) (N) North
- 4) (S) South
- 5) (E) East 6) (W) - West
- 7) (T) Top

8) (B) - Bottom

9) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

10) \*\* ASME Section III, Code Class NF snubbers.

11) \*\*\* ASME Section III, Code Class NF (1) rigid struts. ASME Section III, Code Class NF(1) rigid struts for ASME Section III, Code Class NF(2) application.

12) The existing ASME Code Stamped piping systems in which the ASME Section III, Code Class NF (1) replacement rigid struts were installed are Residual Heat Removal (RHR) piping systems RHR(1)-2A-P1 and RHR(1)-2B-P1. These piping systems are certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

13) ASME Section III, Code Class NF(2) for the pins. ASME Section III, Code Class NF(1) pins for ASME Section III, Code Class NF(2) application.

FORM NF-2 NPT CERTIFICATE HOLDERS' PARTIAL DATA REPORT FOR PARTS FOR COMPONENT SUPPORT \* y the Provisions of the ASME Code Rules, 🗍 tion III, Division 1 As Require PLAN No. 2-1831 NPS INDUSTRIES, INC., 10420 METRIC BOULEVARD, AUSTIN, TX 78758 1. Manufactured by IName and address of NPT Certificate Holder) WASHINGTON PUBLIC POWER SUPPLY SYSTEM, P.O. BOX 968, RICHLAND, WA 99352 2. Manufactured for. (Name and address of purchaser or owner) WNP-2 OPS WHS COMPLEX, WHS#1 N. PWR. PLANT LOOP, RICHLAND, WA 99352 3. Location of Installation 4. (a) (b) (c) (d) (1) (e) (g) Part Canadian Part National Serial Registration Drawing Description Board Year No. No. of Part Class No. No. Built \* N/A SPN-040 REPLACEMENT 1 N/A 1990 (1) REV. O SNUBBER (2) SMR-1/2 (3) 3 SIN 765-002-12 NA-2 (4) 165*-0*02.11 (5) \*NA-2765-002-1 5-002-14 (6) 165-002 -7 THRU (7) VERIFIED & ACCEPTED NA-2765-002-15 (8) Date R.I. Inspector LEVEL TT (9) 6125103 (10)\_

CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this report are correct and that these component is ition of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edit Code Case no. <u>N247</u> .	
Code Case no. <u>IVC47</u>	Silver
(NPT Certificate Molder) Our ASME Certificate of Authorization No. <u>N-2689</u> to use the <u>NPT</u>	SANDY REYNOLDS 
(NPT)	(Date)

#### 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 <u>TEXAS</u> and employed by <u>COMMERCIAL UNION</u> of <u>BOSTON</u>, <u>MASSACHUSETTS</u> have inspected the parts for the component supports described in this Data Report on <u>Y/27</u>, 19 <u>50</u>, and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these

component support parts in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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 4/25/90 00	
to all to pal	Ex 802
Signed Commissions	(Nat'l Board, State, Province, and No.)

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

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2. Manufaci			Name and address of pur	chases or emme	•1		-
J. Location	of Installation	2 OPS WHS CO	MPLEX, WHS 1 N.	PWR. PLA	NT LOOP, RIC	CHLAND, WA 9	9352
4. (s)	(b)	(c)	[6]	tel	(4)	4g1	
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This Iom (E00075) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

# ENERGY NORTHWEST

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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/26/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 RHR-39(N)(S) RHR-39(S)(S) RHR-39(N)(R) RHR-39(S)(R) RHR-42(S) RHR-42(R)	WPPSS * Pacific Scientific Pacific Scientific Lisega Lisega Pacific Scientific Lisega	RHR(1)-2C-P1 4489 4429 NR-1234-2-7 NR-1234-2-6 258 NR-1234-2-19	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	1983 1992 1992 1976 1992	Replaced Replaced Replacement Replacement Replaced Replacement	Yes, Code Class 2 Yes, Code Class** Yes, Code Class** No, Code Class*** No, Code Class*** Yes, Code Class*** No, Code Class***

7. Description Of Work Performed: Replaced existing snubbers with rigid struts for supports RHR-39 and RHR-42. The replacement work was performed as follows:

1) Removed existing snubbers from the supports.

2) Installed replacement rigid struts for the supports reusing the existing parts.

- 3) Torqued the rigid strut assemblies to the required torque values.
- 4) Verified that the replacement rigid struts were properly installed and that all fasteners were secure.
- 5) Perform VT-3 visual examination on the supports to satisfy ISI (PSI) requirements. VT-3 visual examination results acceptable.

#### NOTES-

- 1) (S) Snubber
- 2) (R) Rigid strut
- 3) (N) North
- 4) (S) South

5) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

6) \*\* ASME Section III, Code Class NF snubbers.

7) \*\*\* ASME Section III, Code Class NF (1) rigid struts. ASME Section III, Code Class NF(1) rigid struts for ASME Section III, Code Class NF(2) application.

8) The existing ASME Code Stamped piping system in which the ASME Section III, Code Class NF (1) replacement rigid struts were installed is Residual Heat Removal (RHR) piping system RHR(1)-2C-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

PLAN No 2-
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F         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
Date62603Date62603
<i>CERTIFICATE OF INSERVICE INSPECTION</i> <i>I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure</i> <i>Vessel Inspectors and the State of</i> Washington <i>and employed by</i> Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the <i>period</i> <u><i>H</i></u> <u><i>R</i>(<i>I</i>)</u> <u><i>L</i>(<i>J</i>)</u> <u><i>L</i>(<i>J</i>)</u> <u><i>A</i></u> <i>AAAAAAAAAAAAA</i>
Image: Commissions     THE U/7486     NI       Inspector's Signature     Commissions     THE U/7486     NI       Date     U/30/07



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

## 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/26/03 Sheet: 1 Of 2 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(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	Name Of Manufacturer	Manufacturer's Serial No	National	Other I.D.	Year Built	Repaired,	ASME Code
Component	Wanuacturer	Senar NO	Board	<i>I.D.</i>	DUIIC	Replaced Or	Stamped
			No			Replacement	(Yes Or No)
			ļ				Code Class
RHR(4)-1A	WPPSS*	RHR(4)-1A-P1	N/A	N/A	1983	*****	Yes, Code Class 2
RHR(4)-1B	WPPSS*	RHR(4)-1B-P1	N/A	N/A	1984	*****************	Yes, Code Class 2
RHR-946N(S)	Pacific Scientific	4438	N/A	N/A	*******	Replaced	Yes, Code Class**
RHR-946N(R)	Lisega	NR-1234-2-5	N/A	N/A	1992	Replacement	No, Code Class***
RHR-947N(B)(S)	Pacific Scientific	3882	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-947N(T)(S)	Pacific Scientific	3905	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-947N(B)(R)	Lisega	NR-1234-2-24	N/A	N/A	1992	Replacement	No, Code Class***
RHR-947N(T)(R)	Lisega	NR-1234-2-18	N/A	N/A	1992	Replacement	No, Code Class***
RHR-948N(B)(S)	Pacific Scientific	2580	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-948N(T)(S)	Pacific Scientific	2789	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-948N(B)(R)	Lisega	NR-1234-2-29	N/A	N/A	1992	Replacement	No, Code Class***
RHR-948N(T)(R)	Lisega	NR-1234-2-27	N/A	N/A	1992	Replacement	No, Code Class***
RHR-952N(S)	Pacific Scientific	657	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-952N(R)	Lisega	NR-1234-2-22	N/A	N/A	1992	Replacement	Yes, Code Class**
RHR-954N(W)(S)	Pacific Scientific	125	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-954N(E)(S)	Pacific Scientific	126	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-954N(W)(R)	NPS	NA-2295-025-8	N/A	N/A	1992	Replacement	Yes, Code Class***
RHR-954N(E)(R)	NPS	NA-2295-025-7	N/A	N/A	1992	Replacement	Yes, Code Class***
RHR-183(E)(S)	Pacific Scientific	122	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-183(W)(S)	Pacific Scientific	281	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-183(E)(R)	Lisega	NR-1234-3-5	N/A	N/A	1992	Replacement	No, Code Class***
RHR-183(W)(R)	Lisega	NR-1234-3-15	N/A	N/A	1992	Replacement	No, Code Class***
RHR-906N(NW)(S)	Pacific Scientific	696	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-906N(SE)(S)	Pacific Scientific	293	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-906N(NW)(R)	Lisega	NR-1234-3-10	N/A	N/A	1992	Replacement	No. Code Class***
RHR-906N(SE)(R)	Lisega	NR-1234-3-2	N/A	N/A	1992	Replacement	No, Code Class***

7. Description Of Work Performed: Replaced existing snubbers with rigid struts for supports RHR-946N, RHR-947N, RHR-948N, RHR-952N, RHR-954N, RHR-954N, RHR-96N and RHR-959N. The replacement work was performed as follows:

1) Removed existing snubbers from the supports.

2) Installed replacement rigid struts for the supports reusing the existing parts.

3) Installed new under sized pins.

4) Torqued the rigid strut assemblies to the required torque values.

5) Verified that the replacement rigid struts were properly installed and that all fasteners were secure.

Continued On Sheet 2 of 2

	PLAN No 2- ENERGY NORTHWEST Page - Vision - Belutions
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FU	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducte	d: Hydrostatic Pneumatic Nominal Operating Pressure None X Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
<b>emarks:</b> See att <u>Support No</u> RHR-954N(W) RHR-954N(E)	ached NF-2 Code Data Reports for the following replacement rigid struts: Serial No NA-2295-025-8 NA-2295-025-7
	CERTIFICATE OF COMPLIANCE
to the rules of Type Code Syl	the statements made in this Owner's Report are correct and this replacement conforms the ASME Code, Section XI. mbol Stamp: Not Applicable Authorization No.: Not Applicable
Prepared By _	Kuldip Singh - Program Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Vessel Inspect of Hartford, Col period <u>4-70</u> Owner has per in accordance By signing this implied, conce Furthermore, I	<b>CERTIFICATE OF INSERVICE INSPECTION</b> ned, holding a valid commission issued by the National Board of Boiler and Pressure ors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut inecticut have inspected the components described in this Owner's Report during the $\frac{\partial f'}{\partial r}$ to $\frac{\partial - \beta \partial - \partial f'}{\partial r}$ and state to the best of my knowledge and belief, the formed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI. a certificate neither the Inspector nor his employer makes any warranty, expressed or rning the examinations and corrective measures described in this Owner's Report. beither the Inspector nor his employer shall be liable in any manner for any personal arry damage or a loss of any kind arising from or connected with this inspection.
<u> 1. IM-</u>	Commissions     74/4//74/6     N.I.       Spector's Signature     National Board, State, and Endorsements



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/26/03 Sheet: 2 Of 2 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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-959N(NE)(S) RHR-959N(SW)(S) RHR-959N(NE)(R) RHR-959N(SW)(R)	Pacific Scientific Pacific Scientific Lisega Lisega	2523 2366 NR-1234-2-6 NR-1234-2-9	N/A N/A N/A N/A	N/A N/A N/A	1977 1977 1992 1992	Replaced Replaced Replacement Replacement	Yes, Code Class** Yes, Code Class** No, Code Class*** No, Code Class***

### 7. Description Of Work Performed:

### Continuation From Sheet 1 of 2

6) Perform VT-3 visual examination on the supports to satisfy ISI (PSI) requirements. VT-3 visual examination results acceptable.

NOTES -

- 1) (S) Snubber
- 2) (R) Rigid strut
- 3) (NW) North West
- 4) (SE) South East
- 5) (NE) North East 6) (SW) - South West
- 7) (E) East
- 8) (W) West
- 9) (T) Top

10) (B) - Bottom

11) Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

12) \*\* ASME Section III, Code Class NF snubbers.

13) \*\*\* ASME Section III, Code Class NF (1) rigid struts. ASME Section III, Code Class NF(1) rigid struts for ASME Section III, Code Class NF(2) application.

14) The existing ASME Code Stamped piping systems in which the ASME Section III, Code Class NF (1) replacement rigid struts were installed are Residual Heat Removal (RHR) piping systems RHR(4)-1A-P1 and RHR(4)-1B-P1. These piping systems are certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

15) ASME Section III, Code Class NF(2) for the pins. ASME Section III, Code Class NF(1) pins for ASME Section III, Code Class NF(2) application.

FLAN NO. 2-1833

FORM NF-2 NPT CERTIFICATE HOLDERS' PARTIAL DATA REPORT FOR PARTS FOR COMPON	<b>NENT SUPPORT</b>
As Required by the Provisions of the ASME Code Rules, Section II, Division 1	

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1.	Manufac	NPS INDU	STRIES, INC.	, 10420 METRIC	BLYD., AL	JSTIN, TEXAS	S 78758	
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			(N	lame and address of purc	haser of owner	r)	·····	
3.	Location	ef Installation_WNP-2	OPS WHS COM	PLEX, WHS#1_N.	PWR. PLAN	T LOOP, RIC	HLAND WA	<u>99</u> 352
	(a)	(5)	ic)	(d)	(e)	(f)	(g)	
-	Part	Canadian	Part		191	National	-	
	Serial No.	Registration No.	Drawing No.	Description of Part	Class	Board No.	Year Built	
	(1)_*	N/A	NPS-140	REPLACEMENT	1	N/A	• 1988	
			REV.O	SNUBBER	1			
	·			SMR-1				
				· · · · · · · · · · · · · · · · · · ·				
	(4)	*NA-2295-025-1		RHR- 954N	(W) S	IN NA-	2295-02	<u>5-8</u>
		THRU		RHR-954N PHR-954N	I(E)	SIN NA-	2295-025	- 7
		NA-2295-025-1	5.					
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tio	n of the A	hat the statements made ASME Code for Nuclear Pro- N247	in this moort are cor	CATE OF COMPLIAN rect and that these comp nts, Section III, Division	onent support	971 , Addenda_	the rules of construct WINTER 1973 (Date)	
-	MA	RCH 25 19 88	- NPS IN	IDUSTRIES	. 4		•	
Qa	te	19	Signed	Certificate Hoider)	SA	NDY REYNOLD	5	-
Qu	T ASME	Certificate of Authorizatio	n No. N-2689	_to use the NPT	\$	ymbol expires <u>JU</u>	(Date)	-  .
				· · ·				<sup>-</sup>
		•	CERTIFICA	te of shop inspe	CTION			7
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_	3/2	5 19 32 . and :		pected the parts for the o of my knowledge and be	_	· · · · ·		
0	nponent	support parts in accordance	a with the ASME C	oce for Nuclear Power Pla	int Componen	α.		
201	nent Sud	this cartificate, mither the poorts described in the er for any personal injury	is Cata Report. F	furthermore neither th	e inspector	nar his employe	er shall be liable	
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		2 mes:		Commissions TEXA	s 1186			

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Herringtand, State, Province, and No.)



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/26/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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		Yes, Code Class 2
RHR-206(S)	Pacific Scientific	610	N/A	N/A	1977	Replaced	Yes, Code Class**
RHR-206(R)	Lisega	NR-1234-1-4	N/A	N/A	1992	Replacement	No, Code Class***
RHR-210(S)	Pacific Scientific	111	N/A	N/A	1976	Replaced	Yes, Code Class**
RHR-210(R)	NPS	NA-2765-002-1	N/A	N/A	1990	Replacement	Yes, Code Class***
RHR-993N(S)	Pacific Scientific	22349	N/A	N/A	1982	Replaced	Yes, Code Class**
RHR-993N(R)	Lisega	NR-1234-1-5	N/A	N/A	1 <del>9</del> 92	Replacement	No, Code Class***

7. Description Of Work Performed: Replaced existing snubbers with rigid struts for supports RHR-206, RHR-210 and RHR-993N. The replacement work was performed as follows:

- 1) Removed existing snubbers from the supports.
- 2) Installed replacement rigid struts for the supports reusing the existing parts.
- 3) Installed new under sized pins.
- 4) Torqued the rigid strut assemblies to the required torque values.
- 5) Verified that the replacement rigid struts were properly installed and that all fasteners were secure.
- 6) Perform VT-3 visual examination on the supports to satisfy ISI (PSI) requirements. VT-3 visual examination results acceptable.

#### NOTES -

1) (S) - Snubber

- 2) (R) Rigid strut
- 3) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
- 4) \*\* ASME Section III, Code Class NF snubbers.

5) \*\*\* ASME Section III, Code Class NF (1) rigid struts. ASME Section III, Code Class NF(1) rigid struts for ASME Section III, Code Class NF(2) application.

6) The existing ASME Code Stamped piping system in which the ASME Section III, Code Class NF (1) replacement rigid struts were installed is Residual Heat Removal (RHR) piping system RHR(9)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

7) ASME Section III, Code Class NF(2) for the pins. ASME Section III, Code Class NF(1) pins for ASME Section III, Code Class NF(2) application.

PL	AN No 2-18
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Non         Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F	e X
See attached NF-2 Code Data Report for the following replacement rigid strut:           Support No         Serial No           RHR-210         NA-2765-002-1	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement conto the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Muddy         Kuldip Singh - Program Lead Engineer (PLE)         Date       6/26/03	2
<b>CERTIFICATE OF INSERVICE INSPECTION</b> I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pr Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Com of Hartford, Connecticut have inspected the components described in this Owner's Report dur period $4-36-66$ to $6-366-66$ and state to the best of my knowledge and be Owner has performed examinations and taken corrective measures described in this Owner's in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expres- implied, concerning the examinations and corrective measures described in this Owner's Re- Furthermore, neither the Inspector nor his employer shall be liable in any manner for any per- injury or property damage or a loss of any kind arising from or connected with this inspection	necticut ing the elief, the 's Report ssed or port. rsonal
3/-111.     Topolog     Commissions     7/186.     N/17/186.     N/1       Inspector's Signature     National Board, State, and Endors       Date     6-30-03	ルゾ eements

				. (	ruth No	. 2-183.	4
. FORM NF-2	NPT CERTIFICAT As Require	TE HOLDERS' PA	RTIAL DATA REPOR of the ASME Code	TFOR PART	S FOR COMPON on III, Division 1	IENT SUPPOR	T• -
1. Manufacture	d by NPS INDU	ISTRIES, INC.	, 10420 METRIC	BOULEVARD	, AUSTIN, T	x 78758	
2 Manufacture	WASHINGT		VER SUPPLY SYS			CHLAND . WA	993
		¢.	Name and address of pu	rchaser or owner	1)		
3. Location of	Installation	2 UPS WHS LUI	MPLEX, WHS#1 N	. PWR. PLA	NT LOOP, RIC	CHLAND, WA	<u>993</u>
4. (a) Part	(b) Canadian	lc) Part	(5)	· le}	{f} National	(g)	
Serial No.	Registration No.	Drawing No.	Description of Part	Class	Board	Year	
	N/A	SPN-040	REPLACEMENT	<u>Class</u>	<u> </u>	<u> </u>	
(1)		REV. 0	SNUBBER	<b>≜</b>	N/A	1990	
(2)				<u> </u>	<u> </u>		
(3)	•	· · · · · · · · · · · · · · · · · · ·	SMR-1/2				
(4)	<u></u>	<u> </u>					<u></u>
(5)		PHR-2	10, SIN H	<u>14 - 216</u>	5-002-1		
(6) <u>*NA-</u>	2765-002-1		7 4 0 0				
(7) <u>THR</u>	<u>یں :</u>		heding Samp	h	0		<u> </u>
(B) NA-2	2765-002-15	· · · · · · · · · · · · · · · · · · ·	6126/03	VERIFIED &	ACCEPTED -P		1001
(9)			, ,	LEVEL J	R.I. Inspec		1401
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(10)							
tion of the ASMI Code Case no	E Code for Nuclear   N247	e in this report are co Rower Plant Compone •	ICATE OF COMPLIA	aponent support n 1, Edition <u>19</u>		he rules of constru ( <u>INTER_1973</u> (Date)	yc. 
Date APRIL	<u>25 19 90 </u>	Signed NPS IN	DUSTRIES, INC.	_ by	2 Vun	<u> </u>	
		ion No. <u>N-2689</u>		30	NDY REYNOLDS ymbol expires JUL		]
•		CERTIFIC	TE OF SHOP INSP	ECTION		~ `	-  -
, the undersigne Province of		_and employed by	the National Board of	<u>Nor</u>	BOSTON, MASS	ACHUSETTS	<u> </u>
		state that to the best	spected the parts for the of my knowledge and t ode for Nuclear Power F	elief the NPT C	ertificate Holder ha		
By signing this exponent support:	certificate, neither s described in t	the Inspector nor his his Data Report. I	s employer makes any Furthermore heither t or a loss of any kind ar	warranty, expri	essed or implied, c nor his employed	r shall be liab	
Date	EV Z A	$D_{-}$		$- \sim -$	<b>`</b>		
Signed	anex!	Tavel	Commissions				_
	J			(Nat'l Board	State, Province, an	id Na.)	

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



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

## 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 06/26/03 Sheet: 1 Of 1 **Unit:** Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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(2)-1 RHR-400(S) RHR-400(R) RHR-401(B)(S) RHR-401(T)(S) RHR-401(B)(R) RHR-401(T)(R)	WPPSS * Pacific Scientific NPS Pacific Scientific Pacific Scientific NPS NPS	RHR(2)-1-P1 369 NA-2765-002-4 123 4006 NA-2765-002-6 NA-2765-002-7	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	1983 1976 1990 1976 1978 1990 1990	Replaced Replacement Replaced Replaced Replacement Replacement	Yes, Code Class 2 Yes, Code Class** Yes, Code Class** Yes, Code Class** No, Code Class** Yes, Code Class** Yes, Code Class***

7. Description Of Work Performed: Replaced existing snubbers with rigid struts for supports RHR-400 and 401. The replacement work was performed as follows:

- 1) Removed existing snubbers from the supports.
- 2) Installed replacement rigid struts for the supports reusing the existing parts.
- 3) Installed new under sized pins.
- 4) Torqued the rigid strut assemblies to the required torque values.
- 5) Verified that the replacement rigid struts were properly installed and that all fasteners were secure.
- 6) Perform VT-3 visual examination on the supports to satisfy ISI (PSI) requirements. VT-3 visual examination results acceptable.

## NOTES -

- 1) (S) Snubber
- 2) (R) Rigid strut
- 3) (T) Top
- 4) (B) Bottom

5) Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

6) \*\* ASME Section III, Code Class NF snubbers.

7) \*\*\* ASME Section III, Code Class NF (1) rigid struts. ASME Section III, Code Class NF(1) rigid struts for ASME Section III, Code Class NF(2) application.

8) The existing ASME Code Stamped piping system in which the ASME Section III, Code Class NF (1) replacement rigid struts were installed is Residual Heat Removal (RHR) piping system RHR(2)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

9) ASME Section III, Code Class NF(2) for the pins. ASME Section III, Code Class NF(1) pins for ASME Section III, Code Class NF(2) application.

	PLA	N No 2-
	ENERGY NORTHWEST People - Vision - Solutions	
FC	ORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
ests Conducte	ed: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F	X
<b>emarks:</b> See at <u>Support No</u> RHR-400 RHR-401(B) RHR-401(T)	ttached NF-2 Code Data Report for the following replacement rigid struts: Serial No NA-2765-002-4 NA-2765-002-6 NA-2765-002-7	
	CERTIFICATE OF COMPLIANCE	<del></del>
o the rules of Type Code Sy Certificate Of J	t the statements made in this Owner's Report are correct and this replacement conf the ASME Code, Section XI. rmbol Stamp: Not Applicable Authorization No.: Not Applicable te: Not Applicable	orms
Prepared By _ Date	Kuldip Singh - Program Lead Engineer (PLE) G 26 03 Date 6 26 03	(PLE)
	CERTIFICATE OF INSERVICE INSPECTION	·····
/essel Inspec of Hantford, Co period <u>//</u>	gned, holding a valid commission issued by the National Board of Boiler and Pres tors and the State of Washington and employed by Hartford Steam Boiler Of Conne- nnecticut have inspected the components described in this Owner's Report durin <u>() ()</u> to <u>() )</u> and state to the best of my knowledge and beli informed examinations and taken corrective measures described in this Owner's with the requirements of the ASME Code, Section XI.	cticut g the ef, the Report
mplied, conce Furthermore,	erning the examinations and corrective measures described in this Owner's Repo neither the inspector nor his employer shall be liable in any manner for any perso erty damage or a loss of any kind arising from or connected with this inspection.	ort. onal
ITT-CL	Commissions 74/74/2017486 11-2 1 National Board, State, and Endorsem	

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FORM NF-	2 NPT CERTIFICAT	E HOLDERS' PAR	ITIAL DATA REPOR	T FOR PARTS	FOR COMPON		
•		Y DIE Provisions.	of the ASME Code	Rules, tio	n III, Division 1		
1. Manufactu	red by NPS INDU	STRIES, INC.,	10420 METRIC	BOULEVARD	, AUSTIN, T	78758	
	UACUTNCT		lame and address of NPT C				
2. Manufactu	red for_WASHINGI		IER SUPPLY SYST	EM, P.U.	<u>BUX 968, RIC</u>	HLAND, WA	<u>   9</u> 93
3. Location o	WNP-		PLEX, WHS#1 N.			CHLAND, WA	<u>993</u>
i. (a)	(a)	(c)	(d) ·	(e)	(†)	(g)	•
Part	Canadian	Part	<b>_</b>		National		
Serial No.	Registration No.	Drawing No.	Description of Part	Class	Board No.	Year Built	
(1)_*	N/A	SPN-040	REPLACEMENT	1	N/A	1990	
(2)		REY. O	SNUBBER				
			SMR-1/2	<u> </u>			
(3)	•	RHR-40		A . 276	5-002-	1	
(4)'	<u></u>	PHR-40			165-002		<del></del>
(5)		Quel (0	$\frac{1(0)}{2}$				<del></del>
	-2765-002-1	KATK - 40	$I(\Gamma), SIN$	NA-C	765-002		
(7) <u>T</u>	HRU				0	here	<u> </u>
(R) NA-	-2765-002-15	( dela	sup Sings	VERIFIED 8	ACCEPTED -	Data	Dol
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(9)		• .	6 20 05				
(10)		· · · · · · · · · · · · · · · · · · ·	<u></u>		· · · · · · · · · · · · · · · · · · ·	•	
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			rect and that these comp				
		over Plant Compone	nts, Section III, Division	1, Edition <u>19</u>	1 Addenda W	INTER 1973	
ode Case no	<u>N24/</u>			/	$\langle \nabla \rangle$		
APRI	L 25 19 90	Signed NPS IN	DUSTRIES, INC.	- by -	2 Yum		
		INPT	Certificate Holder)		IDY REYNOLDS		
ur ASME Cer	rtilicate of Authorization	on No. <u>N-2689</u>	_to use the		rmbol expires JUL	<u>Y 12, 1991</u> (Date)	
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	•	CERTIFICA	TE OF SHOP INSP	ECTION		<b></b> `	1
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¥125	10 20		pecied the parts for the of my knowledge and b				
mponent sup			ode for Nuclear Power P				
y signing this	s certificate. neither t	he inspector nor his	employer makes any s	warranty, expre	issed or implied, c	oncerning the co	m-
			furthermore neither t				
• •			or a loss of any kind ari				ľ
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\*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information on items 1-4 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at the top of this form.



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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station **Date:** 06/19/03 **Sheet:** 1 Of 1 **Unit:** Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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 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-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
RFW-V-10A	Anchor Darling	1N260	N/A	N/A	1977		Yes, Code Class 1

7. Description Of Work Performed: Replaced existing threaded hinge pin plug with welded hinge pin plug for valve RFW-V-10A. The replacement work was performed as follows:

1) Removed existing threaded hinge pin plug from the valve.

2) Installed new replacement welded hinge pin plug in the valve.

3) Made required weld.

4) Performed visual examination on the final weld. Visual examination results acceptable.

5) Performed liquid penetrant (PT) examination on the final weld. Liquid penetrant (PT) examination results acceptable.

6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

### NOTES -

1) The liquid penetrant (PT) examination on the final weld was performed in accordance with the requirements of ASME Section III, Code Class 1, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

2) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

PLAN No 2-1836
ENERGY NORTHWEST
People · Vision · Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Test Temperature: 199.8° F Component Design Pressure: 2790 Psig Temperature: 100° F
9. Remarks: * The test pressure and the test temperature on the hinge pin cover bolted joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 *Reactor Pressure Vessel Leakage Test*.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable
Prepared ByKuldip Singh - Program Lead Engineer (PLE) Signed ByKuldip Singh - Program Lead Engineer (PLE)
Date = 61903 $Date = 61903$
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\frac{1}{2} - \frac{4}{2} - \frac{6}{2}$ to $\frac{7 - 1 - \frac{6}{2}}{2}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report
in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
Furthermore, neither the inspector nor his employer shall be 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 74/8/11/74/6 12 12 National Board, State, and Endorsements
Date <u>7-1-05</u>

Date: 05/22/03

Sheet: 1 Of 1

Unit: Not Applicable



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 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
RHR-V-60A	Marotta	101	1237	N/A	1981		Yes, Code Class 2

7. Description Of Work Performed: Replaced existing poppet for valve RHR-V-60A. The replacement work was performed as follows: 1) Removed existing valve poppet.

2) Installed replacement valve poppet in the valve.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)         Test Dessure: Paig         Test Temperature: °F         Component Design Pressure: Paig         Test Temperature: °F         Component Design Pressure: Paig         Test Temperature: °F         Component Design Pressure: Paig         Temperature: °F         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         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Prepared By		PLAN No 2-
Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F         Remarks: None       CERTIFICATE OF COMPLIANCE         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable       Certificate of Authorstation No: Not Applicable         Expiration Date: Not Applicable       Signed By       Kuidip Singh - Pkogram Lead Engineer (PLE)         Date       \$122 0 3       Date       \$122 0 3         CERTIFICATE OF 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       and         Assue Inspected the toxing the period       tox       and       and         ASME Code, Section XI.       Support during the period       tox       and       and         State to the best of my knowledge and bellet, the Owner's Report makes any warrantly, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report nor his employer makes any warrantly, expressed or implied, concerning the examinations and corrective measures described in this owner's Report.	FORM NIS-2 OWNER'S REPO	ORT FOR REPAIRS OR REPLACEMENTS (Back)
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Kuidip Singh - Plogram Lead Engineer (PLE)         Date       Signed By         Kuidip Singh - Plogram Lead Engineer (PLE)         Date       Signed Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Multip Singh - Plogram Lead Engineer (PLE)         Date       Signed By         Kuidip Singh - Plogram Lead Engineer (PLE)         Date       Signed By         Kuidip Singh - Plogram Lead Engineer (PLE)         Date       Signed By         Kuidip Singh - Plogram Lead         Date       Signed By         Kuidip Singh - Plogram Lead         Date       Signed By         Kuidip Singh - Plogram Lead         Date       Signed By         Kuidip Singh - Signed By       Notant Lead         Date       Signed By         Kuidip Singh - Signed By       Notant Lead         Date       Signed By         Kuidip Singh - Signed By	Test Pressure: Psig	Test Temperature: <sup>o</sup> F
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Expiration Date: Not Applicable Prepared By	Remarks: None	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Expiration Date: Not Applicable Prepared By		
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	CERTIF	FICATE OF COMPLIANCE
Kuldip Singh - Pilogram Lead Engineer (PLE)       Kuldip Singh - Pilogram Lead Engineer (PLE)         Date       \$122 03         Date       \$122 03         Date       \$122 03         CERTIFICATE OF 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	to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable	
<i>CERTIFICATE OF INSERVICE INSPECTION</i> <i>I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure</i> <i>Vessel inspectors and the State of and employed by</i> <i>have inspected the components</i> <i>described in this Owner's Report during the period to and</i> <i>state to the best of my knowledge and belief, the Owner has performed examinations and taken</i> <i>corrective measures described in this Owner's Report in accordance with the requirements of the</i> <i>ASME Code, Section XI.</i> <i>By signing this certificate neither the inspector nor his employer makes any warranty, expressed or</i> <i>implied, concerning the examinations and corrective measures described in this Owner's Report.</i> <i>Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal</i> <i>injury or property damage or a loss of any kind arising from or connected with this inspection.</i>		
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	Date5 22 03	Date5\22\03
Vessel inspectors and the State of and employed by	CERTIFICAT	TE OF INSERVICE INSPECTION
described in this Owner's Report during the period		and employed by
implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	state to the best of my knowledge and bell corrective measures described in this Owr ASME Code, Section XI.	he period to and lief, the Owner has performed examinations and taken ner's Report in accordance with the requirements of the
Not Required - Replacement 1" NPS And Smaller Commissions Inspector's Signature National Board, State, and Endorsements	implied, concerning the examinations and Furthermore, neither the Inspector nor his	corrective measures described in this Owner's Report. s employer shall be liable in any manner for any personal
Date	Inspector's Signature	Commissions

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Date: 05/22/03

Sheet: 1 Of 1

Unit: Not Applicable



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 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
RHR-V-75A	Marotta	103	1239	N/A	1981		Yes, Code Class 2

7. Description Of Work Performed: Replaced existing poppet for valve RHR-V-75A. The replacement work was performed as follows: 1) Removed existing valve poppet.

2) Installed replacement valve poppet in the valve.

### NOTES -

1) Valve parts for Marotta valves are manufactured by Enertech.

	EN	ENERGY NORTHWES'	PLAN No 2-1845
FOI	RM NIS-2 OWNER'S REPOR	T FOR REPAIRS	OR REPLACEMENTS (Back)
8 Tests Conducted	d: Hydrostatic Pneumat Test Pressure: Psig Component Design Pressure	<u> </u>	Operating Pressure None X est Temperature: ° F emperature: ° F
9. Remarks: None			
	CERTIFIC	CATE OF COMPLI	ANCE
to the rules of t Type Code Syn	the ASME Code, Section XI. abol Stamp: Not Applicable Authorization No.: Not Applicable	)wner's Report are	correct and this replacement conforms
Prepared By	Kuldip Singh - Program Lead Engineer	. ,	Kuldip Singh - Program Lead Engineer (PLE)
Date	5722/03	Date	5/22/03
	CERTIFICATE	OF INSERVICE IN	
l, the undersign Vessel inspecto	ned, holding a valid commissio	on issued by the N and emp	lational Board of Boiler and Pressure loyed by
state to the bes corrective mean ASME Code, Se By signing this implied, concer Furthermore, n	t of my knowledge and belief, sures described in this Owner ection XI. certificate neither the Inspect ning the examinations and co either the Inspector nor his er	period , the Owner has pe r's Report in accor tor nor his employe prrective measures mployer shall be lia	have inspected the components toand erformed examinations and taken dance with the requirements of the er makes any warranty, expressed or described in this Owner's Report. able in any manner for any personal
			connected with this inspection.
Ins	placement 1" NPS And Smaller pector's Signature	Commissio <b>ns</b>	National Board, State, and Endorsements

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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/31/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Service Water (SW) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced Service Water (SW) piping material down stream of SW-RO-2A. The replacement work was performed as follows:

1) Removed existing piping material such as sockolet, flange, pipe.

2) Beveled cut pipe ends.

3) Installed new section of 18" of pipe and flange.

4) Completed the root pass on both the 18" circumferential butt welds.

5) Performed visual examination on the root pass on both the 18" circumferential butt welds. Visual examination results acceptable.

7) 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) Made required socket welds.

10) Installed new studs and nuts for the bolted joint.

11) 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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The magnetic particle (MT) examination on the root pass for both the 18" welds was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in 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 requirements outlined in 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 requirements outlined in Code Case N-416-1.

P	LAN No 2-184
ENERGY NORTHWEST People - Vision - Belutions	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Baci	k)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Ot Test Pressure: 138 Psig Component Design Pressure: 309 Psig Temperature: 150° F	her
. Remarks: None	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement of to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable	conforms
Prepared By <u>(ulay)</u> Such Signed By <u>(ulay)</u> Signed By <u>Kuldip Singh - Program Lead Engineer (PLE)</u> Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Eng	inéer (PLE)
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Co of Hartford, Connecticut have inspected the components described in this Owner's Report d period $4-27-cs$ to $4-32-cs$ and state to the best of my knowledge and Owner has performed examinations and taken corrective measures described in this Owner in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expl implied, concerning the examinations and corrective measures described in this Owner's F urthermore, neither the Inspector nor his employer shall be liable in any manner for any p injury or property damage or a loss of any kind arising from or connected with this inspector	onnecticut uring the belief, the er's Report ressed or Report. personal
Inspector's Signature Commissions THSG IU/74184 NJ	E BUS
Date (1-30-03	



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/13/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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, 1995 Edition with 1996 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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-PCV-15	Target Rock	1	N/A	N/A	2003	Repaired	Yes, Code Class

7. Description Of Work Performed: Repaired valve RCIC-PCV-15. The repair work was performed as follows:

1) Cut valve body to bonnet (spring housing) tack welds.

2) Reassemble valve parts.

3) Made valve body to bonnet (spring housing) tack welds.

4) Performed visual examination on the final tack welds. Visual examination results acceptable.

		ERGY RTHWEST	PLAN No 2-18
FORM N	VIS-2 OWNER'S REPORT F	OR REPAIRS C	R REPLACEMENTS (Back)
	rdrostatic Pneumatic [ t Pressure: Psig mponent Design Pressure: 15	 Te	oerating Pressure Difference None X st Temperature: ° F mperature: ° F
. Remarks: None			
<b></b>			
	CERTIFICAT	E OF COMPLIA	INCE
rules of the ASME C Type Code Symbol Certificate Of Autho Expiration Date: Not Prepared By	Code, Section XI. Stamp: Not Applicable prization No.: Not Applicable	Signed By	Kuldip Singh - Program Lead Engineer (PLE)
	• · · · · · · · · · · · · · · · · · · ·		
	CERTIFICATE OF	INSERVICE IN	SPECTION
Vessel inspectors a of Hartford, Connection period <u>4/-22-05</u> Owner has performed in accordance with a By signing this certa implied, concerning Furthermore, neither	and the State of Washington a jout have inspected the comp to <u>(2-?0-0)</u> red examinations and taken of the requirements of the ASM tificate neither the inspector is g the examinations and corre- er the inspector nor his emplo	nd employed by conents describe and state to the corrective mease IE Code, Section nor his employed ctive measures loyer shall be lia	Ational Board of Boiler and Pressure Hartford Steam Boiler Of Connecticut ed in this Owner's Report during the best of my knowledge and belief, the ures described in this Owner's Report n XI. r makes any warranty, expressed or described in this Owner's Report. ble in any manner for any personal connected with this inspection.
<u></u>	r's Signature	Commissions	748610 / 7486 IN Z INS National Board, State, and Endorsements
Date <u>6-30-0</u>	<u>}</u>		

1.



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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/04/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Low Pressure Core Spray (LPCS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 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
LPCS-V-3	Anchor Darling	2N-563	N/A	N/A	1975		Yes, Code Class 2

7. Description Of Work Performed: Valve LPCS-V-3 was disassembled to perform work. The valve was reassembled without requiring any repair or replacement work, however the following work was performed:

- 1) Performed VT-3 visual examination on the existing hinge pin studs. VT-3 visual examination results acceptable.
- 2) Performed VT-3 visual examination on the existing hinge pin nuts. VT-3 visual examination results acceptable.
- 3) Reinstalled VT-3 visually examined existing hinge pin studs.
- 4) Reinstalled VT-3 visually examined existing hinge pin nuts.
- 5) Performed VT-3 visual examination on the existing body to bonnet studs. VT-3 visual examination results acceptable.
- 6) Performed VT-3 visual examination on the existing body to bonnet nuts. VT-3 visual examination results acceptable.
- 7) Reinstalled VT-3 visually examined existing body to bonnet studs.
- 8) Reinstalled VT-3 visually examined existing body to bonnet nuts.

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.

			RGY THWEST	[	PLAN No 2-18
FU	IRM NIS-2 UWNERS	S REPURI FUR	HEPAINS	DR REPLACEMENTS	(Back)
Tests Conducte	d: Hydrostatic Test Pressure: 325 F Component Design		Τέ	perating Pressure state the perature of the perature: 68° F Perperature: 100° F	Other
<i>Remarks:</i> None					
<b></b>					
		CERTIFICATE C	OF COMPLI	ANCE	
to the rules of Type Code Sy	the ASME Code, Sec mbol Stamp: Not Applic Authorization No.: No te: Not Applicable	ction XI. cable Applicable	s Report are _ Signed By _ Date	Kuldip Singh - Program Le	ement conforms
[					
Vessel Inspec of Hartford, Co period <u>5</u> <u>7</u> Owner has pe in accordance By signing thi implied, conce Furthermore,	ned, holding a valid tors and the State of necticut have inspect ?	Washington and ted the compon- of and taken corr ts of the ASME ( the Inspector nor ons and correction for his employed	led by the N employed by ents describ d state to the rective meas Code, Section his employed we measures er shall be lia	ational Board of Boiler y Hartford Steam Boiler ed in this Owner's Rep best of my knowledge sures described in this	Of Connecticut bort during the e and belief, the Owner's Report ar's Report. any personal
	Amonto Ispector's Signature	Co	ommissions	7456 L2/74183 National Board, State, ar	
Date	- 05				



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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/04/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-V-31B	Anchor Darling	2N-432	N/A	N/A	1975		Yes, Code Class 2

7. Description Of Work Performed: Valve RHR-V-31B was disassembled to perform work. The valve was reassembled without requiring any repair or replacement work, however the following work was performed:

- 1) Performed VT-3 visual examination on the existing hinge pin studs. VT-3 visual examination results acceptable.
- 2) Performed VT-3 visual examination on the existing hinge pin nuts. VT-3 visual examination results acceptable.
- 3) Reinstalled VT-3 visually examined existing hinge pin studs.
- 4) Reinstalled VT-3 visually examined existing hinge pin nuts.
- 5) Performed VT-3 visual examination on the existing body to bonnet studs. VT-3 visual examination results acceptable.
- 6) Performed VT-3 visual examination on the existing body to bonnet nuts. VT-3 visual examination results acceptable.
- 7) Reinstalled VT-3 visually examined existing body to bonnet studs.
- 8) Reinstalled VT-3 visually examined existing body to bonnet nuts.

9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

	PLAN No 2-1849 ENERGY NORTHWEST People: Vielon: Belutions
	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
87	Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       Other       Other         Test Pressure: 210 Psig       Test Temperature: 70° F         Component Design Pressure: 720 Psig       Temperature: 100° F
<b>9</b> .	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
ſ	CERTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int \frac{-12-02}{2}$ to $\frac{12-02}{2}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
	Mational Board, State, and Endorsements       Date     Commissions



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/22/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306 (b) Repair Organization P.O. No, Job No, etc.: PO No 313236

(c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR

(d) Certificate Of Authorization No.: NWS Technologies, LLC, VR No 632 And NR No 81

(e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2006 And NR - April 09, 2006

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 Disc Insert Disc Insert	Crosby Crosby Crosby	N63790-03-0051 N97499-33-0005 N97499-32-0024	N/A N/A N/A	N/A N/A N/A	1981 N/A N/A	Replaced Replacement	Yes, Code Class 1 No, Code Class 1 No, Code Class 1

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0045 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.

2) Removed existing disc insert Serial No N97499-33-0005 from the relief valve.

3) Installed replacement (modified) disc insert Serial No N97499-32-0024 in the relief valve.

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 for all twelve (12) studs.

5) 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 for all twelve (12) studs.

6) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results

acceptable for all twelve (12) nuts.

7) Reassembled the relief valve.

8) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.

9) Tested the relief valve at set pressure of 1185 PSIG. Test results acceptable.

	PLAN No ENERGY NORTHWEST
	People · Vision · Solutions
FC	ORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
est <b>s</b> Conducte	ed: Hydrostatic Pneumatic X Nominal Operating Pressure None Test Pressure: 10 Psig Test Temperature: 75 <sup>0</sup> F Component Design Pressure: 1185 Psig Temperature: 575 <sup>0</sup> F
am Relief Valve (Mi N63790-00-0051 (i	e attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for ISRV), Serial No N63790-03-0051, 2) See attached NV-1 Code Data Report for Main Stearn Relief Valve (MSRV) Post Mod Serial No N63790-03-0051), 3) Component design pressure of 1185 Psig and design temperature of 57 blief Valve (MSRV) set pressure and rated temperature respectively.
	CERTIFICATE OF COMPLIANCE
to the rules of Type Code Sy Certificate Of	at the statements made in this Owner's Report are correct and this replacement conforms If the ASME Code, Section XI. Ymbol Stamp: Not Applicable Authorization No.: Not Applicable Ite: Not Applicable
Prepared By _	Kuldip Singh - Program Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Date	S122103 Date S122103
<u></u>	CERTIFICATE OF INSERVICE INSPECTION
Vessel Inspect of Hartford, Co period <u>5</u> <u>7</u> Owner has per in accordance By signing this implied, conce Furthermore,	gned, holding a valid commission issued by the National Board of Boiler and Pressure ctors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut onnecticut have inspected the components described in this Owner's Report during the $\sqrt{2-C^2}$ to $\sqrt{2-C^2}$ and state to the best of my knowledge and belief, the erformed examinations and taken corrective measures described in this Owner's Report e with the requirements of the ASME Code, Section XI. is certificate neither the inspector nor his employer makes any warranty, expressed on erning the examinations and corrective measures described in this Owner's Report. neither the inspector nor his employer shall be liable in any manner for any personal perty damage or a loss of any kind arising from or connected with this inspection.
<u>/////</u>	nspector's Signature Commissions 7476 W/ 7486 IN I IN National Board, State, and Endorsements
Date 7-/	

			PL	AN NO. 2	2-1850
F(	ORM NVR-1 REPORT OF NUCLEAR PR				2p Surps
1. Work performed by:	NWS Technologies, L 131 Venture Boulevard, Sp		Purchase Order	r#00313236	হ/22/33 Rev. 2
2. Work performed for:	Energy Northwest - Columb	ia Generating	Station		<u> </u>
	ress and identification of nuc r Plant Loop, Richland, WA	• •	ant: Energy No	orthwest - Columb	bia Generating
	e relief device: <u>Main Stea</u> turer: <u>Crosby Valve &amp; Gag</u>	m Safety Relie e Co.	ef Valve		
c: Identifying nos. <u>HB-65-BP-1</u> (type)	N new s/n: <u>N63790-</u> (mfrs		N/A stean (NB#) (service		<u>1981</u> (yr.built)
d: Construction Code	-	1971 (edition)	<u>N/A</u>	N/A (Code Cases(s))	(Code Class)
6. ASME Code Section	XI applicable for inservice in	spection:	1989	N/A	<u>N/A</u>
7. ASME Code Section	XI used for repairs, replacen	nents:	(edition) 1989 (edition)	(addenda) <u>N/A</u> (addenda)	(Code Case(s)) N/A (Code Case(s))
B. Construction Code u	sed for repairs, replacement	5:	(edition)	(addenda) (addenda)	(Code Case(s)) N/A (Code Case(s))
9. Design responsibilitie			•	• - <u>-</u>	•
10. Opening pressure: Set-pressure adjust		echnologies, I	LLC usir	ng <u>steam</u>	
11. Description of work	(include namé and identifying num	ber of replaceme	nt parts): See att	achment 1.	
12. Remarks: See attac	hment 1.				
conforms to Section XI National Board Certifica National Board Certifica	a certify that to the best ne repair, modification or rep of the ASME Code and the N the of Authorization No. te of Authorization No. Technologies, LLC Repair Organization	lacement of th lational Board 532 to use to 81 to use to <i>Vicas</i> Author	edge and belief the ressure relief Inspection Code the "VR" stamp end the "NF" stamp end the "NF" stamp end the "NF" stamp end the representative	devices describe "VR" and "NR" r xpires <u>April 3</u> xpires <u>April 9</u>	ed above rules. , 2006.
Vessel Inspectors and o by <u>Hartford Steam Bo</u> or replacement describe this repair, modification Code and the National 1 By signing this certificat concerning this repair, r	al Jr. holding a valid comme certificate of competency issu- tiler of CT ad in this report on <u>12 APA</u> or replacement has been co Board Inspection Code "VR" e, neither the undersigned n modification or replacement of the liable in any manner for an	of <u>Hartfon</u> <u>2003</u> and sta mpleted in acc and "NR" rule or my employed described in th	by The National sdiction of <u>Not</u> d, <u>CT</u> have in the that to the bes cordance with Se s. er makes any wa is report. Further	rth Carolina and ispected the repart it of my knowledg ction XI of the of rranty, expressed more, neither the	d employed air, modification ge and belief, the ASME d or implied, e undersigned
<u>4/22/03</u>	Inspector's Stanature	a second production of	NB # 8462, A, N Commissions (NB (in		risdiction, & no.)

# FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 2 131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: <u>Energy Northwest - Columbia</u> Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0051

11. Description of work:

NWS Traveler # 03-65

The valve was disassembled. The nozzle and disc were removed for NDE. The disc was replaced. The old disc was packaged for return to site.

New disc: N97499-33-0024 was installed.

Both disc and nozzle were polished by NWS prior to installation.

Other parts replaced during the repair include:Disc Holder Spiral Pins (2):MC 54407794Eductor Gasket:MC 56230461Inlet Studs:N/A

During the initial repair, accelerometer mounts were installed on the spindle and spring as directed by CGS engineering. The valve was tested to ensure mount integrity. During the jack and lap, accelerometers were installed on the mounts.

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

**NWS Technologies, LLC** Manager, QA (authorized representative) (repair organization) (title) NB# 8462, A.N.I NC# 1073 Commissions (NB (incl endorsements), jurisdiction,& no.) \*

PLAN NO. 2-1850

Queaup Sur's 522133 CROSBY VALVE & GAGE COMPANY CROSBY WRENTHAW, NASS FORM MY-1 FOR SAFETY AND SAFETY RELIEF W/LVES Q.C.-44D As Required by the Provisions of the ASPE Code Rules BATA REPORT Salaty and Salaty Relief Valves 1. Menufactured By \_ Crooby Value & Gage Company, 43 Kendrick St., Prentham, MA 02093 r and Address Nodel No. HB-65-E2-FN Order No. N94275 Contract Date 4/26/79 National Board No. N/A 2. Nasufactured For San Jone, CA 93125 Order No. . Base and Address 205-17986 3. Owner\_ Washington Public Power Supply System, Richland, Washington 99352 4. Location of Plant\_ Hanford Reservation, Richland, Washington 99352 5. Valve IdentificationMPL #322-F013 Series Ho. N63790-00-0051 Drawing Nc. DS-A-63790 Rev. C a<u>Safery Relief</u> Safery, Salers Balief, Pilor, Orifice Size R Pipe Size -- Injer 6 Outlet 10 Power Accusted 575° 6. Set Pressure (pate)\_ 1185 Rated Temperature Stamped Capacity\_\_\_\_\_891,250 2% to 11% # 3 10verpressure \_Blevdern (psig)\_ 975 psig (Assembled Valve) Gutlet 1100 psig (Body Only) Mydrostatic Test .seig) Inlat 2370 (Apolicable Valves for Closed Systems Only) Pressure Retaining Floces Serial No. Natorial Specification Including Type or Grade Identification Bar Stock & Forgings 於花 \$195576r.<sup>Cr</sup>t1<sup>11</sup> N93183-35-0070 Body ASTH A105-71 Gr. II ASHE SA105 Gr. II N93407-35-0033 Bonnet b. Baccizzakchelizaerza -Superiodox Dist Insert N93185-34-0083 ASHE \$4637 Gr. 716 ASHE SA182 Gr. 7316 ¥93184-33-0055 Nose1. Diec Holder\*K55434-35-0084 \_\_\*889714-34-0122 K62856-35-0089 AMS 5662B ASTH A105-71 Gr. 11 Sering Venhern K62858-35-0033 K62857-35-0054 ASHE SA105 Gr. II ASME \$A193 Gt. 86 Adjusting Bolt N93410-33-0058 Spindle Point K6:373-37-0151 ASPE SAS64 Type 630 N89720-43-0146 KX2689-0119 c. Spring K62858-33-0033 ASTM A304-66 Gr. 4161H Bolging Spindle Ball Spindle Ball M93213-0218 W93209-32-0 . Stoody #6 ASHE SA193 Gr. B6 Thrust Bearing Adapter ¥93409-32-0053 45 - 6116576. Cr. 17 (BW5. 117) 893207-0609 thru 0620 Benner Stud (J87) N93210-0829 thru 0840 ASME SA194 Gr. 2H ASME SA194 Gr. 2H ASME SA193 Gr. 27 ASTH A194-71 Gr. 2H ASME SA194 Gr. 2H Bonnet Stud Hut Inlet Stud (BW6) N93216-0611 thru 0622 (BW8) N93218-0615 thru 0626 Inlet Stud Nut ASHE SAIDS Gr. B6 Adjusting Bolt Sutton K93411-33-0059 Ċ(;;;; ¥63618-13-0059 MAB

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FOR INFORMATION ONLY

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	N 620 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -
	East of the State
	Valve eriginally built signat Crosby Order No. N103600, Assembly No. N56000. Valve modification consists of replacement of the Disc Insert, Nozzla, Bonnet Stud Nucs, Adjusting Bolt, and Thrust Bearing Adsper, remachining Bolt Button Assembly. New serialization is required unless indicated by an asterish. 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 Flant Components, Section III, Div. 1. <u></u>
•	Class
	(N Certificate Helder) Our ASHE Certificate of Authorization No 1878 to use the NV
	symbol supiras_September 30, 1983
·	(Date)
•	CENTIFICATION OF DESIGN
	Design information on file at Crosby Valve & Gage Company
	Stress analysis report (Class 1 omly) on file at <u>Crosby Valve &amp; Gage Company</u> 43 Kendrick Street, Wrentham, <u>Massachupetts</u> 02093
	AJ Kendrick Street, brentnam, Massachusette U2093 Design specifications certified by Boyd P. Brooks
	PE State <u>California</u> Reg. No. <u>13655</u> Stress report certified by <sup>1</sup> W. D. Greenlaw
	Stress report certified by <sup>1</sup> W. D. Greenlaw PE State MassachusettsReg. No14784
	1 Signature not required - list name only.
	CERTIFICATE OF SHOP INSPECTION
	I, the undersigned, helding a valid commission issued by the National Joard of Joiler and Pressure Vessel Inspectors and the State or Province of <u>Massachusetts</u> and employed by Factory Nutual Systems <sup>*</sup> of <u>Norwood</u> , <u>Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>1/7</u> , <u>K</u> 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 squipment described in this Data Report. Further- more, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
	Date $1/9$ 19 $31$
	Signed [Buy Stills Commissions MASS 1266 (Inspector) (Nat'1. Bd., State, Prov. and No.)-FE
	"Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.
	MAB 20'
	• • • I
	۲ <sup>۳</sup>
• •	۲ <sup>*</sup>
• <u>·</u> •··	<b>5 6</b>
- <u>.</u> .	<b>N</b> 3 <b>N</b> 4 <b>N</b> 5 6 <b>1</b> 7 <b>1</b> 8 <b>1</b> 9 <b>1</b> 10

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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/22/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306 (b) Repair Organization P.O. No, Job No, etc.: PO No 313236

(c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR

(d) Certificate Of Authorization No .: NWS Technologies, LLC, VR No 632 And NR No 81

(e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2006 And NR - April 09, 2006

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	N63790-03-0057	N/A	N/A	1980		Yes, Code Class

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0057 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.

2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for all twelve (12) studs.

3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable for all twelve (12) studs.

4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable for all twelve (12) nuts.

5) Reassembled the relief valve.

6) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.

7) Tested the relief valve at set pressure of 1195 PSIG. Test results acceptable.

and the state of the		5-4-65
CROSBY	CROSBY VALVE	
AND ANY ON DESCRIPTION OF A DAMAGE STRAND AND AND AND AND AND AND AND AND AND	WRENTI	HAM, HASS
		PLAN No 2-1851
	-1 FOR SAFETY AND SAFETY RELIEF	
AB REQUITED	by the Provisions of the ASME (	Julan Bur
S	DATA REPORT Safety and Safety Relief Valves	5122(03
	· ·	· · · ·
1. Menufectured By Crosby Valv	Name and Address	it., Wrentham, MA 02093
Kodel No. <u>HB-65-BP-FN</u> Orde	r No. N94275 Contract Date	4/24/79 National Board No. N/A
General El	ectric Company, 175 Curtne	
2. Manufactured For San Jose,	Name and Address	
3. Owner Washington Public	Power Supply System, Richl.	and, Washington 99352
Handand D	Name and Address	
4. Location of Plant Hanford R	coctvation, Alchiand, Wash	THECH 77336
5. Valve Identification <u>MPL #B2</u>	<u>2-F013</u> Serial No. <u>N63790-00-0</u>	057 Drawing Ko. <u>DS-A-63790 R</u> ev
Type Safety Relief	Orifice Size R P	ipe Size Inlet 6 Outlet 10
Safety, Safety Relief, I		
Power Actuated	1105 iv	6760
6. Set Pressure (psig)	1195	F Rated Temperature
Stamped Capacity 899,185	e 3 zoverpressure -	Blowdown (psig) 2 % to
		5 psig (Assembled V
Hydrostatic Test (psig) Inlet		to Valves for Closed Systems Only)
Pressure Retaining Pieces		
New Check ( Tempines	Serial No. Identification	Material Specification Including Type or Grade
Bar Stock & Forgings a. Carthlys		ASTM A105-71 Gr. II
Body	<u>N93183-35-0076</u>	ASME SA105 GT. II
Bonnet	N93407-35-0039	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. Bankingerkennenke		
Kuppersoner Disc Insert	N93185-34-0089	ASME SA637 Gr. 718
Nozzle	<u>N93184-33-0061</u>	ASME SA182 Gr. F316
Disc Holder*K55484-35-0083		AMS 5662B
Spring Washers K62858-35-003	89 <u>K62857-35-0095</u>	ASTM A105-71 Gr. II ASME SA105 Gr. II
		ASTM A105-71 Gr. 11 ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0064	ASTM A105-71 Gr. II ASME SA105 Gr. II ASME SA193 Gr. B6
Adjusting Bolt Spindle Point K62873-35-005	N93410-33-0064 57*N89720-34-0073	ASTM A105-71 Gr. II ASME SA105 Gr. II ASME SA193 Gr. B6 ASTM A564-71 Type 630 ASME SA564 Type 630
Adjusting Bolt Spindle Point K62873-35-005 c. SpringK62858-35-0039	N93410-33-0064	ASTM A105-71 Gr. 11 ASME SA105 Gr. 11 ASME SA193 Gr. B6 ASTM A564-71 Type 630 ASME SA564 Type 630 ASTM A304-66 Gr. 4161 H
Adjusting Bolt Spindle Point K62873-35-005 c. SpringK62858-35-0039 d. Bolting	N93410-33-0064 7 *N89720-34-0073 *N89722-0015	ASTM A105-71 Gr. 11 ASME SA105 Gr. 11 ASME SA193 Gr. B6 ASTM A564-71 Type 630 ASME SA564 Type 630 ASTM A304-66 Gr. 4161 H Z X 0 0 3 8 0 0 9 0
Adjusting Bolt Spindle Point K62873-35-005 c. SpringK52858-35-0039 d. Bolting Spindle Ball c. Commander K62873-35-005	N93410-33-0064 7 *N89720-34-0073 *N89722-0015 7 N93213-0057	ASTM A105-71 Gr. 11 ASME SA105 Gr. 11 ASME SA193 Gr. B6 ASTM A564-71 Type 630 ASME SA564 Type 630 ASTM A304-66 Gr. 4161 H 7 X 00380090 Stellite #6
Adjusting Bolt Spindle Point K62873-35-005 c. SpringK62858-35-0039 d. Bolting Spindle Ball c. Chink K62873-35-005 Thrust Bearing Adapter	N93410-33-0064 N89720-34-0073 *N89722-0015 N93213-0057 N93409-32-0059	ASTM A105-71 Gr. 11 ASME SA105 Gr. 11 ASME SA193 Gr. B6 ASTM A564-71 Type 630 ASTM A304-66 Gr. 4161 H <u>7 X 0 0 3 8 0 0 9 0</u> Stellite #6 ASME SA193 Gr. B6
Adjusting Bolt Spindle Point K62873-35-005 c. SpringK62858-35-0039 d. Bolting Spindle Ball c. CHARTER K62873-35-005 Thrust Bearing Adapter Bonnet Stud (BW5,	N93410-33-0064 7 *N89720-34-0073 *N89722-0015 7 N93213-0057 N93409-32-0059 117) N93207-0681 thru 0692	ASTM A105-71 Gr. II ASME SA105 Gr. II ASME SA193 Gr. B6 ASTM A564-71 Type 630 ASTM A304-66 Gr. 4161 H ZX00380090 Stellite #6 ASME SA193 Gr. B6 ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Adjusting Bolt Spindle Point K62873-35-005 c. SpringK62858-35-0039 d. Bolting Spindle Ball e. Churker K62873-35-005 Thrust Bearing Adapter Bonnet Stud (BW5, Bonnet Stud Nut (	N93410-33-0064 17 *N89720-34-0073 *N89722-0015 17 N93213-0057 N93409-32-0059 117) N93207-0681 thru 0692 J87) N93210-0901 thru 0912	ASTM A105-71 Gr. 11 ASME SA105 Gr. 11 ASME SA193 Gr. B6 ASTM A564-71 Type 630 ASTM A304-66 Gr. 4161 H <u>7 X 00380090</u> Stellite #6 ASME SA193 Gr. B6 ASTM A193-71 Gr. B7 ASME SA193 Gr. B7 ASME SA194 Gr. 2H
Adjusting Bolt Spindle Point K62873-35-005 c. SpringK62858-35-0039 d. Bolting Spindle Ball e. OTHERE K62873-35-005 Thrust Bearing Adapter Bonnet Stud (BW5, Bonnet Stud Nut (	N93410-33-0064 7 *N89720-34-0073 *N89722-0015 7 N93213-0057 N93409-32-0059 117) N93207-0681 thru 0692	ASTM A105-71 Gr. II ASME SA105 Gr. II ASME SA193 Gr. B6 ASTM A564-71 Type 630 ASME SA564 Type 630 ASTM A304-66 Gr. 4161 H Z X 0 0 3 8 0 0 9 0 Stellite #6 ASME SA193 Gr. B6 ASME SA193 Gr. B7 ASME SA193 Gr. B7 ASME SA194 Gr. 2H ASTM A193-71 Gr. B7 ASME SA193 Gr. B7
Adjusting Bolt Spindle Point K62873-35-005 c. SpringK62858-35-0039 d. Bolting Spindle Ball e. OTHER BEATING Adapter Bonnet Stud (BW5, Bonnet Stud Nut ( Inlet Stud (	N93410-33-0064 17 *N89720-34-0073 *N89722-0015 17 N93213-0057 N93409-32-0059 117) N93207-0681 thru 0692 J87) N93210-0901 thru 0912	ASTM A105-71 Gr. 11 ASME SA105 Gr. 11 ASME SA193 Gr. B6 ASTM A564-71 Type 630 ASTM A564-71 Type 630 ASTM A304-66 Gr. 4161 H Z X 0 0 3 8 0 0 9 0 Stellite #6 ASME SA193 Gr. B6 ASTM A193-71 Gr. B7 ASME SA194 Gr. 2H ASTM A193-71 Gr. B7 ASTM A193-71 Gr. B7 ASTM A193-71 Gr. 2H

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Adjusting bolt, and incost scaling Adapter, itenting of the Assembly. New 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. Nuc 3790-100-10-10-10-10-10-10-10-10-10-10-10-1
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this report are correct and that this value 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 11-5-20 Signed Crosby Value & Gage Co. by C.G. Catavant (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 <u>Crosby Valve &amp; Gage Company</u>
43 Kendrick Street, Wrentham, Massachusetts 02093
Design specifications certified by Boyd P. Brooks
PE State California Reg. No. 13655
Scress report certified by <sup>1</sup> W.D. Greenlaw
PE State <u>Massachusetts</u> Reg. No. <u>14784</u>
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 <u>Massachusetts</u> and employed by <u>Factory Mutual Systems</u> * of <u>Norwood</u> , <u>Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>12-9</u> , 19 <u>50</u> 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,
By signing this certificate, meither the inspector nor his employed makes any warrant, expressed or implied, concerning the equipment described in this Data Report. Further- more, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Date
*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380091



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/22/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306 (b) Repair Organization P.O. No, Job No, etc.: PO No 313236

(c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR

(d) Certificate Of Authorization No.: NWS Technologies, LLC, VR No 632 And NR No 81

(e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2006 And NR - April 09, 2006

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 Disc Insert Disc Insert Nozzle Nozzle	Crosby Crosby Crosby Crosby Crosby	N63790-03-0058 N93185-56-0237 N97499-33-0028 N93184-38-0059 N97498-50-0150	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	1980 N/A N/A N/A N/A	Replaced Replacement Replaced Replacement	Yes, Code Class 1 No, Code Class 1 No, Code Class 1 No, Code Class 1 No, Code Class 1

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0058 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.

2) Removed existing disc insert Serial No N93185-56-0237 from the relief valve.

3) Installed replacement (modified) disc insert Serial No N97499-33-0028 in the relief valve.

4) Removed existing nozzle Serial No N93184-38-0059 from the relief valve.

5) Installed replacement (modified) nozzle Serial No N97498-50-0150 from the relief valve.

6) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for all twelve (12) studs.

7) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable for all twelve (12) studs.

8) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable for all twelve (12) nuts.

9) Reassembled the relief valve.

10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.

11) Tested the relief valve at set pressure of 1195 PSIG. Test results acceptable.

### NOTES -

1) Nozzle Serial No N93184-50-0150 was previously modified (upgraded) to Serial No N97498-50-0150 by Energy Northwest in accordance with ASME Section XI Plan No 2-1779.

PLAN No 2-1852
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic       Pneumatic       X       Nominal Operating Pressure       None       None         Test Pressure: 10 Psig       Test Temperature: 75° F         Component Design Pressure: 1195 Psig       Temperature: 575° F
<b>9. Remarks:</b> 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for Main Steam Relief Valve (MSRV), Serial No N63790-03-0058, 2) See attached NV-1 Code Data Report for Main Steam Relief Valve (MSRV), Serial No N63790-00-0058 (Post Mod Serial No N63790-03-0058), 3) Component design pressure of 1195 Psig and design temperature of 575 <sup>o</sup> F is for the Main Steam Relief Valve (MSRV) set pressure and rated temperature respectively.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
Prepared By Julaip Saugh Signed By Julaip Sing b
Kuldip Singh - Program Lead Engineer (PLE)     Kuldip Singh - Program Lead Engineer (PLE)       Date     5/22/03     Date
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{S-Y-CY}$ to $\underline{Z-I-CY}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or
implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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     74764/7496     N I ms       National Board, State, and Endorsements
Date 7-1-07

PLAN No. 2- 1852 FORM NVR-1 REPORT OF REPAIR B REPLACEMENT B OF NUCLEAR PRESSURE BELIEF DEVICES

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1. Work performed by: NWS Technologies 131 Venture Boulevard,	<u>مر میں میں میں میں میں میں میں میں میں میں</u>	Purchase C SC 29306	Order #00313236	Rev. 2 5727(03
2. Work performed for: Energy Northwest - Col	umbia Generatin	g Station		
3/4. Owner - name, address and identification of Station, North Power Plant Loop, Richland, M	• •	lant: Energy	y Northwest - Colum	bia Generating
5. a: Repaired pressure relief device: <u>Main S</u> b: Name of manufacturer: <u>Crosby Valve &amp; C</u> c: Identifying nos.	Steam Safety Rel Gage Co.	ief Valve		
HB-65-BP-FN new s/n: N637	90-03-0058	N/A st	team6 x 10	1980
(type) (r	mfr's S/N)		ervice) (size)	(yr.built)
d: Construction Code: ASME Sec. III Div. 1		<u>N/A</u>	<u> </u>	1
(name/section/division)	(edition)	(addenda)	(Code Cases(s))	(Code Class)
6. ASME Code Section XI applicable for inservic	e inspection:	1989	<u>N/A</u>	<u> </u>
		(edition)	• •	(Code Case(s))
7. ASME Code Section XI used for repairs, repla	icements:	1989 (edition)	N/A(addenda)	N/A
8. Construction Code used for repairs, replacem	ents:	1971	(addenda) N/A	(Code Case(s)) N/A
		(edition)		(Code Case(s))
9. Design responsibilities: N/A				
<ul> <li>10. Opening pressure: <u>1195 psig</u> Set-pressure adjustment made at: <u>NW</u></li> <li>11. Description of work (include name and identifying</li> <li>12. Remarks: See attachment 1.</li> </ul>	/S Technologies, number of replacem		using <u>steam</u> e attachment 1.	
	ICATE OF CON	DI LANCE		
I.Cesar V. Sierracertify that to the report are correct and the repair, modification or conforms to Section XI of the ASME Code and the National Board Certificate of Authorization No. National Board Certificate of Authorization No. $4/2Z/03$ NWS Technologies, LLC Repair Organization	best of my know replacement of the National Board 632 to use 81 to use	ledge and beli he pressure re d Inspection C the "VR" star the "NR" star www.star horized representation	ode "VR" and "NR" r p expires <u>April 3</u> p expires <u>April 9</u> Ma	ed above ules. , 2006.
I. <u>Charles F. Toegel Jr.</u> holding a valid co Vessel Inspectors and certificate of competency by <u>Hartford Steam Boller of CT</u> or replacement described in this report on <u>22.4</u> this repair, modification or replacement has been Code and the National Board Inspection Code "N By signing this certificate, neither the undersigned concerning this repair, modification or replacement nor my employer shall be liable in any manner for arising from or connected with this inspection.	issued by the jun of <u>Hartfo</u> <u>ARIL Zoo3</u> and st n completed in ac /R" and "NR" rule ed nor my employ ent described in t	by The Natio isdiction of rd, CT hav ate that to the cordance with es. rer makes any his report. Fur jury, property	North Carolina an re inspected the repar- best of my knowledge Section XI of the of warranty, expressed thermore, neither the damage or loss of a	d employed air, modification ge and belief, the ASME d or implied, e undersigned
<u>-4/22/03</u> <u>Interview Actors</u>	re / ·	NB # 8462, A	A, N, I NC# 1073 B (incl endorsements), jui	risdiction. & no.);
- DEC Insherior 2 Officiality	·• #	AALININGS/ALIS /LA	w turna ana ana ara ara una ing 10	waterier (w DV.) '

# FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 2 131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant <u>Energy Northwest - Columbia</u> Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0058

The S/N for this valve was <u>N63790-00-0058</u> The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.

**11.** Description of work:

The valve was disassembled. The nozzle was removed and returned to site with the disc.

CGS machined the nozzle to the new flexi-disc dimensions.

NWS machined the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00.Disc S/N:N97499-33-0028andNozzle S/N:N97498-50-0150

were installed in the valve.

Both disc and nozzle were polished by NWS prior to installation.

Other parts replaced during the repair include:

Disc Holder Spiral Pins (2):	MC 54407794
Eductor Gasket:	MC 56230461
inlet Studs:	N/A

NWS Traveler # 03-67

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

**NWS Technologies, LLC** Manager, QA (authorized representative) (repair organization) (title) NB# 8462, A,N,I NC# 1073 Commissions (NB (incl endorsements), jurisdiction, & no.)

CROSSY VALVE & GAGE COMPANY VALVE & GAGE COMPANY Select and Select Relief Valves 0.Cids DATA EFORT Select and Select Relief Valves 1. Remulactured by_ <u>Creaty Valve &amp; Cape Company. 13</u> Kenthem. RJ 02071 Medi No.JB-65-87-71 Order Ro. B2225 Central Electric Company. 135 Curtaet Ave., 2. Remulactured by_ <u>Creaty Valve &amp; Cape Company. 135 Curtaet Ave.</u> , 2. Remulactured For. <u>Control Edge Company. 135 Curtaet Ave.</u> , 2. Remulactured For. <u>Control Edge Company. 135 Curtaet Ave.</u> , 2. Remulactured For. <u>Control Edge Company. 135 Curtaet Ave.</u> , 2. Remulactured For. <u>Control Edge Company. 135 Curtaet Ave.</u> , 2. Remulactured For. <u>Control Edge Control Edge </u>			Audip &
As laquired by the Provisions of the ASE Code Bules DATA REPORT Safety and Safety Rolis/ Values 3. Hanufactured By_ <u>Cronby Value &amp; Case Company. Al Handrich St. Frenchen. MA 02021</u> Nodel Ho. <u>HD-65-BP-77</u> Order He. <u>B24275</u> Contract Bate <u>4/24/79 Mational Board He.</u> <u>W/A</u> General Electric Company. 175 Curtuer Ave 2. Hanufactured For_ <u>St. Jon. Act. CA 93132</u> . Conser <u>Mashington Public Power Supply System. Richland, Washington 99352</u> . Conser <u>Mashington Public Power Supply System. Richland, Washington 99352</u> . Lecettem of Fiant <u>Hanferd Esservation, Richland, Washington 99352</u> . Lecettem of Fiant <u>Hanferd Esservation, Richland, Washington 99352</u> . Lecettem of Fiant <u>Hanferd Esservation, Richland, Washington 99352</u> . Valve Identification <u>KTL f822-F013</u> terial He. <u>B3790-00-005</u> BDreviag He. <u>DS-A-63790 Rev.</u> Typ <u>Safety Reidef</u> <u>Orifice Size Tinch Inch</u> States telestification <u>FIL f822-F013</u> terial He. <u>B53790-00-005</u> BDreviag He. <u>DS-A-63790 Rev.</u> Typ <u>Safety Reidef</u> <u>Orifice Size Tinch Inch</u> States telestification <u>FIL f822-F013</u> terial He. <u>B53790-00-005</u> BDreviag He. <u>DS-A-63790 Rev.</u> Typ <u>Safety Reidef</u> <u>Orifice Size Tinch Inch</u> States telestification <u>FIL f822-F013</u> terial He. <u>B53790-00-005</u> BDreviag He. <u>DS-A-63790 Rev.</u> Typ <u>Safety Reidef</u> <u>Orifice Size Tinch Inch</u> States telestification <u>FIL f822-F013</u> States telestification <u>Inch</u> Bate Safety Reidef <b>States freesoure</b> (peig) <u>1195</u> <u>States telestification</u> <u>State Safety Nalve)</u> Mydrowatte (Sigi Jalet <u>2370</u> <u>Outlet</u> <u>11005</u> <u>BF1E f8607</u> <u>D545</u> , Valve) HyJHoch2-15 <u>Cr. 111</u> Master Safety <u>H93183-33-0007</u> <u>ASTE SA182 Cr. 71</u> Messile <u>H93183-33-0062</u> <u>ASTE SA182 Cr. 71</u> Messile <u>H93183-33-0062</u> <u>ASTE SA1832 Cr. 71</u> Messile <u>H93407-33-0055</u> <u>ASTE SA1852 Cr. 71</u> Messile <u>H93407-33-0056</u> <u>ASTE SA1957 Cr. 111</u> Adjustiss Bolt <u>H93407-33-0056</u> <u>ASTE SA1957 Cr. 111</u> Adjustiss Bolt <u>H93407-33-0058</u> <u>State 71 7578 8830</u> t. Spring K2258-33-0040 <u>H83722-0016</u> <u>ASTE SA1957 Cr. 111</u> Adjustiss Bolt <u>H93409-32-0060</u> <u>ASTE SA1957 Cr. 111</u> Adjustiss Bolt	CROSBY	••••••••••••••	E & GAGE COMPANY
Lafety med Safety Reilef Valves  1. Hanufactured By_CTably Valve & Capt Company, 43 Kendgrich St., Mranthan, RA 92021  Nedel Ho. <u>HD-65-B7-FF Grader Ho. EF04275</u> Contract Date <u>4/24/79</u> Matianal Loard Ho. <u>N/A</u> Contract. <u>C4 93125</u> Contract Date <u>4/24/79</u> Matianal Loard Ho. <u>N/A</u> Contract. <u>C4 93125</u> Contract Date <u>4/24/79</u> Matianal Loard Ho. <u>N/A</u> Contract. <u>C4 93125</u> Contract Date <u>4/24/79</u> Matianal Loard Ho. <u>N/A</u> Location of Public Power Supply System, Richland, Washington <u>99352</u> Lase and Address  4. Location of Flant <u>Hanford Baservation RC.hland</u> , Washington <u>99352</u> Lase and Address  4. Location of Flant <u>Hanford Baservation RC.hland</u> , Washington <u>99352</u> Lase and Address  4. Location of Flant <u>Hanford Baservation RC.hland</u> , Washington <u>99352</u> Lase the state of the the the test test test test test te			
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Rade and Address         Node) No. <u>HD-52-FTF Order No</u>		• ••• •••	-
General Electric Company, 175 Curtner Ave., San Joiz CA 93123       Order No., Order No., 205-A1986         1. Gener Washington Public Power Supply System, Richland, Washington 99352         2. Lacation of Plant Manford Reservation, Richland, Washington 99352         3. Valve Identification PTL #22-PD13Serial No., B5750-00-0058Dreving No., DS-A-63790 Rev.         Type       Safety Reidef, Filet, Fore Safety Reidef, Filet, Power Actuated         5. Valve Identification PTL #22-PD13Serial No., B5750-00-0058Dreving No., DS-A-63790 Rev.         Type       Safety Reidef, Filet, Power Actuated         6. Set Pressure (peigt)       1195         Stamped Capacity, B192, 285       4 3 TOverpressure — Simadown (self)         Rydresotatic Tool (self) Inlet, 2770       Outlet 100 File (Sace Valve) (Applicable to Valver for Closed Systems Only)         Pressure Lating Pices       Bartial No.         Rydresotatic Tool (self) Inlet, 2770       Outlet 100 File (Sace (Sa		Hang and Address	
2. Hanufactured Fer			
3. Gener_Washington Public Power Supply System, Richland, Washington 99352 Base and Address 4. Location of Plant_Hanford Reservation, Richland, Washington 99352 3. Value Identification [JT], 522-F0135erial No. [J53790-00-0056Drewing No. D5-A-63790 Rev. Type Safety Reidef, Pilot, Orifice Size R Pipe Size — Inlet 6 Outlet 10 Inch Inch Inch Inch Inch Inch Inch Inch	2. Nanufactured For San Jose.	<u>CA 95125</u>	Order No
4. Lecetien of Pient_ <u>Hanford Reservation, Richland, Weshington 99352</u> 3. Valve Identification <u>NTL 4822-7013</u> serial No. <u>H53790-00-0058</u> Drewing No. <u>D5-A-63780 Rev.</u> 7792 <u>Safety Reilef</u> Orifice Size <u>Piece Size Labet 6</u> Outlet 10 Inch Rever Actuated 4. Set Pressure (peigi		r Supply Systen, Rich	land, Vashington 99352
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Nydreetatic Teet (reig) Inlet 2370 Outlet 1000 Frif (argen) (alve) Valve) IApplicable to Valver for Close only) Pressure Bataining Pieces Berial No. Berial No. Berial No. Berial No. Berial No. Berial No. Berial No. Identification Naterial Sectification Including Type or Grade NUMBER THE THE TYPE or Grade NUMBER THE THE THE TYPE or Grade NUMBER THE THE THE TYPE or Grade NUMBER THE			
Image: Second Systems Control           Second Sys			_Slendown (Doig)EO 112 975 psie (Assembled Valve)
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Bit Stock & Forgings         Identification         Including Type or Grade           Bedy         H93183-35-0077         ASTM \$105-71 Gr.11         Including Type or Grade           Bennet         H93407-35-0040         ASTM \$105-71 Gr.11         Including Type or Grade           bennet         H93407-35-0040         ASTM \$105-71 Gr.11         Including Type or Grade           b. Marxthocticsongings         H93185-34-0090         ASTM \$105-71 Gr.11         Including Type or Grade           b. Marxthocticsongings         H93185-34-0090         ASTM \$105-71 Gr.11         Including Type or Grade           b. Marxthocticsongings         H93185-34-0090         ASTM \$105-71 Gr.11         Including Type or Grade           b. Marxthocticsongings         H93185-34-0090         ASTM \$105-71 Gr.11         Including Type or Grade           b. Marxthocticsongings         H93185-34-0090         ASTM \$105-71 Gr.11         Including Type or Grade           b. Marxthocticsongings         H93185-34-0090         ASTM \$5182 Gr. Fla         Including Type or Grade           b. Marxthocticsongings         H93185-34-0090         ASTM \$5182 Gr. Fla         Including Type or Grade           b. Marxthocticsongings         H93185-35-00058         H89714-34-0099         ASTM \$5182 Gr. Fla           b. Marxthocticsongings         H93410-33-00055         ASTM \$5193 Gr. B6	Pressure Retaining Pieces		
Bedy       N93183-35-0077       ASNE \$4105 °C; 11 11         Bennet       N93407-35-0040       ASNE \$4105 °C; 11 11         Bennet       N93407-35-0040       ASNE \$4105 °C; 11 11         Bennet       N93407-35-0040       ASNE \$4105 °C; 11         Bennet       N93185-34-0090       ASNE \$4005 °C; 11         Bennet       N93185-34-0090       ASNE \$4637 °C; 7         Nezzie       N93185-34-0094       ASNE \$4105 °C; 11         Bis Molder*K55484-35-0093       *N89714-34-0094       ASNE \$4105 °C; 11         Seriag Weekere K62858-35-0040       K62814-35-0096       ASNE \$4105 °C; 11         Adjusting Bolt       N93410-33-0065       ASNE \$4105 °C; 11         Adjusting Bolt       N93410-33-0065       ASNE \$4105 °C; 11         Spindle Point Kó2873-35-0058       *N89720-34-0070       ASNE \$4105 °C; 11         Spindle Bell       K62858-35-0040       *N89722-0016       ASTM \$304-66 °C; 4161H         4. Solting       K62873-35-0058       K93213-0058       Stellite #6	Bar Stock & Forgings		
Bennet         N93407-35-0040         ASTM A105-71 Gr. 11           b. Marximouxame         M93185-34-0090         ASTM SA105 Gr. 11           b. Marximouxame         Disc Insert         M93185-34-0090         ASTM SA105 Gr. 11           Muxamouxame         Disc Insert         M93185-34-0090         ASTM SA105 Gr. 11           Muxamouxame         Disc Insert         M93185-34-0090         ASTM SA182 Gr. 7           Muscle         M93184-33-0062         ASTM SA182 Gr. 7           Disc Molder*K55484-35-0093         MN89714-34-0094         ANS 56628           Sering Mashere K62858-35-0040         K62834-35-0096         ASTM A105-71 Gr. 11           Adjusting Bolt         M93410-33-0065         ASTM SA105 Gr. 11           Adjusting Bolt         M93410-33-0065         ASTM A564-71 Type 630           spindle Point Kó2873-35-0058         M89722-0016         ASTM A564-71 Type 630           c. Spring K62858-35-0040         M89722-0016         ASTM A304-66 Gr. 4161H           d. Solting         K62873-35-0058         K93213-0058         Stellite #6           Thrust Bearing A2spter         M93409-32-0060         ASME SA193 Gr. 86           Bonnet Stud         (BW5, 117) M93207-0693 thru 0704         ASME SA193 Gr. 86           Bonnet Stud Mut         (J87) H93210-0913 thru 0924         ASME SA194 Gr		N93183-35-0077	ASRE \$185572, CT 11 II
b. :Marithmetik:Marithmetik:         Marithmetik:Marithmetik:         Marithmetik:         Marit:         Marithmetik:	Bonnet	¥93407-35-0040	ASIM A105-71 Gr. II ASMT SALOS Gr. II
Nozzle         N93184-33-0062         ASHE SA182 Gr. Fj.           Disc Molder*K55484-35-0093         *N89714-34-0094         AMS 5662B           Sering Meshere K62858-35-0040         K52836-35-0096         ASTM A105-71 Gr. 11           Adjusting Bolt         N93410-33-0065         ASTM A105-71 Gr. 11           Adjusting Bolt         N93410-33-0065         ASTM A364-77, Type 630           spindle Point K62873-35-0058         *N89720-34-0070         ASTM A364-77, Type 630           c. spring K62858-35-0040         *N89722-9016         ASTM A304-66 Gr. 4161H           d. Boltine         K62873-35-0058         N93213-0058         Stellite #6           Thrust Bearing Adapter         N93409-32-0060         ASTM SA193 Gr. 86           Bonnet Stud         (BW5, 117) N93207-0693 thru 0704         ASTM SA194 Gr. 2H           Julet Stud Nut         (J87) N93210-0913 thru 0924         ASTM SA194 Gr. 2H           Julet Stud Nut         (BW5) N93216-0695 thru 0706         ASTM SA194 Gr. 2H			
Bisr Holder*K55484-35-0093       #N89714-34-0094       AMS 5662B         Sering Machere K62858-35-0040       K62836-35-0096       ASTM A105-71 Gr. 11         Adjusting Bolt       H93410-33-0065       ASTM A105-71 Gr. 11         Adjusting Bolt       H93410-33-0065       ASTM A364-71 Type 630         spindle Point K62858-35-0040       #N89720-34-0070       ASTM A364-71 Type 630         c. spring K62858-35-0040       #N89720-34-0070       ASTM A364-66 Gr. 4161H         d. Bolting       #N89722-0016       ASTM A304-66 Gr. 4161H         d. Bolting       K62873-35-0058       H93213-0058       Stellite #6         Thrust Bearing Adapter       H93409-32-0060       ASTM A304-66 Gr. 85         Bonnet Stud       (BU5, 117) H93207-0693 thru 0704       ASTM A193-71 Gr. 85         Bonnet Stud Nut       (J87) H93210-0913 thru 0924       ASTM SA194 Gr. 2H         Inlet Stud Nut       (BWB) H93216-0695 thru 0706       ASTM SA194 Gr. 2H         Inlet Stud Nut       (BWB) H93218-0699 thru 0710       ASTM SA194 Gr. 2H	Maximulater Disc Insert	N93185-34-0090	ASME SA637 Gr. 7
Sering Machere K62858-35-0040       K62886-35-0096       ASTM A105-71 Gr. 11         Adjusting Bolt       H93410-33-0065       ASTM SA105 Gr. 11         Adjusting Bolt       H93410-33-0065       ASTM SA105 Gr. 11         Spindle Point K62873-35-0058       #N89720-34-0070       ASTM SA564 Type 630         t. Spring K62858-35-0040       #N89722-9016       ASTM A364-71 Type 630         t. Spring K62858-35-0040       #N89722-9016       ASTM A304-66 Gr. 4161H         4. Bolt fat       Spindle Ball       Stellite 86         5pindle Ball       H93213-0038       Stellite 86         Thrust Bearing Adapter       H9309-32-0060       ASTM SA193 Gr. 86         Bonnet Stud       (BU5, 117)       H93207-0693 thru 0704       ASTM SA194 Gr. 2H         Inlet Stud Nut       (BU6) H93216-0695 thru 0706       ASTM SA194 Gr. 2H         Inlet Stud Nut       (BU8) H93218-0699 thru 0710       ASTM SA194 Gr. 2H	Kozzle	N93184-33-0062	ASHE SA182 Gr. FJ.
Seriag Machere K62858-35-0040       K52857-35-0561       ASHE SA105 Gr. 11         Adjusting Bolt       H93410-33-0065       ASHE SA193 Gr. B6         Spindle Point K62873-35-0058       4889720-34-0070       ASHE SA193 Gr. B6         Spindle Point K62873-35-0058       4889722-0016       ASTM A564-71 Type 630         c. Spring K62858-35-0040       • H89722-0016       ASTM A364-66 Gr. 4161H         d. Solting       • Spindle Ball       ASTM A304-66 Gr. 4161H         e. Spindle Ball       • H93213-0058       Scellite #6         Thrust Bearing Adapter       H93409-32-0060       ASTM A193-71 Gr. B7         Bonnet Stud       (BU5, 117) H93207-0693 thru 0704       ASTM A193-71 Gr. B7         Bonnet Stud Nut       (J87) H93210-0913 thru 0924       ASTE SA194 Gr. 2H         Inlet Stud Nut       (BWB) H93216-0695 thru 0706       ASTM A193-71 Gr. 2H         Inlet Stud Nut       (BWB) H93216-0695 thru 0706       ASTM A193-71 Gr. 2H	Bier Kolder*K55484-35-0093		
Spindle Boint Kó2873-35-0058 #N89720-34-0070       ASTM A364-71 Type 630         c. Spring K62858-35-0040       #N89722-0016       ASTM A304-66 Gr. 4161H         d. Solting       Spindle Ball       Science       K62873-35-0058         Thrust Bearing Adapter       N93409-32-0060       ASME SA193 Gr. 86         Bonnet Stud       (BW5, 117) N93207-0693 thru 0704       ASTM SA191-71 Gr. 87         Bonnet Stud Nut       (J87) N93210-0913 thru 0924       ASME SA194 Gr. 2H         Julet Stud       (BW6) N93216-0695 thru 0706       ASTM SA194 Gr. 2H         Inlet Stud Nut       (BW8) N93218-0699 thru 0706       ASTM SA194 Gr. 2H         She SA194 Gr. 2H       ASME SA194 Gr. 2H	Sering Mashers K62858-35-0040	K62836-35-0096	
c. Spring K62858-35-0040          •N89722-9016        ASTM A304-66 Gr. 4161H          d. Bolting        Spindle Ball        Bolting          e. Spring K62858-35-0058          K93213-0058        Stellite #6          Thrust Bearing Adapter       N93409-32-0060        ASTM A194-71 Gr. B6          Bonnet Stud       (BW5, I17)       N93207-0693 thru 0704        ASTM A194-71 Gr. B7          Bonnet Stud       (BW5, I17)       N93210-0913 thru 0924        ASTM SANE SA194 Gr. 2H          Inlet Stud       (BW6)       N93216-0695 thru 0706        ASTM A194-71 Gr. 2H          Inlet Stud Nut       (BW8)       N93218-0699 thru 0710        ASTM SA194 Gr. 2H	Adjusting Bolt	¥93410-33-0065	
c. Spring K62858-35-0040          •N89722-9016        ASTM A304-66 Gr. 4161H          d. Bolting        Spindle Ball        Bolting          e. Spring K62858-35-0058          K93213-0058        Stellite #6          Thrust Bearing Adapter       N93409-32-0060        ASTM A194-71 Gr. B6          Bonnet Stud       (BW5, I17)       N93207-0693 thru 0704        ASTM A194-71 Gr. B7          Bonnet Stud       (BW5, I17)       N93210-0913 thru 0924        ASTM SANE SA194 Gr. 2H          Inlet Stud       (BW6)       N93216-0695 thru 0706        ASTM A194-71 Gr. 2H          Inlet Stud Nut       (BW8)       N93218-0699 thru 0710        ASTM SA194 Gr. 2H	Spindle Point K62873-35-0058	*x89720-34-0070	ASTH A564-71 Type 630 ASME \$4564 Type 630
Spind(=)	c. Spring K62858-35-0040	*x89722-0016	
Thrust Bearing Adapter         N93409-32-0060         ASNE SA193 Gr. 86           Bonnet Stud         (BW5, I17)         N93207-0693 thru 0704         ASNE SA193 Gr. 86           Bonnet Stud         (BW5, I17)         N93207-0693 thru 0704         ASNE SA194 Gr. 28           Bonnet Stud         (J87)         N93210-0913 thru 0924         ASNE SA194 Gr. 28           Inlet Stud         (BW6)         N93216-0695 thru 0706         ASNE SA194 Gr. 28           Inlet Stud Nut         (BW8)         N93218-0699 thru 0710         ASNE SA194 Gr. 28           SHE Stud Nut         (BW8)         N93218-0699 thru 0710         ASNE SA194 Gr. 28	6. Bolting		
Bonnet Stud         (BW5, 117)         N93207-0693         thru         0704         ASTH A191-7, Gr, B7           Bonnet Stud Nut         (J87)         N93210-0913         thru         0704         ASTE SA194         Gr, 2H           Inlet Stud         (BW6)         N93216-0695         thru         0706         ASTE SA194         Gr, 2H           Inlet Stud         (BW6)         N93216-0695         thru         0706         ASTE SA194         Gr, 2H           Inlet Stud Nut         (BW8)         N93218-0699         thru         0710         ASTE SA194         Gr, 2H			
Bonnet Stud Nut         (JB7) N93210-0913 thru 0924         ASNE SA194 Gr. 2H           Inlet Stud         (BW6) N93216-0695 thru 0706         ASNE SA194 Gr. 2H           Inlet Stud Nut         (BW8) N93216-0695 thru 0706         ASNE SA194 Gr. 2H           ASNE Stud Nut         (BW8) N93218-0699 thru 0710         ASNE SA194 Gr. 2H			
Inlet Stud Nut (BWB) N93218-0699 thru 0710 ASTH A194-71 Gr. 2H SAME SA194 Gr. 2H	ويستعد والمراجع والم		4 ASHE SA194 Gr. 2H
وآي	Inlet Stud (BW6)	N93216-0695 thru 070	
Adduced to Bale Button	Inlet Stud Nut (BW8)	N93218-0699 thru 071	D ASHE SAI94 Gr. 2H
Adjusting Bolt Button K63618-33-0067 N93411-33-0067 C. KASHE SA193 Gr. B6	Adjusting Bolt Button K63618-33-0067	N93411-33-0067 S(4	WILASHE SAL93 GT. B6

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	S/N N 63790-00-0 Kindit 2 31
	Kuld A
	Value originally built against Crosby Order No. <u>N103600</u> , Assembly No. <u>N56000</u> . Value 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 adjing an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.
Γ	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 ASNE Code for Nuclear Power Plant Components, Section III, Div. 1,Edition, Addenda No. Addenda, Code Case No Class (Date)
	Date 11-3-20 Signed Crosby Value & Gaze Co. by R. G. Calaumet
	Our ASE Certificate of Authorization No1878to use the NV
	symbol expires September 30, 1983
- r	CIRTIFICATION OF DESIGN
	Design information on file at Grosby Valve & Gage Company
	Stress analysis report (Class 1 only) on file at Crosby Valve 6 Cage Company
· •	43 Kendrick Street. Wrentham, Massachusetts 02093
- I-	PZ State California Reg. No. 13655
	Stress report certified by W.D. Greenlaw
	PE State <u>Massachusetts</u> Reg. No. <u>14784</u>
Ľ	<sup>1</sup> Signature not required - list name only.
Г	CERTIFICATE OF SHOP INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Bod state of Pressure Vessel Inspectors and the State or Province of <u>Hassachusetts</u> and employed by <u>Factory Mutual Systems</u> of <u>Norwood</u> , <u>Hassachusetts</u> <u>11/25</u> <u>9</u> have inspected the pump, or valve, described in this Data Report on <u>11/25</u> <u>9</u> and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, cr valve, in accordance with the ASME Code for Nuclear Power Plant Components.
1	By signing this cartificate, neither the Inspector nor his employer makes any warrant, expressed or implied, creating the equipment described in this Data Report. Further- more, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
	Date
! !	Signed (Inspectra) Commissions MASS 1266 (Inspectra) (Inspectra) (Nat'1. 3d., State, Prov. and No.1. E.
Ļ	Arkartight-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/22/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306 (b) Repair Organization P.O. No, Job No, etc.: PO No 313236

(c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR

(d) Certificate Of Authorization No.: NWS Technologies, LLC, VR No 632 And NR No 81

(e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2006 And NR - April 09, 2006

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 Disc Insert	Crosby Crosby	N63790-03-0060 N97499-31-0004	N/A N/A	N/A N/A	1980 N/A	Replaced	Yes, Code Class 1 No. Code Class 1
Disc Insert	Crosby	N97499-33-0026	N/A	N/A	N/A	Replacement	No, Code Class 1
Nozzle Nozzle	Crosby	N97498-51-0154 N97498-53-0167	N/A N/A	N/A N/A	N/A N/A	Replaced Replacement	No, Code Class 1 No, Code Class 1
NULLIE	Crosby	1197490-33-0107		11/2	N/A		

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0060 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.

2) Removed existing disc insert Serial No N97499-31-0004 from the relief valve.

3) Installed replacement (modified) disc insert Serial No N97499-33-0026 in the relief valve.

4) Removed existing nozzle Serial No N97498-51-0154 from the relief valve.

5) Installed replacement (modified) nozzle Serial No N97498-53-0167 from the relief valve.

6) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for all twelve (12) studs.

7) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable for all twelve (12) studs.

8) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable for all twelve (12) nuts.

9) Reassembled the relief valve.

10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.

11) Tested the relief valve at set pressure of 1205 PSIG. Test results acceptable.

### NOTES -

1) Nozzle Serial No N93184-53-0167 was previously modified (upgraded) to Serial No N97498-53-0167 by Energy Northwest in accordance with ASME Section XI Plan No 2-1779.

PLAN No 2-1853 ENERGY NORTHWEST Papple · Vision · Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: 10 Psig Test Temperature: 75° F Component Design Pressure: 1205 Psig Temperature: 575° F
<b>9. Remarks:</b> 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for Main Steam Relief Valve (MSRV), Serial No N63790-03-0060, 2) See attached NV-1 Code Data Report for Main Steam Relief Valve (MSRV), Serial No N63790-03-0060), 3) Component design pressure of 1205 Psig and design temperature of 575 <sup>0</sup> F is for the Main Steam Relief Valve (MSRV) set pressure and rated temperature respectively.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       S12203
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Mathematication issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Mathematication issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Mathematication issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Mathematication is the components described in this Owner's Report during the period Steam Boiler of Mathematications and taken corrective measures described in this Owner's Report.         Owner has performed examinations and corrective measures described in this Owner's Report.         Builed, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Mational Board, State, and Endorsements         National B

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PLAN NO. 2-1853 FORM NVR-1 REPORT OF REPAIR REPLACEMENT DI OF NUCLEAR PRESSURE RELIEF DEVICES

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1. Work performed b		blogies, LLC llevard, Spartanburg		nase Order # 6	00313236	Rev. 2 512403
2. Work performed for	or: Energy Northwe	st - Columbia Gener	ating Statio	<u>n</u>	<u></u>	· · · · · · · · · · · · · · · · · · ·
3/4. Owner - name, a Station, North Po		ation of nuclear power hland, WA 99352-09		Energy North	hwest - Columb	bia Generating
<ol> <li>a: Repaired press</li> <li>b: Name of manufacture</li> <li>c: Identifying nos.</li> </ol>	facturer: Crosby V	Main Steam Safety alve & Gage Co.	Relief Valv	e		
HB-65-B	P-FN new s/n:	N63790-03-0060	<u>N/A</u>	<u>steam</u>	<u>6 x 10</u>	1980
(type		(mfr's S/N)	(NB#)	(service)	(size)	(yr.built)
d: Construction C	ode: <u>ASME Sec. I</u> (name/section/o			V/A denda) (Co	N/A de Cases(s))	(Code Class)
6. ASME Code Secti	-		(20)	1989	N/A	N/A
D. ASIVIE CODE SECU				(edition)	(addenda)	(Code Case(s))
7. ASME Code Section	on XI used for repair	rs, replacements:		1989	<u>N/A</u>	<u>N/A</u>
8. Construction Code	e used for repairs, re	placements:		edition) 1971	(addenda) N/A	(Code Case(s))
				edition)	(addenda)	(Code Case(s))
9. Design responsibil	ities: <u>N/A</u>		···		······································	
10. Opening pressum Set-pressure adju		NWS Technolog	ies, LLC	using	steam	
11. Description of we	ork (include name and id	lentifying number of repla	cement parts)	See attac	chment 1.	· · · · ·
12. Remarks: See at	tachment 1.					
		CERTIFICATE OF C				
I, <u>Cesar V. Si</u>		t to the best of my kr				
report are correct and conforms to Section 2						
National Board Certil				R" stamp exp		
National Board Certif				etamp exp		
4/22/03 NM	/S Technologies, L	LC <i>léca</i>	Alth	ral	· Mar	nager, QA
Date	Repair Organization		Aythorized re	preseptative	<u></u>	Title
		<b>CERTIFICATE OF I</b>				
I, Charles F. To		valid commission iss				
Vessel Inspectors an			-			
by Hartford Steam or replacement descr			rtford, CT		•	ir, modification
this repair, modification						
Code and the Nation						
By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied,						
concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned						
nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this igspection.						
		T. A				
4122103	Internet	Signature		462, A, N, 1	NC# 1073 endorsements), jun	indiction & co.)
	inspectors	oiduarhie	Commiss		endorsements), jun	

# FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 2 131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for: Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: <u>Energy Northwest - Columbia</u> Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: N63790-03-0060

11. Description of work:

NWS Traveler # 03-68

The valve was disassembled. The nozzle and disc were removed for NDE. Both were replaced. The old parts was packaged for return to site.

New disc: N97499-33-0026 was installed.

New nozzle: N97498-53-0167

Both disc and nozzle were polished by NWS prior to installation.

Other parts replaced during the repair include:

Disc Holder Spiral Pins (2):	MC <sup>·</sup> 54407794
Eductor Gasket:	MC 56230461
Inlet Studs:	N/A

During the initial repair, accelerometer mounts were installed on the spindle and spring as directed by CGS engineering. The valve was tested to ensure mount integrity. During the jack and lap, accelerometers were installed on the mounts.

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

**NWS Technologies, LLC** Manager, QA (repair organization) authorized representativ (title) NB# 8462, A.N.I NC# 1073 Commissions (NB (incl endorsements), jurisdiction,& no.)

		PLAN NO. 2-1853_
CROSBY	CROSBY VALVE WRENT	A GAGE COMPANY HAM, MASS Freadly Bup 5 5172/03
	FOR SAFETY AND SAFETY RELIE the Provisions of the ASME DATA REPORT	
Safe	ety and Safety Relief Valves	5
1. Manufactured By Crosby Valve &	Gage Company, 43 Kendrick Name and Address	St., Wrentham, MA 02093
Model No. <u>HB-65-BP-FN</u> Order N	o. <u>N94275</u> Contract Date ctric Company, 175 Curt	4/24/79 National Board No. N/A
2. Manufactured For San Jose, C	A 95125	Order No205-AJ986
3. Owner Washington Public Po	wer Supply System, Rich	land, Washington 99352
4. Location of Plant Hanford Res	Name and Address ervation, Richland, Was	hington 99352
.[ ^		0060Drawing No. <u>DS-A-63790 Rev</u> . C
Type Safety Relief	Orifice Size R	Pipe Size Inlet 6 Outlet 10
Safety, Safety Relief, Pil Power Actuated	or, Inch - MAR ALL ALL	Inch Inch Inch
6. Set Pressure (psig) 120	5	5750 F Rated Temperature
Stamped Capacity 906,621		Blowdown (psig) 2% to 11%
Hydrostatic Test (psig) Inlet	<u>2370</u> Outlet <u>11</u>	75 psig (Assembled Valve) 00 psig (Body Only) e to Valves for Closed Systems Only)
Pressure Retaining Pieces	(	
Bar Stock & Forgings	Serial No. Identification	Material Specification Including Type or Grade
Body	N93183-35-0079	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	<u>N93407-35-0042</u>	ASTM A105-71 Gr. II ASME SA105 Gr. II
P. BELIERSONCELASHELLER		
XXXXXXXXXXXX Disc Insert	<u>N93185-34-0092</u>	ASME SA637 Gr. 718
Nozzle	<u>N93184-33-0064</u>	ASME SA182 Gr. F316
Disc Holder K55484-45-0185	N89714-37-0224	AMS 5662B
Spring Washers K62858-35-0042	K62856-35-0098 K62857-35-0063	ASTM A105-71 Gr. II 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 ASME SA564 Type 630
c. Spring K62858-35-0042	*N89722-0018	ASTM A304-66 Gr. 4161H
d. Bolting Spindle Ball e. XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N93213-0060	<u>7 X 0 0 3 8 0 1 5 3</u> Stellite #6
Thrust Bearing Adapter	N93409-32-0062	ASME SA193 Gr. B6
· · · · · · · · · · · · · · · · · · ·	W5) N93207-0717 thru 072	ASTM ATUSETI DE BT
	87) N93210-0937 thru 094	
politice ocud tide	W6, N93216-0721 thru 07:	10704 1105 31 0
	8) N93218-0723 Ehru 073	34 ASTM A194-71 Gr. 2H
L	N03/11 32 0040	ASME SA194 Gr. 2H

	-modification consists Searing 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.
ſ	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 11-5-90 Signed Crosby Valve & Gage Co. by A. C. Curward (N Certificate Holder)
	(N Certificate Holder) Our ASME Certificate of Authorization No. 1878 to use the <u>NV</u>
	symbol expires September 30, 1983 . (Date)
[	CERTIFICATION OF DESIGN
·	
	Design information on file at Crosby Valve & Gage Company
l	Stress analysis report (Class 1 only) on file at <u>Crosby Valve &amp; Gage Company</u>
ļ	43 Kendrick Street, Wrentham, Massachusetts 02093 Design specifications certified by Boyd P. Brooks
ł	Design specifications certified by       PE State         California   Reg. No.
	Stress report certified by W.D. Greenlaw
	PE State Massachusetts Reg. No. 14784
	<sup>1</sup> Signature not required - list name only.
L	TUR ISTURMATION USLY
ſ	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 <u>Massachusetts</u> and employed by Factory Mutual Systems* of <u>Norwood</u> , <u>Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>12-9</u> , 1900 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.
	By signing this certificate, neither the Inspector nor his employer makes any warrant, . expressed or implied, concerning the equipment described in this Data Report. Further- more, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Date $\frac{29}{1980}$ .
	Signed Commissions MASS. 1266 (Inspector) Commissions MASS. 1266 (Nat'l. Bd., State, Prov. and No.) *Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Div.

ZX00380154

.



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/22/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306 (b) Repair Organization P.O. No, Job No, etc.: PO No 313236

(c) Type Code Symbol Stamp: NWS Technologies, LLC, VR And NR

(d) Certificate Of Authorization No .: NWS Technologies, LLC, VR No 632 And NR No 81

(e) Expiration Date: NWS Technologies, LLC, VR - April 03, 2006 And NR - April 09, 2006

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	N63790-03-0122	N/A	N/A	1981		Yes, Code Class

7. Description Of Work Performed: Spare Main Steam Relief Valve (MSRV), Serial No N63790-03-0122 was refurbished by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29306. The work was performed in accordance with NWS Technologies, LLC VR and NR programs as follows:

1) Disassembled the relief valve to perform the required work.

2) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable for nine (9) studs. Three (3) studs were replaced.

3) Performed VT-3 visual examination on the exposed surfaces of the existing studs for the relief valve body to bonnet joint. VT-3 visual examination results acceptable for all twelve (12) studs.

4) Performed VT-3 visual examination on the existing nuts for the relief valve body to bonnet joint. VT-3 visual examination results acceptable for all twelve (12) nuts.

5) Reassembled the relief valve.

6) Installed three (3) replacement studs for the relief valve inlet joint.

7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the body to bonnet joint. No evidence of leakage during the pressure test.

8) Tested the relief valve at set pressure of 1175 PSIG. Test results acceptable.

#### NOTES -

1) Energy Northwest performed VT-1 visual examination on three (3) replacement studs for the relief valve inlet joint. VT-1 visual examination results acceptable.

PLAN No 2-1854
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic X Nominal Operating Pressure None Test Pressure: 10 Psig Test Temperature: 75° F Component Design Pressure: 1175 Psig Temperature: 575° F
<b>9. Remarks:</b> 1) See attached NVR-1 Code Data Report "Report Of Repair And Replacement Of Nuclear Pressure Relief Devices" for Main Steam Relief Valve (MSRV), Serial No N63790-03-0122, 2) See attached NV-1 Code Data Report for Main Steam Relief Valve (MSRV), Serial No N63790-00-0122 (Post Mod Serial No N63790-03-0122), 3) Component design pressure of 1175 Psig and design temperature of 575 <sup>0</sup> F is for the Main Steam Relief Valve (MSRV) set pressure and rated temperature respectively.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Image: Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Signed Engineer (PLE)
<b>CERTIFICATE OF INSERVICE INSPECTION</b> I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -\frac{1}{2} - \frac{1}{2} - \frac{1}{$
Mathematical     Commissions     Turity like     Number of the second

PLAN No. 2-1854 FORM NVR-1 REPORT OF REPAIR REPLACEMENT REPORT OF REPAIR REPLACEMENT REPORT OF NUCLEAR PRESSURE RELIEF DEVICES

								Smb 2
1. Work performed by:	NWS Techno 131 Venture Bou				chase Ord	ler#00313	236 Rev.	2 5122603
2. Work performed for:	Energy Northwe	st - Columbia	Generatin	g Stati	on			
3/4. Owner - name, add Station, North Powe				lant:	Energy N	lorthwest - Col	umbia Ge	enerating
5. a: Repaired pressure b: Name of manufac c: Identifying nos.		Main Steam alve & Gage (	Contraction of the local distance of the loc	ie <u>f Vah</u>	/e			
HB-65-BP-F	FN new s/n:	N63790-03-	-0122	N/A	stea	im 6 x	10	1981
(type)		(mfr's S/h		(NB#)	(servi	ice) (siz	ze)	(yr.built)
d: Construction Code	e: ASME Sec. II	I Div. 1	1971		N/A	N/A		1
	(name/section/c	livision)	(edition)	(a	idenda)	(Code Cases(s))	(Co	de Class)
6. ASME Code Section	XI applicable for i	nservice insp	ection:		1989	<u>N/A</u>	Contraction of the local division of the loc	<u>N/A</u>
7. ASME Code Section	XI used for repair	F ropiscomor	ste <sup>.</sup>		(edition) 1989	(addenda) N/A	•	e Case(s)) N/A
7. ASME CODE SECTION	A used for repair	s, replacement	113.		(edition)	(addenda)		e Case(s))
8. Construction Code us	sed for repairs, re	placements:			1971	N/A	-	N/A
	• •			-	(edition)	(addenda)		e Case(s))
9. Design responsibilitie	s: <u>N/A</u>							
10. Opening pressure: Set-pressure adjust		NWS Tec	hnologies,	LLC	us	ing <u>steam</u>		
11. Description of work	(include name and id	entifying number	of replacem	ent parts	s): <u>See a</u>	ttachment 1.		
12. Remarks: See attac	hment 1.							
		CERTIFICAT	E OF CON	PLIAN	ICE			· · · · ·
I, Cesar V. Sierr						the statements		
report are correct and th								ve
conforms to Section XI								
National Board Certifica					R" stamp		<u>il 3, 2006.</u>	
National Board Certifica	te of Authorization	n No. <u>81</u>		r r	R" Stamp	expires <u>Apr</u>	<u>il 9, 2006.</u>	
	Technologies, L	<u></u>	lisa		//		Manager,	
Date	Repair Organization		Auth	prized n	epresentativ	e	Title	
		CERTIFICAT					•	
I. Charles F. Toege				-				
Vessel Inspectors and o	-	etency issued	• •			orth Carolina	•	
by Hartford Steam Bo			of Hartfo		the second s	inspected the r	•	
or replacement describe						est of my know		
this repair, modification Code and the National I					ice with S			
By signing this certificat	•				kes anv w	arranty expres	ssed or im	plied
concerning this repair, r		-			•			
nor my employer shall b	•			•				
arising from or connected	•		<u>か</u>			<b>y</b>	•	
4/11/12 "	Then los A	Trank	-h	NR #	8462, A,	N.I NC# 107	73	
Date (	Inspector	Signature	<del>1"</del>			incl endorsements		n,& no.) .

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#### FORM NVR-1 Attachment 1 (Page 1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # 00313236 Rev. 2 131 Venture Boulevard, Spartanburg, SC 29301

2. Work performed for. Energy Northwest - Columbia Generating Station

3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968

Valve S/N: <u>N63790-03-0060</u> 0/22 J 5/14/03 Mge-ANI 5/14/03

11. Description of work:

NWS Traveler # 03-69

The valve was disassembled. The nozzle and disc were removed for NDE. Both disc and nozzle were polished by NWS prior to installation.

Parts replaced during the repair include:Disc Holder Spiral Pins (2):MC 54407794Eductor Gasket:MC 56230461Inlet Studs (3):SLR

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve was then jacked and lapped to restore seat integrity.

A final steam seat tightness test was then done at 93% of set-pressure.

4/12/0	NWS Technologies, LLC	lucar,	Sterral	Manager, QA
Date	(repair organization)	(authorized rep	resentative)	(title)
		$\mathcal{D}$		
4/22/03	Thursh Fold	Beech.	NB# 8462, A,N	,I NC# 1073
Date	inspector's Signature	7-7-	Commissions (NB	(incl endorsements), jurisdiction,& no.) *

		PLAN No. 2-1854
	CROSBY VALVE	& GAGE COMPANY
CROSBY		AN. MASS 17 . 24 0-
		failing Sup
	FOR SAFETY AND SAFETY RELIEF the Provisions of the ASME (	·····
	DATA REPORT	
- Saf	ety and Safety Relief Valves	
L. Manufactured By Crosby Valve	Gage Company, 43 Kendrick S Name and Address	t., Wrentham, MA 02093
Model No. HB-65-BP-FN Order	No. N94281 Contract Date	4/24/79 National Board No. N/A
General B Manufactured For San Jose,	CA 95125	Order No. 205-AJ986
	ime and Address	
. Owner Washington Public	Power Supply System, Ric Name and Address	niand Wasnington 99352
. Location of Plant Hanford B	leservation, Richland, Wa	shington 99352
		_
	_	122 Draving No. DS-A-63790 Rev. C
Type <u>Safety Relief</u> Safety, Safety Relief, Pil		ipe Size Inlet 6 Outlet 10 Inch Inch Inch
Fover Actuated	lot, inch	
5. Set Pressure (psig) 1175		575 <sup>0</sup> F
	14 0 3 50	Rated Temperature
Stamped Capacity884,3	<u>14 @ 3</u> ZOverpressure	
Hydrostatic Test (psig) Inlet		75 psig (Assembled Valve) 00 psig (Body Only)
ressure Retaining Pieces	(wpplicable	to Valves for Closed Systems Only)
	Serial No.	Material Specification
Bar Stock & Forgings	Identification	Including Type or Grade
Body	<u>N93183-36-0085</u>	ASTM A105-71 Gr. II ASME SALO5 Gr. II
Bonnet	N93407-36-0097	ASTM A105-71 Gr. II ASME SA105 Gr. II
. MAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	<u></u>	
SHERKER Disc Insert	<u>N93185-37-0153</u>	ASME SA637 Gr. 718
	· · · · · · · · · · · · · · · · · · ·	ASVE 54192 C= 5216
Nozzle	<u>N93184-33-0070</u>	ASME SA182 Gr. F316,
Disc Holder K55484-31-0016	<u>N89714-31-0014</u>	AMS 5662B
Spring Washers K62858-36-0080	K62856-36-0107 K62857-36-0121	ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0071	ASME SA193 Gr. B6
Spindle Point K62873-37-0135		ASME SA564 Type 630
:. Spring K62858-36-0080	<u>*N89722-0085</u>	ASTM A304-66 Gr. 4161H_
l. Bolting Spindle Ball K62873-37-013	N93213-0202	Stoody #6
-	N93409-32-0068	ASME SA193 Gr. B6
Thrust Bearing Adapter		ASTM ATOTATI CP BI
	<u>/19) N93207-1498 thru 150</u> (87) N93210-1009 thru 102	
	21) N93216-1431 thru 144	ASTM ALGIET GT. BI
		ASTM A194-71 Gr. 2H
Inlet Stud Nut (BW	122) N93218-1365 thru 137	6 ASME SA194 Gr. 2H
Adjusting Bolt Button K63618-33-0075	N93411-33-0075	ASME SA193 Gr. 86

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.alve originally built against Crosby Order No. <u>N51727</u>, Assembly No. <u>N56000</u>. 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.

N63'	790-00	-0/aa
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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, <u>1971</u> Edition, Addenda <u>No Addenda</u> , Code Case No. <u>1567 &amp; 1711</u> . Class <u>1</u> (Date) Date <u>11/5780</u> Signed Crosby Valve & Gage Co. by <u>Yffecture</u> (N Certificate Holder) Our ASME Certificate of Authorization No. <u>1878</u> to use the <u>NV</u> symbol expires <u>September 30, 1983 (Date)</u>
•
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 Boyd P. Brooks
PE State <u>California</u> Reg. No. <u>13655</u>
Stress report certified by 1 W.D. Greenlaw
PE StateReg. No'14784

<sup>1</sup>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 <u>Massachusetts</u> and employed by <u>Factory Mutual Systems</u><sup>\*</sup> of <u>Norwood</u>, <u>Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>1/9</u>, 19<u>S/</u> and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date	1/9_19_81.					
Signed (	Joly Petrovin	Commissions	1918	1		
-	(Inspector)		(Nat'1. Bd.	., State,	Prov.	and No.)

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

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/06/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

(b) Repair Organization R.O. No. Job Mo. ato at

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

(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) Tubing

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-83-1 Valve Valve	JCI Dragon Dragon	PI(1)-ST-IR-83-1 GP1391 PB1196	N/A N/A N/A	N/A N/A N/A	1983 1981 1993	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing valve IR-V-IR-83/V1\* associated with instrument MS-PS-15C. The replacement work was performed as follows:

1) Removed existing valve IR-V-IR-83/V1\*, Serial No GP1391.

2) Installed new replacement valve IR-V-IR-83/V1\*, Serial No PB1196.

3) Made required socket welds.

4) Performed visual examination on the final socket welds. Visual examination results acceptable.

5) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

#### NOTES -

1) The existing ASME Code Stamped Process Instrumentation (PI) Tubing in which the new replacement valve IR-V-IR-83/V1\*, Serial No PB1196 was installed is PI(1)-ST-IR-83-1. This process instrumentation tubing is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda requirements.

2) The new replacement valve IR-V-IR-83/V1\*, Serial No PB1196 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda requirements.

3) \* This valve has two (2) EPN's. Valve EPN No IR-V-IR-83/V1\* appears on PASSPORT and valve EPN No IR-83-V-1C appears on Dwg No D-220-15.0-PED-I-0563, CVI No 220-01,1248.

	PLAN No 2-1 ENERGY NORTHWEST
FORM NIS-2 OWNER'S REPOR	T FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic Pneumat Test Pressure: Psig Component Design Pressure	Test Temperature: ° F
Remarks: See attached NPV-1 Code Data Report for the	e replacement valve IR-V-IR-83/V1*, Serial No PB1196.
CERTIFIC	CATE OF COMPLIANCE
We certify that the statements made in this ( to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable	Owner's Report are correct and this replacement conforms
Prepared By Aug Sungh - Program Lead Engineer	r (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Date6603	Date 603
CERTIFICATE	OF INSERVICE INSPECTION
<i>I, the undersigned, holding a valid commissi</i> Vessel Inspector <del>s</del> and the State of	ion issued by the National Board of Boiler and Pressure and employed by
state to the best of my knowledge and belief corrective measures described in this Owne ASME Code, Section XI.	have inspected the components period to and f, the Owner has performed examinations and taken er's Report in accordance with the requirements of the
implied, concerning the examinations and c Furthermore, neither the Inspector nor his e	tor nor his employer makes any warranty, expressed or orrective measures described in this Owner's Report. Employer shall be liable in any manner for any personal kind arising from or connected with this inspection.
Not Required - Replacement 1" NPS And Smaller	Commissions
Inspector's Signature	Commissions

(Nome and Address of Purchaser or Owner)         Location of Installation HNE 2 Site Richland WA 99352 (Name and Address)         Purp or Valve Valve         (I) And Address (C) I and Inlet Size 1/2 Outlet Size (I)         (I) Model No. (b) N Certificate Holder's (c) Canadian         Series No.         No.         No.         No.         No.         No.         No.         No.         N/A         Series No.         Series No.         Series No.         PE1194         N/A         Series No.         Series No.         Series No. <td <="" colspan="2" th=""><th>1/2 (inch) (g) Year Built 1993</th></td>	<th>1/2 (inch) (g) Year Built 1993</th>		1/2 (inch) (g) Year Built 1993
(a) Model No., (b) N Certificate Holder's (c) Canadian       (inch)       (inch)         Series No.       Serial       Registration       (d) Drawing       (l) Nat'l.         or Type       No.       No.       No.       (e) Class       Bd. No.         1)       7N058SWD       PB1194       N/A       10580       2       N/A         2)       thru       Rev. C       2       N/A         3)       PB1204       3	(g) Year Built		
Series No.         Serial         Registration         (d) Drawing         (!) Nat'l.           or Type         No.         No.         No.         (e) Class         Bd. No.           1)         7N058SWD         PB1194         N/A         10580         2         N/A           2)         thru         Rev. C         2         N/A           3)         PB1204         3         3         3         3           5)         SIN PB196         96196         3         3         3           6)         SIN PB196         3         3         3         3	Built		
or Type         No.         No.         No.         (e) Class         Bd. No.           1)         7N058SWD         PB1194         N/A         10580         2         N/A           2)         thru         Rev. C         2         N/A           3)         PB1204	Built		
$\frac{\text{thru}}{\text{PB1204}}$ $\frac{\text{Rev. C}}{\text{PB1204}}$ $\frac{\text{S}[N] PB[96]$	1993		
PB1204           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)           5)	·····		
5) 5) 5) 5) 5) 5) 5) 5) 5) 5) 5) 5) 5) 5	· <u> </u>		
5) 			
5)SIN PB1196			
n			
))			
))			
Instrument Valve (11 Pc	s.)		
(Brief description of service for which equipment was designed)			
old Working Pressure 3600 psi at 100°F. ressure Retaining Pieces Mark No. Material Spec. No. Manufacturer Rem			
Mark No. Material Spec. No. Manufacturer Kem	erks		
) Castings N/A			
	• • • • • • • • • • • • • • • • • • • •		
HT.AJ9461 ASME SA182 GR. F316 Ajax Forge Co. Body	Yoke		
HT.AJ9461 ASME SA182 GR. F316 Ajax Forge Co. Body			
HT.AJ9461 ASME SA182 GR. F316 Ajax Forge Co. Body			

(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 dems 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.

025636000885

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

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• Mark No.	Material Spec. No.	Manufacturor	Remarks
Boking N/A		· · · · ·	
· · · · · · · · · · · · · · · · · · ·			
		*	
			· ·····
(d) Other Parts HT.853543	ASME_SA564_GR630	Carpenter Tech.	Disc
		·	
•			

#### CERTIFICATE OF COMPLIANCE

025686000886

 that the statements made on of the ASME Code for N S 75 (Date) DRAGON VALVES INC	luclear Power Plant ode Case No. <u>N</u>	Components. Section	•••	<u>1974</u> <u>1993</u>
(# Certificate Holder) Certificate of Authorization f	N 1033	to use theN	symbol expi	10/1/93 (Date)

#### CERTIFICATION OF DESIGN

Design information on file at -	Washnington Public Power Sup. Sys.
Stress analysis report (Class 1	only) on file atN/A
Design specifications cardified	tw (1) David J. Murphy
PE State	by (1) David J. Murphy Reg. No
Stress analysis certified by (1)	N/A
PE State	Reg. No
(1) Signature not required. Lis	l 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 <u>CALIFORNIA</u> and employed by <u>H.S.B.</u> INSP. & INSP. CO. <u>HARTFORD</u> CT. have inspected the pump, or valve, described in this Data Report on <u>AUGUST 24</u> 19 <u>93</u>, 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 8-24 11	13		
(inspector)	Commissions	CA 17/G (Nai'l Bd., State, Prov. and No.)	
*****************	•	treat time annual time, and tad b	



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/20/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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 Bullt	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4 MS-V-67A MS-V-67A	WPPSS * Borg Warner Borg Warner	MS(9)-4-P1 28467 28472	N/A N/A N/A	N/A N/A N/A	1983 1978 1978	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Removal and installed valve (MSLC-V-2D) Serial No 28472 for MS-V-67A use. The replacement work to replace existing valve MS-V-67A was performed as follows:

- 1) Cut or ground existing socket welds associated with existing valve MS-V-67A, Serial No 28467.
- 2) Removed existing valve MS-V-67A, Serial No 28467.

3) Prepped existing tee cut socket end surfaces (one socket end) on as needed basis for rewelding.

- 4) Performed liquid penetrant (PT) examination on the tee prepped socket end. Liquid penetrant (PT) examination results acceptable.
- 5) Removed existing valve MSLC-V-2D, Serial No 28472 for MS-V-67A use.

6) Prepped valve MSLC-V-2D, Serial No 28472 cut socket end surfaces (two socket ends) on as needed basis for rewelding.

7) Performed liquid penetrant (PT) examination on the valve prepped socket ends. Liquid penetrant (PT) examination results acceptable.

8) Installed replacement pipe.

9) Installed valve MS-V-67A Serial No 28472.

10) Made required socket welds.

11) Performed visual examination on the final socket welds. Visual examination results acceptable.

12) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

13) 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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999. 2) The existing ASME Code Stamped piping system in which the replacement valve MS-V-67A Serial No 28472 was installed is Main Steam (MS) piping system MS(9)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement valve MS-V-67A Serial No 28472 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda requirements.

4) The liquid penetrant (PT) examination on the final socket welds was performed in accordance with the requirements of ASME Section III, Code Class 1, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

5) 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 requirements outlined in Code Case N-416-1.

	PLAN No 2-1 ENERGY NORTHWEST People - Vision - Salutions
	ORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducte	ed: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Test Temperature: 199.8° F Component Design Pressure: 1250 Psig Temperature: 575° F
st temperature on the	e attached NPV-1 Code Data Report for the replacement valve MS-V-67A Serial No 28472, 2) * The test pressure and e socket welds was recorded during ASME Section XI pressure test which was performed in accordance with PPM N ctor Pressure Vessel Leakage Test*.
	CERTIFICATE OF COMPLIANCE
	t the statements made in this Owner's Report are correct and this replacement conforms
Type Code Sy	f the ASME Code, Section XI. mbol Stamp: Not Applicable
	Authorization No.: Not Applicable te: Not Applicable
Prepared By _	Kuldip Singh - Program Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Date	63003 Date 63003
	CERTIFICATE OF INSERVICE INSPECTION
Vessel Inspect of Hartford, Co period <u>5-/6</u> Owner has pe	erformed examinations and taken corrective measures described in this Owner's Report
By signing thi implied, conce Furthermore,	with the requirements of the ASME Code, Section XI. is certificate neither the inspector nor his employer makes any warranty, expressed or erning the examinations and corrective measures described in this Owner's Report. neither the inspector nor his employer shall be liable in any manner for any personal perty damage or a loss of any kind arising from or connected with this inspection.
<u>]].177</u>	Spector's Signature Commissions 74/86/14/74/86/2017 10/2012
Date <u>( 5</u>	°c-07
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## INFORMATION ONLY

	As Require	rd by the Provintions of	the AMIL Code Rules	Thurs &
	Nuclear Valve D scrured by of Borg Warner, 7	ivision 500 Tyrone Ave	Van Nuys, Ca.	6/20/ 47713
I. Manuri	(Nam Bovee & Crail/G	es & Address of Manufecture	r)	
. Magula		Richland, Washing	ton 99352	der No215-32610
		(Name and Address)	······································	
	WPPSS Hanford #2 Jub	• •	LVE MS-V-6	7A, SIN 284
l. Locatio	on of Plant Richland, Wash	hington 99352	······································	
Pumb	or Valve Identification Nuclear	Valve Div. P/N	76890-1, 1 1/2 In	ch Gate Valve, MO
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		· · · · · · · · · · · · · · · · · · ·		
	ring No. 76890-1	Base of the Nine L	ear Valve Division	of Borg Warner
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		•		
(D) NAI	ional Board No.			
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i. Design The ma Edition (a) Ce	Conditions Conditions (Pressure) serial, design, construction, and work    Norb No. prings Gate = Code     Gate = Code     	Ne Summer '75	NSHE Code Section III. Class Case No. N/A Nanulaciwor Rex Precision	Romana Romana MAR 12 1982
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i. Design Edition (a) Ce (a) Ce (b) to (b) to	Conditions	Ale Summer '75 Noteriol Sport No. SA487 CA6NM	NSHE Code Section III. Class Case No. N/A Manufacturer Rex Precision	Romana Romana MAR 12 1982
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# INFORMATION ONLY FURM NPV-1 (back)

(c) Boltiz.       /A         (d) Other Pures N/A	
(d) Other Parts N/A	
Hydrostatic testS400psi.	
CERTIFICATION OF DESIGN	
Design information on file at <u>NVD of Borg Warner</u> , 7500 Tyrone Ave., Van Nuys, Ca. 91409 Stress analysis report on file at <u>NVD of Borg Warner</u> , 7500 Tyrone Ave., Van Nuys, CA. 9140 Design specifications certified by <u>David J. Murphy</u> (1) Prof. Eng. State <u>Wash</u> . Reg. No. <u>17</u>	9
Design specifications certified by William E. Hill (1) Prof. Eng. State Reg. No. 11: Stress analysis report certified by William E. Hill (1) Prof. Eng. State Reg. No. 11:	38
(1) Signature not required. List name only,	
We certify that the statements made in this report are correct. Nuclear Valve Division	
Date March 30 19 78 Signed of Borg Warner By Jerner Turner	— !
Certificate of Authorization No. <u>N-1254</u> expires October 27, 1978	

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#### CERTIFICATE OF SHOP INSPECTION

d/or the State of Province of Long Grove, 111: March 30	12018 10.78 and		have inspected th	ermon's Mutual e equipment describ ledge and belief, th	ed in this Da
s constructed this equipment By signing this certificate, the equipment described in	in secondance with th	e applicable Sub	sections of ASME (	Lode, Section III.	alied. concer
s the equipment described in inner for any personal injury c	into Data Neport. Ful or property damage ut	a loss of any kin	d arising from or c	panected with this i	espection.
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March	16_78	• •			
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	<u>/\</u>	- Comaissions -	CA-1275		d N- 1
(Inspector) Manuel B. Diana	3	·	(National Be	ord, State, Province a	NG N:.
	- 628	12A			
WEGBR			•		
	· ·			<u>KE, 345 E. 47th 81., N</u>	less Yark, N.Y



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/30/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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 Leakage Control (MSLC) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1&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.	<b>Ye</b> ar Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4D MSLC(2)-1 MSLC-V-2D MSLC-V-2D	WPPSS * WPPSS * Borg Warner Borg Warner	MS(1)-4D-P2 MSLC(2)-1-P1 28472 28467	N/A N/A N/A N/A	N/A N/A N/A N/A	1983 1983 1978 1978	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Removal and installed valve (MS-V-67A) Serial No 28467 for MSLC-V-2D use. The replacement work to replace existing valve MSLC-V-2D was performed as follows:

1) Cut or ground existing socket welds associated with existing valve MSLC-V-2D, Serial No 28472.

2) Removed existing valve MSLC-V-2D, Serial No 28472.

- 3) Prepped existing pipe cut end surfaces (one end) on as needed basis for rewelding.
- 4) Performed liquid penetrant (PT) examination on the pipe prepped end. Liquid penetrant (PT) examination results acceptable.
- 5) Removed existing valve MS-V-67A, Serial No 28467 for MSLC-V-2D use.
- 6) Prepped valve MS-V-67A, Serial No 28467 cut socket end surfaces (two socket ends) on as needed basis for rewelding.
- 7) Performed liquid penetrant (PT) examination on the valve prepped socket ends. Liquid penetrant (PT) examination results acceptable.
- 8) Installed replacement piping material such as pipe and coupling.
- 9) Installed valve MSLC-V-2D Serial No 28467.

10) Made required socket welds.

11) Performed visual examination on the final socket welds. Visual examination results acceptable.

12) Performed liquid penetrant (PT) examination on the final socket welds. Liquid penetrant (PT) examination results acceptable.

13) Installed support material such as U bolt and jam nuts.

14) 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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) The existing ASME Code Stamped piping system in which the replacement valve MSLC-V-2D Serial No 28467 was installed is Main Steam (MS) piping system MS(1)-4D-P2. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system in which the replacement valve MSLC-V-2D Serial No 28467 was installed is Main Steam Leakage Control (MSLC) piping system MSLC(2)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

4) The replacement valve MSLC-V-2D Serial No 28467 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Summer 1975 Addenda requirements.

5) The liquid penetrant (PT) examination on the final socket welds was performed in accordance with the requirements of ASME Section III, Code Class 1, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

6) 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 requirements outlined in Code Case N-416-1.

essure Side - The test pressure of 35 Psig and the test temperature of 81 on the socket welds was recorded during ASME Section XI essure test which was performed utilizing local pressurization, 3) * Valve MSLC-V-2D High Pressure Side - The test pressure of 1000 Ps I the test temperature of 82 on the socket weld was recorded during ASME Section XI pressure test which was performed utilizing local				PLAN	No 2-1
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other         Test Pressure: 35/100 Paig       Test Temperature: 8182° F         Remarks: 1) See attached NPV-1 Code Data Report for the replacement valve MSLCV-2D Safal No 2447, 2) * Valve MSLCV-2D saure Side: The test pressure of 31 On the socket wolds was recorded during KS Socion XI         saure Side - The test pressure of 32 Paig and the test temperature of 31 on the socket wolds was recorded during KS Socion XI         saure test which was performed utilizing local pressure and during ASME Section XI pressure test which was performed utilizing local social was recorded during ASME Section XI         Number of B2 on the socket weld was recorded during ASME Section XI         Sure test which was performed utilizing local pressure and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Prepared By       Muldip Sight - Program Lead Engineer (PLE)         Date       6(32/03)         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartiord Steam Boiler Of Connecticut of Hartford Science with the requirements of the ASME Code, Section XI.         I hartor (Science with the requirements of the ASME Code, Section XI.         Sectin State of Washington and employ			ENERGY NORTHWE	5 <b>T</b>	
Test Pressure: 35/1000 Paig       Test Temperature: 81/82°F         Component Design Pressure: 50/1250 Psig       Temperature: 57/575°F         Remarks: 1) See attached NPV-1 Code Data Report for the replacement valve MSLC-V-2D Serial No 2847, 2) * Valve MSLC-V-2D Serial No 2847, 2) * Valve MSLC-V-2D Serial No 2847, 2) * Valve MSLC-V-2D High Pressure Side - The test pressure of 1000 Ps         Sure test which was performed utilizing local pressurization, 3) * Valve MSLC-V-2D High Pressure Side - The test pressure of 1000 Ps         Sure test which was performed utilizing local pressureative of 82 on the socket weld was recorded during ASME Section XI pressure test which was performed utilizing local sourceation.         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Expiration No: Not Applicable         EXPIRE Code, Section XI.         Nuddy Guardy G	FC	ORM NIS-2 OWNER'S	REPORT FOR REPAIRS	S OR REPLACEMENTS (Back)	
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By	Tests Conducte	Test Pressure: 35/100	0 Psig	Test Temperature: 81/82º F	•
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By	essure Side - The te essure test which wa	est pressure of 35 Psig and the as performed utilizing local pre	e test temperature of 81 on the s essurization, 3) * Valve MSLC-V-	cocket welds was recorded during ASME Section -2D High Pressure Side - The test pressure of	on XI 1000 Psi
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By		C	ERTIFICATE OF COMP	LIANCE	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $5-7-c^{-2}$ to $7-7-c^{-2}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements National Board, State, and Endorsements	to the rules of Type Code Sy Certificate Of Expiration Da Prepared By	f the ASME Code, Section Authorization No.: Not Application Authorization No.: Not A Not Applicable	ion XI. ble Applicable Signed E d Engineer (PLE)	Sy Kuldip Singh - Program Lead Engineer (	
Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $5-7-c^{2}$ to $7-7-c^{2}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements National Board, State, and Endorsements		CERTII	FICATE OF INSERVICE	INSPECTION	
Inspector's Signature National Board, State, and Endorsements	Vessel Inspect of Hartford, Co period <u>5</u> -/ Owner has per in accordance By signing the implied, conce Furthermore,	tors and the State of Wonnecticut have inspects <u>7-c-</u> to <u>7-/-</u> erformed examinations e with the requirements is certificate neither the erning the examination neither the inspector n	Vashington and employed ed the components desc - ما state to a and taken corrective me s of the ASME Code, Sec b Inspector nor his emplo is and corrective measure for his employer shall be	I by Hartford Steam Boiler Of Connect ribed in this Owner's Report during the best of my knowledge and belie easures described in this Owner's R stion XI. over makes any warranty, expresse res described in this Owner's Report bliable in any manner for any person	ticut the f, the eport d or t.
Date 7-1-03	<u>A. M.</u>	nspector's Signature		ns 7486W/7486 m 2 National Board, State, and Endorseme	T 2-2 nts
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### INFORMATION ONLY PLAN NO. 2-1858

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Nuclear Valve Di Manufactured by of Borg Warner, 75		Van Nuys, Ca. Or	der No. 47713
Bovee & Crail/G. Manufactured for Box 1040, R	E.R.I.		der No215-3261Q
OwnerWPPSS Hanford #2 Job	SILE MS	LC-V-2D S/	J <u>28467</u>
Location of Plant Richland, Wash	ington 99352	<u>6</u>	udit Surs
Pump or Valve Identification <u>Nuclear</u>	Valve Div. P/N	76890-1, 1 1/2 In u 28472 (12 Valv	1500=
	prion of service for which o		
76890-1			- A Down Warnen
×/4	_ Prepared byNUC1	ear Valve Division	OI BORE WERNER
(b) National Board No.	100	_	
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Edition 1974 Addends Day	. <u>Symmer '75</u>	Case No. N/A	
. No.	Material Spac. No.	Manufacturer	Romarko
(a) Cassings Gate - Code 1R31: 1V05-	SA487 CA6NM	Rex Precision	
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Body - Code 1061. 1888-	5A1(:5		

# INFORMATION ONLY

FORM NPV-1 (back)

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• • • • • •	second of NVD of 3	Borg Warner 7500 3	Cyrone Ave. Va	n Nuve. CA. 91409
Design specificat	ions cenified by <u>David</u> pon cenified by <u>W1111</u>	am E. Hill	(1) Prof. Eag. State (1) Prof. Eag. State	CA Reg. No. 11338
Stress analysis fi (1) Simplify and	required. List same only.		(1) FION ENG. State	
	e statements made in this re		ision .	· · · · · ·
Date March	<u>30 19 78</u> Signed	of Borg Warner	By Carn	c. Sturing !!
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Certificate of Aut	borization No. <u>N-1254</u>	espires <u>October 2</u>		·
				·
	CER	TIFICATE OF SHOP INSI	PECTION	
I, the undersi, and/or the State of	paed, bolding a valid commi	ission issued by the Nationa 077118 and employ	a Board of Boiler and	a Mutual Casualty
of Long G	rove, Illinois			ment described in this Data
Ma:	rch 30 in 78	_, and state that to the be	est of my knowledge i	and belief, the Manufacturer
	his equipment in accordance is centificate, neither the li			
ing the equipment	described in this Data Rep roomal injury or property data	ore. Furthermore, neither the nage or a loss of any kind at	ising from or connecte	d with this isspection.
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Printed in U.S.A. (8/72):

Manuel B. Diana

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This form (237) is obtainable from the ASME, 345 E. 47th St., New York, N.Y. 1001\*

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/31/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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 Bulit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-RV-88C Spare Valve (RHR-RV-97)	Lonergan Lonergan	509258-81-1 509258-89-1	N/A N/A	N/A N/A	1978 1979		Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced base for relief valve RHR-RV-88C, S/N 509258-81-1. The replacement work was performed as follows:

1) Removed the existing base from relief valve RHR-RV-88C, S/N 509258-81-1.

2) Removed the existing base from spare relief valve (RHR-RV-97), S/N 509258-89-1.

3) Installed base removed from spare relief valve (RHR-RV-97), S/N 509258-89-1 in relief valve RHR-RV-88C, S/N 509258-81-1

PLAN No 2-1859
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F
Remarks: See attached NV-1 Code Data Report for the spare relief valve (RHR-RV-97), S/N 509258-89-1.
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 Evaluation Detailed to visualize
Expiration Date: Not Applicable         Prepared By
$Date = \frac{5 3 (0.3)}{2 3 (0.3)} Date = \frac{5 3 (0.3)}{2 3 (0.3)}$
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -I \int -O \hat{r}$ to $2 - I - O \hat{r}$ and state to the best of my knowledge and bellef, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
<u>I. M. Tosto</u> Inspector's Signature Commissions <u>7/16/6</u> W/24186 W I WS National Board, State, and Endorsements
Date 7-1-03

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4. :	Location of Plant	<u>2 Jobsite, 12</u>	Miles North	cf Richly	und, Voshi	Ington 99352	
	Valve Identification						<u> </u>
	Type Safety Relief Valve Safety: Safety Relief; Pily: Pawer	Orifice Size	G.06 Pipe Size	N/A I	:let	_Outles1"	
6.	Set Picssure (PSIG)		•		400		°f
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Dute 2/25-19	ments made in this separt are correct. <u>77</u> Signed J. E. LONERGAN COMPANY m Handfortung FRO 9-25-75 M.M. 125/71	A ASTANT . A. DICKEY
1)ute19	ments made in this separt are correct. <u>77</u> Signed J. E. LONERGAN COMPANY m Handfortung FRO 9-25-75 M.M. 125/71	у 1. Л. Л. Биска 1. А. риска 1. П. 1980 1. 10, 1980
Dute 19 Certificate of Authoriza 1, the undersigned, and the State or Provin of Hartic Report on	cments made in this report are correct. <u>77</u> Signed J. E. LONERGAN COMPANY pro- tion No. <u>N-2359</u> capires Sep CERTIFICATE OF SHOP INSP holding s.valid commission issued by the National penna. and employed by <u>1</u>	Y- 
Dute Certificate of Authoriza I, the undersigned, and the State or Provin of Report on structed this equipment By signing this ce ing the equipment desc	cments made in this report are correct. <u>7</u> Signed J. E. LONERGAN COMPANY IN Manufactury N-2359 expires Sep CERTIFICATE OF SHOP INSU holding a valid commission issued by the National per of <u>Penna</u> and employed by <u>1</u> Drd, Connecticut that to the best of my	FCTION Board of Boiler and Pressure Vessel Inspected inspected the equipment described in this knowledge and belief, the Manufactures has ASME Section III.
Dute 2/25 19; Certificate of Authoriza I, the undersigned, and the State or Provin of Hartfo Report on <u>S</u> atructed this equipment By signing this ce ing the equipment desc mannes for any persons	Ements made in this report are correct.	FCTION Board of Boiler and Pressure Vessel Inspected inspected the equipment described in this knowledge and belief, the Manufactures has ASME Section III.
Dute Certificate of Authoriza I, the undersigned, and the State or Provin of Report on structed this equipment By signing this ce ing the equipment desc mannes for any persons	ements made in this report are correct. The Signed J. E. LONERGAN COMPANY of the second seco	PECTION Board of Boiler and Pressure Yessel Inspe Intford Stm. Boiler I.&I. Co. inspected the equipment described in this knowledge and belief, the Manufacturer has ASME Section III.

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/15/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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, 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
RHR-V-84B	Borg Warner	28828	N/A	N/A	1978	Repaired	Yes, Code Class 1

7. Description Of Work Performed: Repaired valve RHR-V-84B. The repair work was performed as follows:

1) Cut valve body to bonnet seal weld.

2) Removed existing disc from the valve.

3) Machined the disc seating surfaces.

4) Performed liquid penetrant (PT) examination on the machined disc seating surfaces. Liquid penetrant (PT) examination results acceptable.

5) Reinstalled the existing disc in the valve.

6) Prepped body and bonnet cut surfaces.

7) Performed liquid penetrant (PT) examination on the valve body and bonnet prepped surfaces. Liquid penetrant (PT) examination results acceptable.

8) Reinstalled the valve bonnet.

9) Made valve body to bonnet seal weld.

10) Performed visual examination on the final seal weld. Visual examination results acceptable.

11) Performed liquid penetrant (PT) examination on the final seal weld. Liquid penetrant (PT) examination results acceptable.

12) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

PLAN No 2-1862 ENERGY NORTHWEST People - Vision - Balutiane
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back) 8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Test Pressure: 120 Psig Test Temperature: 92.6° F Component Design Pressure: 3600 Psig Temperature: 100° F 9. Remarks: None
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this 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       Mutch         Kuldip Singh - Program Lead Engineer (PLE)         Date       711503
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>COLIPIC3</u> to <u>OTICC3</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Mathematical Description       Commissions <u>SO32W-ACW</u> National Board, State, and Endorsements         Date <u>OTIM/C3</u>

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/04/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Low Pressure Core Spray (LPCS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
LPCS-V-34 Disc Disc	Borg Warner Borg Warner Borg Warner	17867 N/A N/A	N/A N/A N/A	N/A N/A N/A	1976 N/A N/A	Replaced Replacement	Yes, Code Class 1 No, Code Class 1 No, Code Class 1

7. Description Of Work Performed: Replaced existing disc and made body to bonnet seal weld for valve LPCS-V-34. The work was performed as follows:

1) Cut valve body to bonnet seal weld.

2) Removed existing disc from the valve.

3) Installed new replacement disc in the valve.

4) Prepped body and bonnet cut surfaces.

5) Performed liquid penetrant (PT) examination on the valve body and bonnet prepped surfaces. Liquid penetrant (PT) examination results acceptable.

6) Reinstalled the valve bonnet.

7) Made valve body to bonnet seal weld.

8) Performed visual examination on the final seal weld. Visual examination results acceptable.

9) Performed liquid penetrant (PT) examination on the final seal weld. Liquid penetrant (PT) examination results acceptable.

PLAN No 2-1  Provide the second seco							
Fests Conducted: Hydrostatic Pressure: 325 Paig       Test Temperature: 86° F         Component Design Pressure: 3500 Paig       Test Temperature: 100° F         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         Certificate Of Authorization No.: Not Applicable       Signed By         Expiration Date: Not Applicable       Signed By         Kuddip Singh - Program Lead Engineer (PLE)       Date         Date       G 4 (03         CERTIFICATE OF INSERVICE INSPECTION         It and paperature of the State of Washington and employed by Hantlord Steam Boliler Of Connecticut of Hantlord, Connecticut Have inspectors and the State of Washington and employed by Hantlord Steam Boliler Of Connecticut of Hantlord, Connecticut Have inspector sond the State of the State to the best of my knowledge and belief, the Owner is Report fung the period 11/2/2 to 2/2/2 and state to the best of my knowledge and belief, the Owner is Report in accordance with the requirements of the ASINE Code, Section XI.         By signing this certificate neither the Inspector nor his employer shall be liable in any manner for any personal influery or property damage or a loss of any kind arising from or connected with this inspection.         Matterments of the ASINE Code, Section XI.       By signing this certifficate neither the inspector mor his empl					RGY THWEST	•	PLAN No 2-
Test Pressure: 325 Psig       Test Temperature: 68° F         Component Design Pressure: 3600 Psig       Temperature: 100° F         Remarks: None       CERTIFICATE OF COMPLIANCE         Vecentity 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       Expiration No:: Not Applicable         Certificate Of Authorization No:: Not Applicable       Signed By         Expiration Date: Not Applicable       Signed By         Kuldip Singh: Program Lead Engineer (PLE)       Date         Date       6/4/03         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1 1 2 1 - 2 and state to the best of my knowledge and bellef, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By sysping this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report In accordance with the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his e	FO	RM NIS-2	? OWNER'S Ri	EPORT FOR	REPAIRS C	R REPLACEME	ENTS (Back)
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       Signed By       Juan       Juan         Prepared By       Juan       J	l Tests Conducte	Test Pre	essure: 325 Psig		Te	st Temperature:	68 <sup>0</sup> F
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	. Remarks: None						
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							
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							
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	[						<u> </u>
rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       G(4(03)         Date       G(4(03)         Date       G(4(03)         Date       G(4(03)         Date       G(4(03)         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel inspectors and the State of Washington and employed by Hantford Steam Boiler Of Connecticut of Hantford, Connecticut have inspected the components described in this Owner's Report during the period         J=C2       to J=J=C2         and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report during the accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Mational Board, Sta			CEI	RTIFICATE (	OF COMPLIA	<b>NCE</b>	
Prepared By       Mudip       Signed       Signed By       Mudip       Kuldip       Signed       Kuldip       Kuldip       Signed       Kuldip       Signed       Kuldip       Kuldip       Signed       Fregram       Lead       Engineer       Fregram       Lead       Engineer       Fregram       Lead       Engineer       Fregram       Lead       Engineer       Fregram       Kuldip       Signed       Kuldip       Signed       Fregram       Lead       Engineer       Fregram       Lead       Fregram       Lead       Fregram       Lead       Fregram       Kuldip       Signed       Fregram       Kuldip       Signed       Fregram       Kuldip       Signed       Fregram	rules of the A Type Code Sy Certificate Of	SME Code mbol Stan Authorizat	e, Section XI. np: Not Applicable tion No.: Not App	•	s Report are	correct and this	repair <i>conforms to the</i>
Date       6403         Date       6403         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hantford Steam Boiler Of Connecticut         of Hantford, Connecticut have inspected the components described in this Owner's Report during the         period       9-67         to       7-1-62         and state to the best of my knowledge and belief, the         Owner has performed examinations and taken corrective measures described in this Owner's Report         in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or         implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal         injury or property damage or a loss of any kind arising from or connected with this inspection.         Image: The Signature   Commissions <u>7110007740740740740740740740740740740740740</u>		Ju	aip &	20 b	_ Signed By	funding	the stand of
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and empioyed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1	Dete	Kuldip Singl	h - Program Lead E	Engineer (PLE)	Data	Kuldip Singh - Pro	gram Lead Engineer (PLE)
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underbrace{\neg - c}_{-} \underbrace{\neg - c}_{-} \underbrace{\neg - c}_{-} \underbrace{\neg - c}_{-} and state to the best of my knowledge and belief, theOwner has performed examinations and taken corrective measures described in this Owner's Reportin accordance with the requirements of the ASME Code, Section XI.By signing this certificate neither the Inspector nor his employer makes any warranty, expressed orimplied, concerning the examinations and corrective measures described in this Owner's Report.Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personalinjury or property damage or a loss of any kind arising from or connected with this inspection.MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM$		<u> </u>	41				<u>+103</u>
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underbrace{\neg - c}_{-} \underbrace{\neg - c}_{-} \underbrace{\neg - c}_{-} \underbrace{\neg - c}_{-} and state to the best of my knowledge and belief, theOwner has performed examinations and taken corrective measures described in this Owner's Reportin accordance with the requirements of the ASME Code, Section XI.By signing this certificate neither the Inspector nor his employer makes any warranty, expressed orimplied, concerning the examinations and corrective measures described in this Owner's Report.Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personalinjury or property damage or a loss of any kind arising from or connected with this inspection.MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM$	L		<del> </del>		<u></u>		
Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underbrace{7-7-1-c^2}_{intermed}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements			CERTIFI	CATE OF IN	SERVICE IN	SPECTION	
in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. 2111122222222222222222222222222222222	Vessel Inspect of Hartford, Co period	tors and ti nnecticut f	the State of Wa have inspected to <u>7-1-0</u>	shington and the compon	employed by ents describ d state to the	Hartford Steam ed in this Owner best of my know	Boiler Of Connecticut 's Report during the wledge and belief, the
Inspector's Signature National Board, State, and Endorsements	in accordance By signing thi implied, conce Furthermore,	with the I s certificat erning the neither the	requirements of te neither the la examinations e Inspector not	of the ASME ( inspector nor and correction r his employed	Code, Sectio r his employe ve measures er shall be lla	n XI. er makes any wa described in thi ble in any mann	rranty, expressed or 's Owner's Report. er for any personal
Date _ 7-1- ()?	<u></u>	spector's Siç	gnature	C	ommissions	7118610/	7476 M.J. 18-2 State, and Endorsements
	Date	- 13					



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/06/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (c) Type Code Symbol Stamp: Not Applicable
- (d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1974 Edition with Winter 1976 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced studs and nuts for pipe to valve SW-V-165A bolted flanged joints. The replacement work was performed as follows:

#### Studs For The Bolted Flanged Joints

1) Removed existing forty eight (48) studs.

2) Performed VT-3 visual examination on the existing twenty seven (27) studs. VT-3 visual examination results acceptable.

3) Reinstalled twenty seven (27) VT-3 visually examined studs.

4) Scrapped twenty one (21) out of the forty eight (48) studs.

5) Installed twenty one (21) new studs.

#### Nuts For The Bolted Flanged Joints

1) Removed existing forty eight (48) nuts.

2) Performed VT-3 visual examination on the existing twenty three (23) nuts. VT-3 visual examination results acceptable.

3) Reinstalled twenty three (23) VT-3 visually examined nuts.

4) Installed one (1) new nut.

5) Reinstalled twenty four (24) nuts without performing the required VT-3 visual examination.

#### Pressure Test

1) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints. No evidence of leakage during the pressure test.

	EN NORTHWEST People Vision Solutions
FC	ORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
	ed: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 215 Psig Test Temperature: 65° F Component Design Pressure: 300 Psig Temperature: 150° F
<b>Remarks:</b> None	
	CERTIFICATE OF COMPLIANCE
to the rules of Type Code Sy	t the statements made in this Owner's Report are correct and this replacement conforms the ASME Code, Section XI. mbol Stamp: Not Applicable Authorization No.: Not Applicable te: Not Applicable
Prepared By _	$\mathcal{D}_{1,2}$ $\mathcal{D}_{2}$ $\mathcal{D}_{1,2}$ $\mathcal{D}_{2}$
Date	DateDate
Vessel Inspec of Hantford, Co period <u>5</u> 22 Owner has pe in accordance By signing the implied, conce Furthermore,	CERTIFICATE OF INSERVICE INSPECTION gned, holding a valid commission issued by the National Board of Boiler and Pressure tors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut nnecticut have inspected the components described in this Owner's Report during the $\frac{1-\sqrt{2}}{1-\sqrt{2}}$ to $\frac{1}{\sqrt{2}-\sqrt{2}}$ and state to the best of my knowledge and belief, the rformed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI. Is certificate neither the Inspector nor his employer makes any warranty, expressed or erning the examinations and corrective measures described in this Owner's Report. neither the Inspector nor his employer shall be liable in any manner for any personal
<u></u>	erty damage or a loss of any kind arising from or connected with this inspection.
Date 6 30	<i>حری ـ د</i>



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/04/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Low Pressure Core Spray (LPCS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
LPCS-V-34 Bonnet Bonnet	Borg Warner Borg Warner Borg Warner	17867 N/A 301500	N/A N/A N/A	N/A N/A N/A	1976 N/A 1993	Replaced Replacement	Yes, Code Class 1 No, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing bonnet for valve LPCS-V-34. The replacement work was performed as follows: 1) Removed existing bonnet from valve LPCS-V-34.

2) Installed replacement bonnet Serial No 301500 in valve LPCS-V-34.

NOTES -

1) See ASME Section XI Plan No 2-1864 for body to bonnet seal weld for valve LPCS-V-34, Serial No 17867.

2) See ASME Section XI Plan No 2-1864 for pressure test on body to bonnet joint for valve LPCS-V-34, Serial No 17867.

			v	PLAN No 2-1
			WEST Bolutions	
FOF	RM NIS-2 OWNER'S I	REPORT FOR RE	PAIRS OR F	REPLACEMENTS (Back)
ests Conducted	f: Hydrostatic D Test Pressure: Psig Component Design F		Test 7	ating Pressure Other Temperature: <sup>o</sup> F erature: <sup>o</sup> F
	attached N-2 Code Data Rep n body to bonnet joint for val			9 301500. 2) * See ASME Section XI Plan No 2-
	Cl	ERTIFICATE OF (	COMPLIANC	)E
to the rules of t Type Code Syn	the ASME Code, Section head Stamp: Not Applicate Authorization No.: Not A	on XI. De	port are cor	rect and this replacement conforms
Prepared By	Kuldip Singh - Program Lead	Engineer (PLE)		Idip Singh - Program Lead Engineer (PLE)
Date	6 4 03	Da	te	
	CERTIF	FICATE OF INSER	IVICE INSPI	ECTION
Vessel Inspecto of Hartford, Con period <u>5-27</u> Owner has period in accordance By signing this	ors and the State of W necticut have inspecte <u>-CJ</u> to <u>2-/-C</u> formed examinations with the requirements certificate neither the	ashington and emp d the components and taken correction of the ASME Cod Inspector nor his	bloyed by Ha described l ate to the be ive measure e, Section X employer m	akes any warranty, expressed or
Furthermore, n	either the Inspector n	or his employer sl	hall be liable	scribed in this Owner's Report. In any manner for any personal nnected with this inspection.
<u></u>	pector's Signature	Comn	nissions <u>7</u>	National Board, State, and Endorsements
Data 7-1.				

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•••			National Board No. In Numerical Order
Serial Number	Board No. In Numerical Order		Board No.
Serial Number (1)	Board No.	Serial Number	Board No.
Serial Number (1)	Board No. In Numerical Order	Serial Number (26) (27)	Board No.
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Serial Number (1) <u>3025w</u> (2) (3) (4) (5)	Board No. In Numerical Order	Serial Number (26) (27) (28) (29) (30)	Board No.
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Serial Number	Board No. In Numerical Order	Sertal Number           (26)           (27)           (28)           (29)           (30)           (31)           (32)           (33)           (34)           (35)           (36)           (37)           (38)           (39)           (40)	Board No.
Serial Number	Board No. In Numerical Order	Sertal Number           (26)           (27)           (28)           (29)           (30)           (31)           (32)           (33)           (34)           (35)           (36)           (37)           (38)           (39)           (40)	Board No.
Serial Number	Board No. In Numerical Order	Sertal Number           (26)           (27)           (28)           (29)           (30)           (31)           (32)           (33)           (34)           (35)           (36)           (37)           (38)           (39)           (40)	Board No.
Seriel Number	Board No. In Numerical Order	Sertal Number           (26)           (27)           (28)           (29)           (30)           (31)           (32)           (33)           (34)           (35)           (36)           (37)           (38)           (139)           (40)           (41)	Board No.
Seriel Number	Board No. In Numerical Order	Sertal Number           (26)           (27)           (28)           (29)           (30)           (31)           (32)           (33)           (34)           (35)           (36)           (37)           (38)           (40)           (41)           (42)	Board No.
Seriel Number	Board No. In Numerical Order	Sertal Number           (26)           (27)           (28)           (29)           (30)           (31)           (32)           (33)           (34)           (35)           (36)           (37)           (38)           (40)           (41)           (44)	Board No.
Seriel Number	Board No. In Numerical Order	Sertal Number           (26)           (27)           (28)           (29)           (30)           (31)           (32)           (33)           (34)           (35)           (36)           (37)           (38)           (139)           (40)           (41)           (42)           (44)           (45)	Board No.
Seriel Number	Board No. In Numerical Order	Sertal Number           (26)           (27)           (28)           (29)           (30)           (31)           (32)           (33)           (34)           (35)           (36)           (37)           (38)           (141)           (40)           (41)           (42)           (43)           (44)           (45)	Board No.

\*Supplemental information in the form of lists, skatches, or drawings may be used provided (1) size is EX. × 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 in recorded at the top of this form.

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This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Feirfield, NJ 07007-230J.

FORM H-2 (Beat Py. 2 of	_)
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	CERTIFICATION OF E			
Design specifications certified by	Jurian applicable		E. State N	-
Design report <sup>e</sup> certified by	R/A burken oppftaablei	P.	E. StateN	ng. ng
	CERTIFICATE OF COM	PLIANCE		
We certify that the statements made in	this report are correct and that this (IIIII	<b>\$</b> }	N.N.S.T	
conforms to the rules of construction o	f the ASME Code, Section III, Division 1.	a je v pris		8, 1993
NPT Certificate of Authorization No		Expires		<u> </u>
Dets 6-21-93 Name	BR/IP INTERNICAL INC.	Signed	Tatims	
.,	CERTIFICATE OF INSI	PECTION		
CRIMPORTA and employs	mission issued by the National Board of E id by	CO. FACTORY HUT	ML PRODUCTION AS	OCLATIC
	pected these items described in this Data			
	entificate Holder has fabricated these part eauthorized for stamping on the date sho		n accordance with the /	ASME Code, S
By signing this certificate, neither the k	nspector nor his employer makes any wa	manty, expressed or l		
In this Data Report. Furthermore, neither loss of any kind arising from or connect	er the inspector nor his employer shall be	Noble in any manner (	or any personal injury o	property dan
Dete 6/22/93 Signed	Withortand Indector)	Commissions	12-75 C.S.	and state or pro-
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#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/04/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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		Yes, Code Class 3**
SW(21)-2	WPPSS •	SW(21)-2-P1	N/A	N/A	1983		Yes, Code Class 3**

7. Description Of Work Performed: Replaced existing support material The replacement work was performed as follows:

- 1) Removed existing support material such as U bolts, nuts and jam nuts (1/2 nuts).
- 2) Formed one (1) 1" U bolt to meet the dimensional requirements.
- 3) Cut additional threads on the legs for 1" U bolts.
- 4) Performed visual examination on the newly cut threads.
- 5) Installed replacement support material such as U bolts with four (4) nuts for each U bolt and jam nuts (1/2 nuts).

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) \*\* ASME Section III, Code Class NF(3) for the supports.

3) The support material such as U bolts with four (4) nuts for each U bolt and jam nuts (1/2 nuts) was replaced for the following supports:

SW-1529-21	SW-1529-22
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SW-1529-21A SW-1529-11

4) The above listed supports are for the piping material replaced in accordance with ASME Section XI Plan No 2-1803.

(Fa)	PLAN No 24
	NORTHWEST le·Vision·Bolutions
FORM NIS-2 OWNER'S REPOR	T FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic Pneumati Test Pressure: Psig Component Design Pressure	Test Temperature: ° F
Remarks: None	
CERTIFIC	CATE OF COMPLIANCE
We certify that the statements made in this C to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable	Owner's Report are correct and this replacement conforms
Prepared By <u>Fuldy</u> Such Kuldip Singh - Program Lead Engineer	
Dateb 4- 03	Date 6[ 4[ 03
CERTIFICATE	OF INSERVICE INSPECTION
<i>I, the undersigned, holding a valid commissi</i> Vessel inspectors and the State of	ion issued by the National Board of Boiler and Pressure and employed by
described in this Owner's Report during the	have inspected the components
state to the best of my knowledge and belief, corrective measures described in this Owne ASME Code, Section XI.	period to and f, the Owner has performed examinations and taken er's Report in accordance with the requirements of the stor nor his employer makes any warranty, expressed or
implied, concerning the examinations and co Furthermore, neither the inspector nor his en	orrective measures described in this Owner's Report. employer shall be liable in any manner for any personal kind arising from or connected with this inspection.
Not Required - Replacement 1" NPS And Smaller	Commissions National Board, State, and Endorsements
Inspector's Signature Date	

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/25/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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		Yes, Code Class

<sup>7.</sup> Description Of Work Performed: Replaced U bolt for support CIA-4132-14. The replacement work was performed as follows: 1) Removed existing U bolt from the support.

- a) Installed replacement U bolt for the support.
- Installed replacement jam nuts for the support.

Replaced jam nuts for support CIA-4133-13. The replacement work was performed as follows:

1) Installed replacement jam nuts for the support.

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) ASME Section III, Code Class NF(2) for the support material.

PLAN No 2-14 ENERGY NORTHWEST People · Vision · Selutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F
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
CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut
of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -2\hat{\gamma} - c\hat{s}$ to $\int c - c\hat{s}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Minister     Commissions     748640/74186     Null of the second secon
Date 6/ 30/05

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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 06/06/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest
- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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		Yes, Code Class 3**

7. Description Of Work Performed: Replaced existing support material The replacement work was performed as follows:

1) Removed existing support material such as U bolts, nuts and jam nuts (1/2 nuts).

2) Cut additional threads on the legs for 1" U bolts.

3) Performed visual examination on the newly cut threads.

4) Installed replacement support material such as U bolts with four (4) nuts for each U bolt and jam nuts (1/2 nuts).

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) \*\* ASME Section III, Code Class NF(3) for the supports.

3) The support material such as U bolts with four (4) nuts for each U bolt and jam nuts (1/2 nuts) was replaced for the following supports: SW-1525-16

SW-1523-24

(E <sub>N</sub> )	PLAN No 2 ENERGY NORTHWEST
Paopi	ie · Vision · Solutions
FORM NIS-2 OWNER'S REPOR	T FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic Pneumati Test Pressure: Psig Component Design Pressure	Test Temperature: ° F
lemarks: None	
	CATE OF COMPLIANCE
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable	Owner's Report are correct and this replacement conforms
Expiration Date: Not Applicable Prepared By	(PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Date 6 6 03	Date 6 6 6 03
CERTIFICATE	OF INSERVICE INSPECTION
l, the undersigned, holding a valid commissi Vessel Inspectors and the State of	on issued by the National Board of Boiler and Pressure and employed by
deservibed in this Owner's Benert during the	have inspected the components
corrective measures described in this Owne ASME Code, Section XI.	period to and t, the Owner has performed examinations and taken or's Report in accordance with the requirements of the
implied, concerning the examinations and co Furthermore, neither the Inspector nor his e	tor nor his employer makes any warranty, expressed or orrective measures described in this Owner's Report. mployer shall be liable in any manner for any personal find arising from or connected with this inspection.
Not Required - Replacement 1" NPS And Smaller Inspector's Signature	Commissions
inspector o orgination of	National Board, State, and Endorsements

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/17/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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/AA	1983		Yes, Code Class 2**

7. Description Of Work Performed: Replaced existing support material The replacement work was performed as follows:

1) Removed existing support material such as U bolts, nuts and jam nuts (1/2 nuts).

2) Formed two (2) 1" U bolts to meet the dimensional requirements.

3) Cut additional threads on the legs for 1" U bolts.

4) Performed visual examination on the newly cut threads.

5) Installed replacement support material such as U bolts with four (4) nuts for each U bolt and jam nuts (1/2 nuts).

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) \*\* ASME Section III, Code Class NF(2) for the supports.

3) The support material such as U bolts with four (4) nuts for each U bolt and jam nuts (1/2 nuts) was replaced for the following supports: RCIC1484-12A RCIC-1484-14

4) The above listed supports are for the piping material replaced in accordance with ASME Section XI Plan No 2-1801.

	(	PLAN No 2-1
FC	DRM NIS-2 OWNER'S REI	PORT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducti	ed: Hydrostatic Pneu Test Pressure: Psig Component Design Pres	Imatic Nominal Operating Pressure None X Test Temperature: ° F ssure: Psig Temperature: ° F
Remarks: None		
	CERT	TIFICATE OF COMPLIANCE
to the rules of Type Code Sy	f the ASME Code, Section 2 mbol Stamp: Not Applicable	
	Authorization No.: Not Applic le: Not Applicable	;able
Prepared By	Kuldip Singh - Plogram Lead End	Signed By Kuldip Singh - Proofam Lead Engliseer (PLE)
Date	1/17/03	Date '7/10/03
	CERTIFICA	ATE OF INSERVICE INSPECTION
		nission issued by the National Board of Boiler and Pressure and employed by
described in t	his Owner's Report during	the period have inspected the components
state to the be corrective me ASME Code, S	est of my knowledge and b asures described in this O Section XI.	elief, the Owner has performed examinations and taken Owner's Report in accordance with the requirements of the
Implied, conc Furthermore,	erning the examinations an neither the Inspector nor h	spector nor his employer makes any warranty, expressed or nd corrective measures described in this Owner's Report. his employer shall be liable in any manner for any personal ny kind arising from or connected with this inspection.
Not Required - R	eplacement 1* NPS And Smaller Ispector's Signature	Commissions     National Board, State, and Endorsements



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/21/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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(12)-4-CL2	WPPSS*	RCIC(12)-4-CL2-P1	N/A	N/A	1983		Yes, Code Class 1

7. Description Of Work Performed: Replaced existing hanger rods for support RCIC-976S. The replacement work was performed as follows:

- 1) Removed existing hanger rods.
- 2) Removed existing nuts associated with the hanger rods.
- 3) Cut bar to the required lengths.
- 4) Cut threads for the rod.
- 5) Bevel threaded rod ends.
- 6) Perform visual examination on the newly cut threads. Visual examination results acceptable.
- 7) Install hanger rods.
- 8) Install nuts associated with the hanger rods.

#### NOTES-

- 1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
- 2) ASME Section III, Code Class NF(1) for the rods.

		PI	.AN No 2-
	( P		
FC	RM NIS-2 OWNER'S REF	PORT FOR REPAIRS OR REPLACEMENTS (Back)	)
ests Conducte	ed: Hydrostatic Pneu Test Pressure: Psig Component Design Pres	matic Nominal Operating Pressure Nor Test Temperature: ° F sure: Psig Temperature: ° F	ne X
<b>emarks:</b> None			
	CERI	IFICATE OF COMPLIANCE	·····
o the rules of	t the statements made in the the ASME Code, Section 2 mbol Stamp: Not Applicable	his Owner's Report are correct and this replacement co (I.	onforms
Certificate Of	Authorization No.: Not Applicable	able	
Prepared By _	Kuldip Singh - Program Lead Eng	iheer (PLE) Signed By Kuldip Singh - Program Lead Engir	ی مرب Heter (PLE)
Date	6/21/03	Date6 2i 03	
	CERTIFIC	TE OF INSERVICE INSPECTION	
		ission issued by the National Board of Boiler and P	
state to the be corrective me ASME Code, S	est of my knowledge and b asures described in this O Section XI.	have inspected the com the period to elief, the Owner has performed examinations and ta wner's Report in accordance with the requirements	and ken of the
implied, conce Furthermore,	erning the examinations ar neither the Inspector nor t	pector nor his employer makes any warranty, expre nd corrective measures described in this Owner's Re his employer shall be liable in any manner for any pe ny kind arising from or connected with this inspection	eport. ersonal
	eplacement 1" NPS And Smaller spector's Signature	Commissions National Board, State, and Endors	

# ENERGY NORTHWEST

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station **Date:** 06/20/03 **Sheet:** 1 Of 1 **Unit:** Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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-73	Borg Warner	28749	N/A	N/A	1978	Repaired	Yes, Code Class 1

7. Description Of Work Performed: Repaired valve RCIC-V-73. 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 2-1872 ENERGY NORTHWEST People · Vision · Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None X Test Pressure: Psig 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         Nuldip Singh - Program Lead Engineer (PLE)         Date       6/20/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\frac{\sqrt{-1/-C}}{\sqrt{-C}}$ to $\frac{\sqrt{-2}\sqrt{-C}}{\sqrt{-C}}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
1.111: Forther Commissions 74176 11/74176 12: Inspector's Signature Commissions National Board, State, and Endorsements
Date <u>6-30-03</u>



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/15/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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-V-85B Disc Disc	Borg Warner Borg Warner Borg Warner	20217 N/A N/A	N/A N/A N/A	N/A N/A N/A	1977 N/A N/A	Replaced Replacement	Yes, Code Class 1 No, Code Class 1 No, Code Class 1

7. Description Of Work Performed: Repaired valve RHR-V-85B. The repair work was performed as follows:

1) Cut valve body to bonnet seal weld.

2) Removed existing disc from the valve.

3) Installed replacement disc in the valve.

4) Prepped body and bonnet cut surfaces.

5) Performed liquid penetrant (PT) examination on the valve body and bonnet prepped surfaces. Liquid penetrant (PT) examination results acceptable.

6) Reinstalled the valve bonnet.

7) Made valve body to bonnet seal weld.

8) Performed visual examination on the final seal weld. Visual examination results acceptable.

9) Performed liquid penetrant (PT) examination on the final seal weld. Liquid penetrant (PT) examination results acceptable.

10) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

PLAN No 2-18 ENERGY NORTHWEST People - Vision - Belutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       Other       Image: Component Design Pressure: 3600 Psig       Test Temperature: 92.6° F         Component Design Pressure: 3600 Psig       Temperature: 100° F         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 - Program Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE) Date 71(5)03
DateDate
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{Ce/I2/C3}$ to $\underline{C?/Ie/C3}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
(Am) Dimley' Commissions 8032 12 ACIN
Inspector's Signature     National Board, State, and Endorsements       Date     0??////-/03



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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 06/30/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 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
MS-V-22A	Rockwell	JV-2	81	N/A	1973		Yes, Code Class 1

7. Description Of Work Performed: Performed the following ASME related work:

1) Performed VT-1 visual examinations on the replacement study for the valve body to bonnet joint. VT-1 visual examination results acceptable.

2) Performed VT-1 visual examinations on the replacement nuts for the valve body to bonnet joint. VT-1 visual examination results acceptable.

#### NOTES-

1) ASME Section XI Plan No 2-1875 was issued as a contingency plan to replace valve MS-V-22A body to bonnet joint. VT-1 visual examinations on the replacement studs and nuts were performed in anticipation to replace the studs and nuts for the valve body to bonnet joint. However the existing VT-3 visually examined studs and nuts were reinstalled for valve MS-V-22A body to bonnet joint. In view of the above, this NIS-2 form is being issued to close this plan since there is no other mechanism to close and vault the plan. Inspector's signature is not required on this NIS-2 form since no repair and replacement work was performed on permanent plant equipment under this plan.

2) See ASME Section XI Plan No's 2-1826, 2-1876 and 2-1877 for additional work performed on valve MS-V-22A.

	PLAN No 2-1
	People Vision Solutions
FORM NIS-2 OWNER'S I	REPORT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic Pa Test Pressure: Psig Component Design F	neumatic Nominal Operating Pressure None X Test Temperature: ° F Pressure: Psig Temperature: ° F
Remarks: None	
Cl	ERTIFICATE OF COMPLIANCE
We certify that the statements made to the rules of the ASME Code, Section Type Code Symbol Stamp: Not Applicate Certificate Of Authorization No.: Not A Expiration Date: Not Applicable	ble
Prepared By Kuldip Singh - Program Lead Date 7203	Signed By     Kuldip Singh - Program Lead Engineer (PLE)       Date     7) 103
CERTIF	FICATE OF INSERVICE INSPECTION
Vessel Inspectors and the State of W of Hartford, Connecticut have inspecte period to	ommission issued by the National Board of Boiler and Pressure lashington and employed by Hartford Steam Boiler Of Connecticut ed the components described in this Owner's Report during the and state to the best of my knowledge and belief, the
in accordance with the requirements By signing this certificate neither the implied, concerning the examination Furthermore, neither the Inspector n	and taken corrective measures described in this Owner's Report of the ASME Code, Section XI. Inspector nor his employer makes any warranty, expressed or a and corrective measures described in this Owner's Report. For his employer shall be liable in any manner for any personal of any kind arising from or connected with this inspection.
Not Required - See Note 1 Inspector's Signature	National Board, State, and Endorsements
Date	



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

## 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/01/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 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
MS-V-22A	Rockwell	JV-2	81	N/A	1973		Yes, Code Class

7. Description Of Work Performed: See note 1 below.

#### NOTES -

1) This plan was issued to recondition the valve bore inside (ID) surfaces. See ASME Section XI Plan No 2-1877 for the ASME related work performed on the bore inside (ID) surfaces. This NIS-2 form is being issued to close this plan since there is no other mechanism to close and vault the plan. Inspector's signature is not required on this NIS-2 form since no repair and replacement work was performed on permanent plant equipment under this plan.

2) See ASME Section XI Plan No's 2-1826, 2-1875 and 2-1877 for additional work performed on valve MS-V-22A.

	(E	PLAN No 2-18
	P	Ly INCA I MARCO I Deple Vision · Solutions
FO	RM NIS-2 OWNER'S REP	ORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted Remarks: None	d: Hydrostatic Pneum Test Pressure: Psig Component Design Press	natic Nominal Operating Pressure None Test Temperature: ° F Sure: Psig Temperature: ° F
	CERTI	FICATE OF COMPLIANCE
to the rules of a Type Code Syn Certificate Of A Expiration Data Prepared By	the ASME Code, Section X nbol Stamp: Not Applicable Authorization No.: Not Applica	ble signed By Fuldy Singh
Vessel Inspect of Hartford, Cor	ned, holding a valid commi ors and the State of Washi necticut have inspected the	TE OF INSERVICE INSPECTION ission issued by the National Board of Boiler and Pressure ngton and employed by Hartford Steam Boiler Of Connecticut e components described in this Owner's Report during the
period Owner has per in accordance By signing this implied, conce Furthermore, r	to formed examinations and with the requirements of the certificate neither the insp rning the examinations and weither the inspector nor his	and state to the best of my knowledge and belief, the taken corrective measures described in this Owner's Report he ASME Code, Section XI. bector nor his employer makes any warranty, expressed or d corrective measures described in this Owner's Report. is employer shall be liable in any manner for any personal by kind arising from or connected with this inspection.
	lequired - See Note 1	Commissions
Date		

# ENERGY NORTHWEST

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/01/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 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
MS-V-22A	Rockwell	JV-2	81	N/A	1973		Yes, Code Class 1

7. Description Of Work Performed: Repaired the bore inside (ID) surfaces for valve MS-V-22A. The repair work was performed as follows:

1) Prepared the gouges for weld repair.

2) Performed magnetic particle (MT) examination on the final cavities. Magnetic particle (MT) examination results acceptable.

3) Weld repaired (weld built up) the cavities.

4) Ground/blended the weld repaired areas flush with the adjacent base metal to match the contour of the inside surfaces.

5) Performed visual examination on the final welded surfaces. Visual examination results acceptable.

6) Performed magnetic particle (MT) examination on the final ground/blended areas. Magnetic particle (MT) examination results acceptable accept for two (2) linear indications were observed and believed to be non-relevant. Performed liquid penetrant (PT) examination to verify non-relevant status of the two (2) indications. Liquid penetrant (PT) examination revealed that the magnetic particle (MT) examination indications were non-relevant.

7) Performed post repair VT-3 visual examinations on the valve body accessible internal surfaces. VT-3 visual examination results acceptable.

#### NOTES -

1) Post repair VT-3 visual examinations on the valve bonnet accessible internal surfaces was not required since the bonnet was not repaired. See ASME Section XI Plan No 2-1826 for the initial VT-3 visual examination performed on the valve bonnet accessible internal surfaces.

2) See ASME Section XI Plan No's 2-1826, 2-1875 and 2-1876 for additional work performed on valve MS-V-22A.

	PLAN No 2 ENERGY NORTHWEST People - Vision - Belutions
	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
	ucted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
Remarks: N	one
	CERTIFICATE OF COMPLIANCE
to the rule Type Code Certificate	that the statements made in this Owner's Report are correct and this replacement conforms s of the ASME Code, Section XI. Symbol Stamp: Not Applicable Of Authorization No.: Not Applicable Date: Not Applicable By
	CERTIFICATE OF INSERVICE INSPECTION
Vessel Ins of Hartford period <u>6</u> Owner ha in accorda By signing implied, co Furthermo	Persigned, holding a valid commission issued by the National Board of Boiler and Pressure spectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut , Connecticut have inspected the components described in this Owner's Report during the -19-03 to $7-1-03$ and state to the best of my knowledge and belief, the sperformed examinations and taken corrective measures described in this Owner's Report ance with the requirements of the ASME Code, Section XI. This certificate neither the Inspector nor his employer makes any warranty, expressed or concerning the examinations and corrective measures described in this Owner's Report. The property damage or a loss of any kind arising from or connected with this inspection.
1.	Inspector's Signature Commissions 748610/7486 N.I. ms
Date _7	Inspector's Signature National Board, State, and Endorsements $-1-03^{2}$



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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/01/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: High Pressure Core Spray (HPCS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2	WPPSS *	HPCS(1)-4CL2-P2	N/A	N/A	1982		Yes, Code Class 2

7. Description Of Work Performed: Replaced pipe nipple between valve HPCS-V-713 and valve HPCS-V-714. The repair/replacement work was performed as follows:

- 1) Removed existing pipe nipple.
- 2) Installed replacement pipe nipple.

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)         Test Conducted: Hydrostatic Prig         Test Temperature: °F         Test Temperature: °F         Component Design Pressure: Psig         Test Temperature: °F         Test Temperature: °F         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         Expiration Date: Not Applicable         CERTIFICATE OF INSERVICE INSPECTION         Kudap Singh #rogen Lead Engineer (PLE)         Date         The code Symbol Stamp of Mashington and employed by Hantion Stame Boller of Connecticut of Hantord. Connecticut and Hals may instain the and employed by Hantion Stame Boller Of Connecticut of Hantord. Connecticut and these starger during the period OL/2012 to 2014/202 and state to the baset of my knowledge and belief, the Owner's Report during the period OL/2014/202 to 2014/202 and state to the baset of my knowledge and belief, the Owner's Report during the period OL/2014/202 to 2014/202 and state to the baset of my knowledge and belief, the Owner's Report during the period oL/2014/202 to 2014/202 and state to the baset of my knowledge and belief, the Owner's Report for his semployeer makes any warranty, expressed or Implied, concerning the scaminations and		PLAN No 2- ENERGY NORTHWEST People - Vision - Balutions
Tests Conducted: Hydrostatic Pressure: Psig       Nominal Operating Pressure: Psig       Test Temperature: ° F         Test Pressure: Psig       Test Temperature: ° F         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       Expiration Date: Not Applicable         Certificate Of Authorization No.: Not Applicable       Expiration Date: Not Applicable         Prepared By       Labeled State         Kuldip Singh Program Lead Engineer (PLE)       Date         Date       11/03         Date         1/03	FC	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR DEDLACEMENTS (Pack)
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh 4Program Lead Engineer (PLE)         Date       71103         Date       71103         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hantford Steam Boiler Of Connecticut       of Martine Astronometric of my knowledge and belief, the         Owner has performed examinations and taken corrective measures described in this Owner's Report In accordance with the requirements of the ASME Code, Section XI.       By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Maxwadu       Commissions       SO 32 W A.C.W	Tests Conducte	ed: Hydrostatic Pneumatic Nominal Operating Pressure None X Test Pressure: Psig Test Temperature: ° F
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh 4Program Lead Engineer (PLE)         Date       1103         Date       1103         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hantford Steam Boiler Of Connecticut         of Antification 3 and taken corrective measures described in this Owner's Report for any personal in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from		
to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By		CERTIFICATE OF COMPLIANCE
Kuldip Singh Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)         Date       1103         Date       1103         Date       1103         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hantford Steam Boiler Of Connecticut         of Hantford, Connecticut have inspected the components described in this Owner's Report during the         period       06/21/03       to 07/16/03       and state to the best of my knowledge and bellef, the         Owner has performed examinations and taken corrective measures described in this Owner's Report       in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or       implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal       injury or property damage or a loss of any kind arising from or connected with this inspection.         WMM       Commissions       & 32 W. A.CTM	to the rules of Type Code Sy Certificate Of	the ASME Code, Section XI. mbol Stamp: Not Applicable Authorization No.: Not Applicable
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $OG/Q/PO3$ to $OT/PO3$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.		Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{OG/2/O3}$ to $\underline{O7/6/O3}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.		CERTIFICATE OF INSERVICE INSPECTION
implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. $\begin{array}{c} \hline & & & \\ \hline & & \\$	Vessel Inspec of Hanford, Co period <u>OG</u> Owner has pe in accordance	tors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut nnecticut have inspected the components described in this Owner's Report during the $\frac{2}{23}$ to $\frac{27}{2}$ to $\frac{27}{2}$ and state to the best of my knowledge and belief, the rformed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI.
Date 07/16/03	implied, conce Furthermore,	erning the examinations and corrective measures described in this Owner's Report. neither the inspector nor his employer shall be liable in any manner for any personal erty damage or a loss of any kind arising from or connected with this inspection.
	Date 07/1	spector's Signature National Board, State, and Endorsements

WOT No 01037433 01



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/01/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 MS-1368-12 MS-1368-12	WPPSS * Pacific Scientific Pacific Scientific	MS(9)-4-P1 4013 14987	N/A N/A N/A	N/A N/A N/A	1983  1982	Replaced Replacement	Yes, Code Class 1 No, Code Class** Yes, Code Class***

7. Description Of Work Performed: Replaced existing snubber for support MS-1368-12. The replacement work was performed as follows:

1) Removed existing PSA-1/2 snubber, Serial No 4013.

2) Installed replacement PSA-1/2 snubber, Serial No 14987.

3) Torqued the fasteners to the required torque value.

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) \*\* ASME Section III, Code Class NF snubber.

3) \*\*\* ASME Section III, Code Class NF(1) snubber.

4) The replacement PSA-1/2 snubber, Serial No 14987 is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1978 Addenda requirements.

5) The existing ASME Code Stamped piping system in which the replacement snubber PSA-1/2 snubber, Serial No 14987 was installed is Main Steam (RHR) piping system MS(9)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

WOT No 01037433 01
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Preumatic Nominal Operating Pressure None X Test Pressure: Psig Component Design Pressure: Psig Psig
9. Remarks: See attached NF-1 Code Data Report for the replacement snubber, Serial No 14987.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
$\int \partial \rho \partial \rho = \int \partial \rho \partial \rho = $
Prepared By       Ucup       Signed By       Ucup       Signed By         Kuldip Singh - Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)
Date 7/2/03 Date 7/2/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $05/31/03$ to $07/01/03$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or
implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Mm J J mm Commissions 803211/ ACIN/ Inspector's Signature Commissions National Board, State, and Endorsements
Date <u>C1/16/03</u>

Manufactured b	Pacific S	cientific 13	46 S. State Col			, Ca. 9280	3
2. Manufacturer fo	ITT Grinn	ell Corporat	Name and address of N ion 621 Dana St	reet N.E. Wa	erren,	Chio 444	81
	Un	known	(Name and address of	purchaser or own	ir)	•	
3. Location of Inst				·			· · · · · · · · · · · · · · · · · · ·
4. Identification							
(a)	(D)	(c) Apolicable	id) Stress Report	(e) True of	(f)	(g)	(h)
Component Support	Canadian Registration	Drawings with	or Load Capa-	Type of Component		Nat'l Board	
1. D. No.	No.	Last Rev. & Date	city Data Sheet	Support	Class	No.	Year Built
(1) 14578 -	None 1801	1104-07-J D	R 1413 Rev.0	Linear	1	None	1982
(2) 14597,			n	•••			ft
(3) <u>14958 -</u> (4) 14987				- <u></u>		<u> </u>	
(4) <u>14967</u>							
(5)	Ms	5-1368-1	12 SINT	4987			
(7)						<u> </u>	
(8)			<u> </u>				
(9)			Juldip	1 Samp			
(10)							
5. Remarks:			Z	24/02			
	•	CERTIF	FICATE OF COMPL				
of the ASME Code	e statements made for Nuclear Powe	in this report are d	correct and that these c			anda <u>Winter</u>	<u>178</u>
of the ASME Code Code Case No]	statements made for Nuclear Power 1544-7	r Plant Components	correct and that these c s, Section III, Division 1			anda <u>Winter</u>	
of the ASME Code Code Case No]	e statements made for Nuclear Powe	r in this report are or r Plant Components	correct and that these c s. Section III, Division 1 ientific			anda <u>Winter</u>	<u>178</u>
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\*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½ in., (2) information in items 1, 2, 4c, 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form. .

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WOT No 01037433 01



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/01/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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)-4B1 RHR-2264-11 RHR-2264-11	WPPSS * Pacific Scientific Pacific Scientific	RHR(1)-4B1-P1 28454 27682	NA NA NA	N/A N/A N/A	1983 1982 1982	Replaced Replacement	Yes, Code Class 1 Yes, Code Class ** Yes, Code Class **

7. Description Of Work Performed: Replaced existing snubber for support RHR-2264-11. The replacement work was performed as follows:

- 1) Removed existing PSA-1/4 snubber, Serial No 28454.
- 2) Installed replacement PSA-1/4 snubber, Serial No 27682.

3) Torqued the fasteners to the required torque value.

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) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) \*\* ASME Section III, Code Class NF(1) snubbers.

3) The replacement PSA-1/4 snubber, Serial No 27682 is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1978 Addenda requirements.

4) The existing ASME Code Stamped piping system in which the replacement snubber PSA-1/4 snubber, Serial No 27682 was installed is Residual Heat Removal (RHR) piping system RHR(1)-4B1-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

WOT No 01037433 01
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None X Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9. Remarks: See attached NF-1 Code Data Report for the replacement snubber, Serial No 27682.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Multip Singh - Program Lead Engineer (PLE)         Nate       7/2/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Hantford Steam Boiler Of Connecticut of Hantford, Connecticut have inspected the components described in this Owner's Report during the period <u>0.5/31/03</u> to <u>0.7/01/03</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mathematical Based of a loss of any kind arising from or connected with this inspection. Date <u>0.116/03</u> Date <u>0.116/03</u>

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FORM NF-1 (Szck) CERTIFICATE OF SHOP INSPECTION t, the understaned, holding a valid commission issued by the National Board of Boiler and Pressure Vescal Inspectors and the State or Province of Chilo and employed by ESBIAT Co. of Fartford, CT JUL 3 0 1982 have inspected the component supports described in this Cats Report on \_\_\_\_\_ and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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. nn <u>30 1982</u> Date Commission ( CERTIFICATION OF FIELD 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\_\_\_\_\_ \_\_\_\_\_ and employed by\_\_\_\_ ~ ---- have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items ..... inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in acceance with the ASME Code for Nuclear Power Plant Components. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection. Date Commissions (Nat'l Bd., State, Prov., and No.)

WOT No 01037433 01

Date: 07/01/03

Sheet: 1 Of 1

Unit: Not Applicable



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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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 Bulit	Repaired, Repiaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RWCU(3)-4 RWCU-1C-8 RWCU-1C-8	WPPSS * Pacific Scientific Pacific Scientific	RWCU(3)-4-P1 2587 10598	N/A N/A N/A	N/A N/A N/A	1983 1977 1980	Replaced Replacement	Yes, Code Class 1 Yes, Code Class** Yes, Code Class**

7. Description Of Work Performed: Replaced existing snubber for support RWCU-1C-8. The replacement work was performed as follows:

1) Removed existing PSA-3 snubber, Serial No 2587.

2) Installed replacement PSA-3 snubber, Serial No 10598.

3) Installed four (4) snubber assembly bolts.

4) Torqued the fasteners to the required torque value.

5) Performed operability test on the replacement snubber. Operability test acceptable.

6) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

#### NOTES -

1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.

2) \*\* ASME Section III, Code Class NF(1) snubbers.

4) The replacement PSA-3 snubber, Serial No 10598 is certified to comply with ASME Section III, Code Class NF(1), 1974 Edition with Winter 1976 Addenda requirements.

5) The existing ASME Code Stamped piping system in which the replacement snubber PSA-3 snubber, Serial No 10598 was installed is Reactor Water Clean Up (RWCU) piping system RWCU(3)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

(EN NORTHWEST
People: Vision: Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9. Remarks: See attached NF-1 Code Data Report for the replacement snubber, Serial No 10598.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable
Prepared By (uldif Sug) Signed By Juldup Sup)
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 7203 Date 71203
CERTIFICATE OF INSERVICE INSPECTION
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut
of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>05/31/03</u> to <u>07/01/03</u> and state to the best of my knowledge and belief, the
Owner has performed examinations and taken corrective measures described in this Owner's Report
In accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
injury or property damage or a loss of any kind arising from or connected with this inspection.
find commissions 8032 W ACIN
Inspector's Signature Commissions State, and Endorsements
4 02/11/102
Date 01/10/03

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

# FORME NF-1 (Beck)

19 89 and state that to the best of my knowledge and belief the NFT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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.

Yz5180 Date Whin Muy - - Commission TA. Y. Com

# CERTIFICATION OF FIELD INSPECTION

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

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igned:\_\_\_\_\_

\_ Commissions \_\_\_

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

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WOT No 01044800 15



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 no Addenda, Code Case: 1361-1
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	A8743	N/A	N/A	1988	Replaced	Yes, Code Class 1
CRD	GE	6108	N/A	N/A	1974	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 02-43. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No A8743.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

- 4) Installed replacement CRD assembly, Serial No 6108.
- 5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

#### NOTES -

1) The replacement CRD assembly, Serial No 6108 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

3) VT-1 visual examination Report No 2RPV-18 for the new replacement cap screws.

WOT No 01044800 1 ENERGY NORTHWEST People: Vision Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Component Design Pressure: 1250 Psig Temperature: 575° F
<b>D. Remarks:</b> 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 6108. )* Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8 <sup>O</sup> F recorded during ASME ection XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
r
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Guide Signed Expiration Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Guide O3
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have Inspected the components described in this Owner's Report during the period $5-72-03$ to $7-1-03$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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     THSU-U/145t     N I       Date     7-1-03     7

FORM N-2 MANUF AUTURERS DATA REPORT FOR AUGLE		44800 is
		_
As required by the Provisions of the ASM	• •	blild
(Name and address of Man		on, N. C.
(b) Manufactured for General Electric Company, San Josse, (Neme and address of Manufacture )	, California	
Identification-Manufacturer's Serial No. of Part 6108 V	Nat*i Bd. No	<u>,</u>
(a) Constructed According to Drawing No. 761E3B7G2 Drawing Pr	repared by D. L. Pet	erson
b) Description of Part Inspected <u>Control Rod Drive</u> , Model #7	7RDB144 Ci	
c) Applicable ASME Code: Section III, Edition, Add:nda.date	<u>136, Case X., 1361-</u>	
Remarks: Standard part for use with Reactor. Hydro (Brief description of service for which cas		at 1820 761
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We certify that the statements made in this report are correct and this vessel	part or apputtenance as de	efined in the Cade can-
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(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 no Addenda, Code Case: 1361-1
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Bulit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6326	N/A	N/A	1974	Replaced	Yes, Code Class 1
CRD	GE	6088	N/A	N/A	1974	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 18-31. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No 6326.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No 6088.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

#### NOTES -

1) The replacement CRD assembly, Serial No 6088 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

WOT No 01044800 24
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Test Temperature: 199.8° F Component Design Pressure: 1250 Psig Temperature: 575° F
9. Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 6088. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8 <sup>0</sup> 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
$Date \_ 6[12/03] Date \_ 6[12/03]$
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the         period <u>-17-07</u> to <u>7-1-07</u> and state to the best of my knowledge and belief, the         Owner has performed examinations and taken corrective measures described in this Owner's Report         in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or         implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or         inplied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal         injury or property damage or a loss of any kind arising from or connected with this inspection.         Implementations         Inspector's Signature         National Board, State, and Endorsements         Date1-(-?)

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(c) Applicable ASME Code: Section III, Edition <u>1971</u> , Addindadate <u>NEP</u> , <u>GarN. <u>1361-</u>C.u., <u>1622</u>, <u>661</u>, <u>(Brit description of service for which campacefil was designed</u>). 3. Remarks: <u>Standard part for use with Reactor.</u> Hydroctatically tusted at <u>1621</u>, <u>661</u>, <u>(Brit description of service for which campacefil was designed</u>). The certify dust the statements made in this report are correct and this vessel part or appurtenance as defined in the Code content is responsible for Washing and the responsible for the part Manufacturer. An appurtenance is not include in the component Design Specification and Stress Report if the appurtenance is not include in the component Design Specification and Stress Report. Date_Description <u>17</u>, <u>19</u>, <u>14</u>, Signed <u>GE</u>, <u>BWRSD</u>, <u>REM</u> <u>Manufacturer</u>, <u>Manufacturer</u>, <u>Jone 20</u>, <u>1975</u>. Certificate of Authorization No. <u>NPT - 462</u> CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) Design information on file at <u>General Electric Co.</u>, <u>BWRSD-REM</u>, <u>Castle Hayne Rd.</u>, <u>Wilminpton</u> Stress analysis report confiled by <u>VeTION W. Pence</u> <u>Prof. Eng. State Calif.</u> <u>Reg. No.</u> <u>14485</u> Stress analysis report confiled by <u>VeTION W. Pence</u> <u>Prof. Eng. State Calif.</u> <u>Reg. No.</u> <u>14485</u> Stress analysis report confiled at combination is used by the National Board of Hoiler and Pressure Vessei Inspector and/or the State of North Carolina <u>have</u> inspected the part of a pressure vessei described in this Mindecturer? <u>Prof. Bay State Calif.</u> <u>Reg. No.</u> <u>14485</u> Stress analysis report confile at Complicable is an employed by <u>Department of Labor</u> A the undersigned, holding a valid commission is used by the National Board of Hoiler and Pressure Vessei Inspector and/or the State of North Carolina <u>have</u> inspected the part of a pressure vessei described in this Mindecturer? Partial Data Report <u>Department of Labor</u> A the part described in this Manufacturer? <u>Partial Data Reporeand in the service on the send on the s</u></u>	(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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, 1974 Edition with Winter 1975 Addenda, Code Case: 1361-2
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	6717	N/A	N/A	1975	Replaced	Yes, Code Class 1
CRD	GE	A8655	N/A	N/A	1988	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 14-51. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

- 2) Removed existing CRD assembly, Serial No 6717.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8655.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

# NOTES -

1) The replacement CRD assembly, Serial No A8655 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

ENERGY NORTHWEST People · Vision · Balutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Test Temperature: 199.8 <sup>0</sup> F Component Design Pressure: 1250 Psig Temperature: 575 <sup>0</sup> F
<ul> <li>9. Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8655.</li> <li>2) * Pressure test on the CRD botted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8<sup>0</sup> F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".</li> </ul>
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Muddy         Kuldip Singh - Program Lead Engineer (PLE)         Date       6/12(03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -\frac{7}{7} \frac{1}{6} \frac$
Inspector's Signature     Commissions     Tuff. 10/74166     N I ns       Date     7-1-03     National Board, State, and Endorsements

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WOT 0104480031 FORM N-2 NPT CERTIFICATE BOLDERS! DATA REPORT FOR NUCLEAR PART AND APPORTMENTED Stars - 5712/03
FORM N-2 NPT CERTIFICATE BOLDERS' DATA REPORT FOR NUCLEAR PART AND APPORTENTIONS: 57112(03 As required by the Provision of the ASME Code Rules, Section III, Div. 1
(b) Manufactured for: WNP-2, Recompany, 2117 Castle Hayne Rd., Wilmington, N.C. 28402 (Name and Address of NPT Certificate Holder) 99352
(Name and Address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holders's S/N of Part: A8655 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
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 MAL MUL (NPT Certificate Holder)
(NPT Certificate Holder)
CARCIFICATION OF DESIGN FOR APPEREDANCE
Design information on file atGE COMPANY, SAN JOSE, CALIFORNIA
Stress analysis report on file at <u>GE COMPANY, SAN JOSE, CALIFORNIA</u>
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 <u>NORTH CAROLINA</u> and employed by <u>DEPARIMENT OF LABOR</u> f <u>STATE OF NORTH CAROLINA</u> have inspected the part of a pressure vessel described in this artial Data Report on <u><math>3/27</math></u> 1977, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME ode Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, spressed or implied, concerning the part described in the Partial Data Report. Furthermore, either the Inspector nor his employer shall be liable in any manner for any personal injury r property damages or a loss of any kind arising from or connected with this inspection. 5/27, 19 $5$ $10$ $10$ $10$ $10$ $10$ $10$ $10$ $10$

"Selemental 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. "REMARKSS"

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<sup>2</sup> List other internal or external pressure with conincident temperature when applicable.



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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest
- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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, 1974 Edition with Winter 1975 Addenda, Code Case: 1361-2 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	A8721	N/A	N/A	1988	Replaced	Yes, Code Class 1
CRD	GE	A9264	N/A	N/A	1995	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 30-19. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 \*Control Rod Drive Removal And Replacement\* as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

- 2) Removed existing CRD assembly, Serial No A8721.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A9264.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

#### NOTES -

1) The replacement CRD assembly, Serial No A9264 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

WOT No 01044800  With the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp: No Applicable Expiration Date: Not Applicable Expiration Date: Not Applicable Expiration Date: Not Applicable Report Program Lead Engineer (PLE) Date OLICIEN EXPIRENT Program Lead Engineer (PLE) Date OLICIENTERCE EXPIRENT PROGRAM EXPIRENT PROGRAM PROGRAM PROGRAM PROGRAM PROGRAM PROGRAM PROGRAM PROGRAM PROGRAM		
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other         Test Pressure: 1030 Psig       Test Temperature: 198.8° F         Component Design Pressure: 1250 Psig       Temperature: 575° F         Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly. Serial No A9264.       •         Pressure test in accordance with PPM No OSP-RPV-R801 'Reactor Pressure Vessel Leakage Test'.       •         Pressure test in accordance with PPM No OSP-RPV-R801 'Reactor Pressure Vessel Leakage Test'.       •         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.       •         Type Code Symbol Stamp: Not Applicable       Expiration Date: Not Applicable       Signed By       Sumptice State Sta	ENERGY NORTHWEST People: Vision Balutions	800
Test Pressure: 1030 Psig       Test Temperature: 198.8° F         Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9264.       ************************************	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
* Pressure test on the CRD bolde flanged connection - Test pressure of 1930 Peig and test temperature of 199.8° Frecorded during ASI clion 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 Statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Prepared By	Test Pressure: 1030 PsigTest Temperature: 199.8° FComponent Design Pressure: 1250 PsigTemperature: 575° F	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By	Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8 <sup>0</sup> F recorded during	AS
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No: Not Applicable Expiration Date: Not Applicable Prepared By	CERTIFICATE OF COMPLIANCE	
Date       61203         Date       61203         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the         period       5-17-07         to       7-1-02         and state to the best of my knowledge and bellef, the         Owner has performed examinations and taken corrective measures described in this Owner's Report         in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or         implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or         implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal         injury or property damage or a loss of any kind arising from or connected with this inspection.         Image: Image	to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -P - OP = 0$ to $P - P - OP = 0$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. MMM = MMM  = MMM		
Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underbrace{-P-O}_{-P-O}$ to $\underbrace{P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}_{-P-O}$		
Inspector's Signature National Board, State, and Endorsements	Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -/? - C?$ to $2 - /- C?$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal	rt
Date _ / - / - Cif	Inspector's Signature National Board, State, and Endorsements	<u>.</u>
	Date	

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTEN. As required by the Provision of the ASME Code Rules, Section III, Div. 1. Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (( 2117 Castle Hayne Road, Wilmington, North Carolina 28401 (Name and Address of NFT Certificate Bolder) (b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Bolder for completed nuclear component) 2. Identification - Certificate Holder's S/N of Part : <u>A9264</u> Nat'l Bd. No. <u>N/A</u></u>	
(b) Manufactured for : <u>WNP 2</u> (Name and Address of NFT Certificate Holder ) (b) Manufactured for : <u>WNP 2</u> (Neme and Address of N Certificate Holder for completed nuclear component )	<u>GENF&amp;CM)</u>
( Name and Address of NFT Certificate Holder ) (b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> ( Name and Address of N Certificate Holder for completed nuclear component )	
( Name and Address of N Certificate Holder for completed nuclear component )	
2. Identification - Certificate Holder's S/N of Part : <u>A9264</u> Nat'l Bd. No. <u>N/A</u>	
(a) Constructed According to Drawing No: <u>919D258G003 Rev 19</u> Dwg. Prepared by <u>D.L.Peterson</u>	
(b) Description of Part Inspected:	
(c) Applicable ASNE Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>1361-2</u> C	lass <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> ( Brief description of service for which component was designed )	
She	et 1 of 2
We certify that the statements in this report are correct and this vessel part or appurtenance as defined in conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not the component Design Specification and Stress Report ).	and Stress appurtenances
Date: 06/27/95 Signed <u>GE-NEBG-NF &amp; CM-QA</u> By SC QA mepresentive )	—
Certificate of Authorization Expires: $6/16/96$ Certification of Authorization No. : <u>NPTN-1151</u>	
Certification of Design for Appurtenance	·····
Design information on file at GE Company, San Jose, California	
Stress analysis report on file atGE Company, San Jose, California	
OC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>	
DC22A5254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>	
Certification of Shop Inspection	
I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/ State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> inspected the part of a pressure vessel described in this Partial Data Report on <u>ACC</u> , <u>A</u>	have 25, in ied, ver

 G/27, 1995
 Jurne P Enum
 NC 1231, Ohio, WC 3686 PA

 Data
 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".

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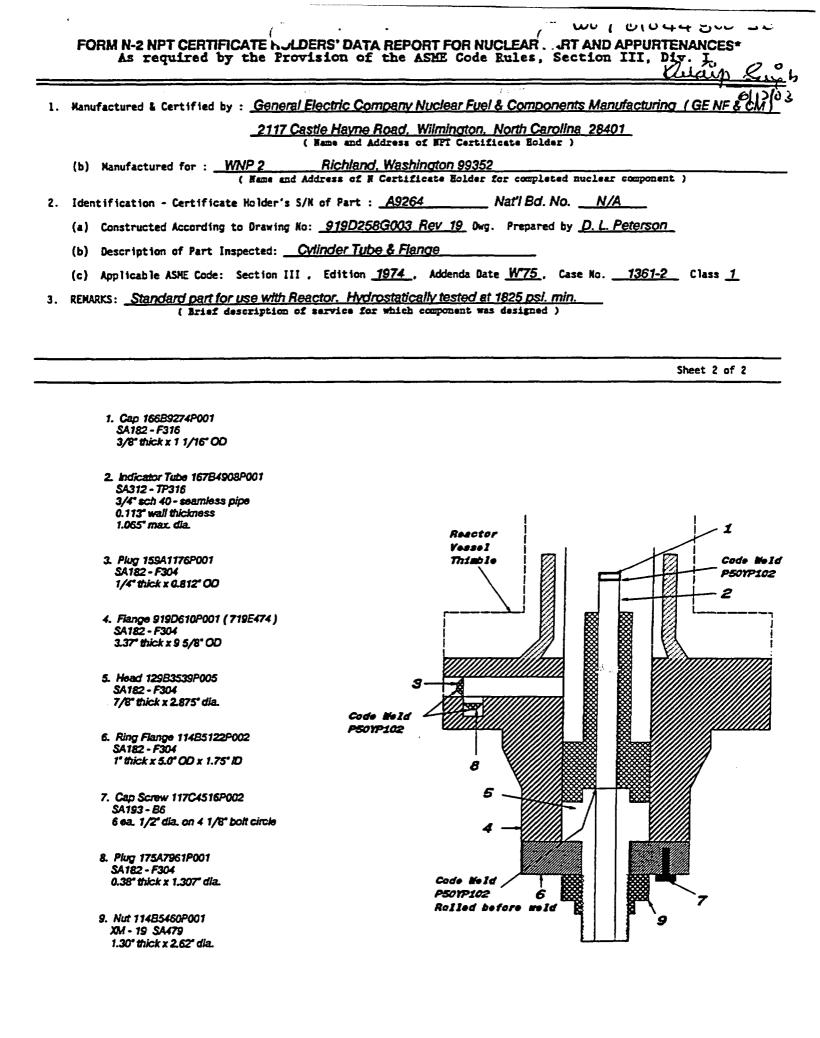
	FORM N-2	( back )	
Items 4-8 Incl. to be completed for si	ngle wall vessels, jacke	ts vessels, or shells of hea	t exchangers.
4. Shell: MaterialT.S (Kind & Spec. No.) (Min. of Pa		orrosion Nowance in. Dia	ft in. Length ft i
5. Seams: Long	н.т.'	R.T	EfficiencyX
Girth	H.T	R.T	No. of Courses
6. Heads: (a) Material	T.S	(b) Material	T.S
Location ( Top Crown Bottom, Ends ) Thickness Radius (a)	s Radius Ratio	Concial Hemispherica Apex Angle Radius	Diameter ( conv. or conc. )
b)		Other fastening	(Describe or attach sketch)
(Mater	ial, Spec. No., T.S. Size Number)		(Describe or attach stutch)
7. Jacket Closure:{[[		Char;	py Impact ft-lb
3. Design pressure1250	psi at	<u>575</u> F at te	P F
tems 9 and 10 to be completed for tube	sections		
). Tube Sheats: Stationary. Materia Floating. Material	(Kind & Spec. No. ) Dia	(Subject to pressure) Thickness	in. Attachment
. Tubes: Material	0.0 in. Thic	kness inches or gage,	Number Type(Se. or U)
tems 11 - 14 incl. to be completed for	inner chambers of jacke	ted vessels, or channels of	heat exchangers.
. Shell: Material T.S. (Xind & Spec. No.) (Min. of Pan	_ Thickness in. Al ge Specified) 1		
. Seams: Long	1		
			No. of Courses
. Heads: (a) Material			
Crown Location Thickness Radius a) Top.bottom.ends b) Channe]			Flat Side to Press. Diameter ( conv. or conc. )
If removable, bolts used (a)	(b)(c)	Other fastening	(Describe or attach sixtch)
2		Charpy	deight ft-lb
. Design pressure	psi at	F at ten	np ofF
ems below to be completed for all ves	sels where applicable.		
. Safety Valve Outlets: Number	Size _	Locati	ion
Nozz 1es: Purpose (Iniet, Oudet, Orain ) Number	Dia, or Size Type	Material Thickness	Reinforcement Material How Attached
Inspection Manholes, No Openings: Handholes, No Threaded, No	Size	Location Location Location	
Supports: Skirt Lugs		Uther (Describe)	Attached (Where & How)

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1 - If Postweid Hest-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.





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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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, 1974 Edition with Winter 1975 Addenda, Code Case: 1361-2
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	6456	N/A	N/A	1974	Replaced	Yes, Code Class 1
CRD	GE	A9322	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 30-03. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No 6456.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No A9322.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

NOTES -

1) The replacement CRD assembly, Serial No A9322 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

WOT No 01044800 S ENERGY NORTHWEST People - Vision - Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other         Test Pressure: 1030 Psig       Test Temperature: 199.8° F         Component Design Pressure: 1250 Psig       Temperature: 575° F
Premarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9322. * Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8 <sup>o</sup> F recorded during ASME action 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
Date6/12/03Date6/12/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -I - C = 0$ to $\int -I - C = 0$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
injury or property damage or a loss of any kind arising from or connected with this inspection.
Date 7-1-03
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( WOT 01044800 52
FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASHE Code Rules, Section III, Div. I
6/12/03
1. Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GENF &amp; CM)</u>
<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> ( Name and Address of NPT Certificate Bolder )
(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Holder for completed nuclear component )
2. Identification - Certificate Holder's S/N of Part : <u>A9322</u> Nat'l Bd. No. <u>N/A</u>
(a) Constructed According to Drawing No: <u>919D258G003 Rev 17</u> Dwg. Prepared by <u>D.L.Peterson</u>
(b) Description of Part Inspected: <u>Cvlinder Tube &amp; Flange</u>
(c) Applicable ASHE Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u>
( 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 <u>GE-NEBG-NF &amp; CM-OA</u> By SC GA Representive )
Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPTN-1151
Certification of Design for Appurtenance
Design information on file at GE Company, San Jose, California
Stress analysis report on file atGE Company, San Jose, California
DC22A5253 Rev. 1
Design specification certified by <u>Biorn Haaberg</u> Prof. Eng. State <u>Callf.</u> Reg. No. <u>15570</u>
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
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 <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on
and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASHE 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, meither 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     Oscore     PErst     NC 1231. Ohio. WC 3686 PA       Date     0     Inspector's Signature     National Board, State, Province And No.
*Supplemental sheets in form of lists, sketches or drawing may be used

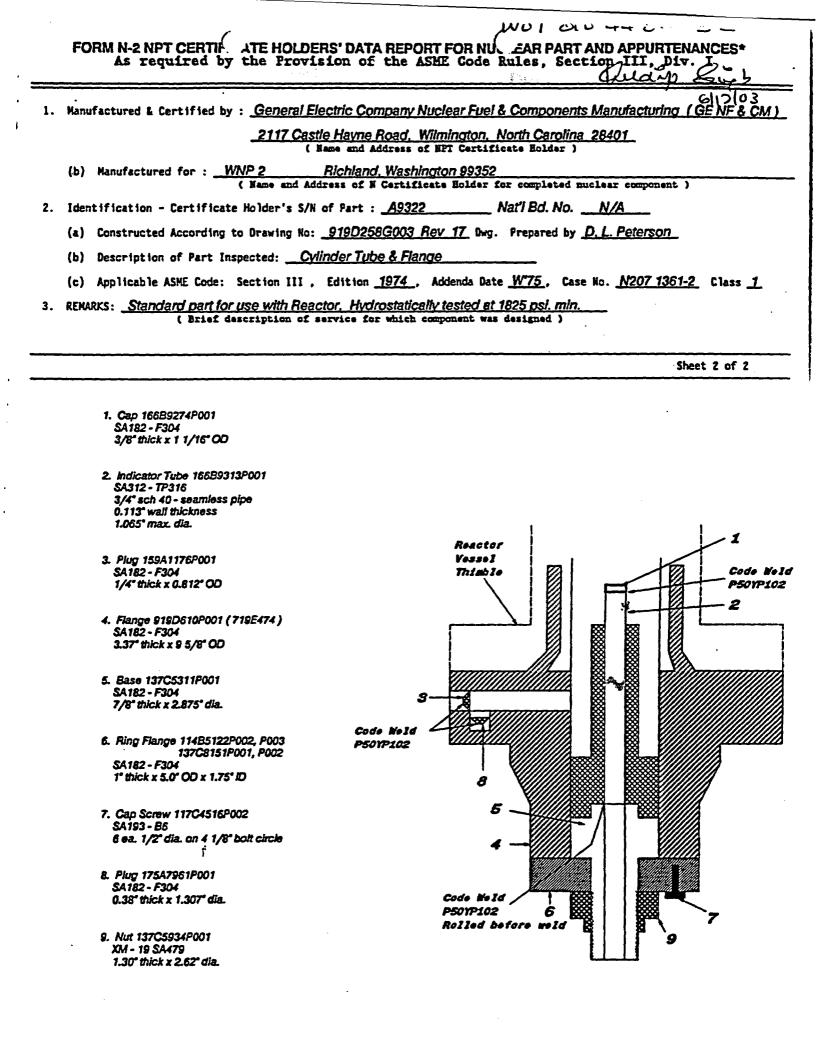
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\*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item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

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• •							( back )			
te	ms 4-8 I	ncl. to	be comple	ted for si	ngle wall v	essels, jackat	ts vessels, or	shells of heat	exchangers.	
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		Girth _			н.т.'		R.T.		No. of	Courses
•	Heads:	(a) Mat	erial			T.S	(b) M	aterial	т.	.s
a)		Ends)	Thickne		Radius		Concial Apex Angla	Hemispherical Radius		Side to Press. ( conv. or conc.
b)	If remov	vable, b	olts used				Other faster	ning		
				( Mater	ial, Spec. No., T.S	, Size Number)		ning(C	eecribe of attach i	skutch )
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te	ns 9 and	10 to b	e complet	ed for tube	sections					
		F	loating.	Hateria		Dia	•	Thickness	in. At	tachment
•	Tubes:	Materia	1		0.0.	in. Thici	kness	inches or gage. NL	mber	Type (Ser. or
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	ns 11 - 1 Shell: Seams: Heads: Locat Top,batt Channel If remov Design p	Long Girth (a) Mat ion ends able, b	to be con 1 Ond & Spee, N er1a1 Thickness plts used	nplated for T.S A.) (Min. of Ran Crown is Radius (a)	inner chan Nominal Thickness ge Specified) H.T H.T Knuckle Radius (b)	bers of jackat in. Al T.S Elliptical Ratio (c) psi at	ted vessels, d rrosion lowancei R.T (b) Ha Conctal Apex Angle	terial fastening for the second	eat exchange in. L Efficie No. of T. Flat Diameter  ight Impact	ength ft ncy Courses S Side to Press. ( conv. or conc.
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# ENERGY NORTHWEST

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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station **Date: 06/12/03 Sheet:** 1 Of 1 **Unit:** Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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, 1974 Edition with Winter 1975 Addenda, Code Case: 1361-2
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	A8478	N/A	N/A	1989	Replaced	Yes, Code Class 1
CRD	GE	A9343	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 18-11. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No A8478.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No A9343.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

#### NOTES -

1) The replacement CRD assembly, Serial No A9343 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

WOT No 01044800 67
(EN) NORTHWEST People - Vielon - Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       •         Test Pressure: 1030 Psig       Test Temperature: 199.8° F         Component Design Pressure: 1250 Psig       Temperature: 575° F
<ul> <li>9. Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9343.</li> <li>2) * Pressure test on the CRD botted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8<sup>o</sup> F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".</li> </ul>
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{f - l^2 - l^2}$ to $\underline{f - l^2 - l^2}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         JMM JMM Commissions JMM JMM M J M J M JMM JMM JMM JMM JMM

(WOT 01044800 4	61
FORM N-2 NOT CERTIFICATE HOLDERS' DATA DEBORT FOR NUCLEAR PART AND ADDUPTEN	ANOCO+
As required by the Provision of the ASHE Code Rules, Section III, Div	to b
وم 1. Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing</u> (	IZOS GENF&CM)
_2117 Castle Havne Road, Wilmington, North Caroling 28401	
(b) Manufactured for : <u>WNP 2 Richland, Washington 99352</u>	
( Name and Address of N Certificate Holder for completed nuclear component )	
2. Identification - Certificate Holder's S/N of Part : <u>A9343</u> Nat'l Bd. No. <u>N/A</u>	
(a) Constructed According to Drawing No: <u>919D258G003 Rev 17</u> Dwg. Prepared by <u>D.L.Peterson</u>	
(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>	
(c) Applicable ASHE Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>N207 1361-2</u>	Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psl. min.</u> (Brief description of service for which component was designed)	
·	· · · · ·
She	et 1 of 2
Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not the component Design Specification and Stress Report ).	
Date: 01/28/93 Signed <u>GE-NEBG-NF &amp; CM-QA</u> By Sc QA Representive )	
Certificate of Authorization Expires: <u>6/16/93</u> Certification of Authorization No. : <u>NPT N - 1151</u>	
Certification of Design for Appurtenance	
Design information on file at <u>GE Company, San Jose, California</u>	
Stress analysis report on file at <u>GE Company, San Jose, California</u>	
DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>	
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Callf.</u> Reg. No. <u>M018646</u>	
·	
Certification of Shop Inspection	
I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> inspected the part of a pressure vessel described in this Partial Data Report on <u>12.6.</u> <u>17</u> and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part accordance with the ASME Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or imp concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employed shall be liable in any manner for any personal injury or property damages or a loss of any kind arising fro	have
	oyer

 1/28.1993
 1993
 PErcent
 NC 1231. Ohio. WC 3686 PA

 Date
 Inspector's Signature
 Hational Board, State, Province And Bo.

\*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".

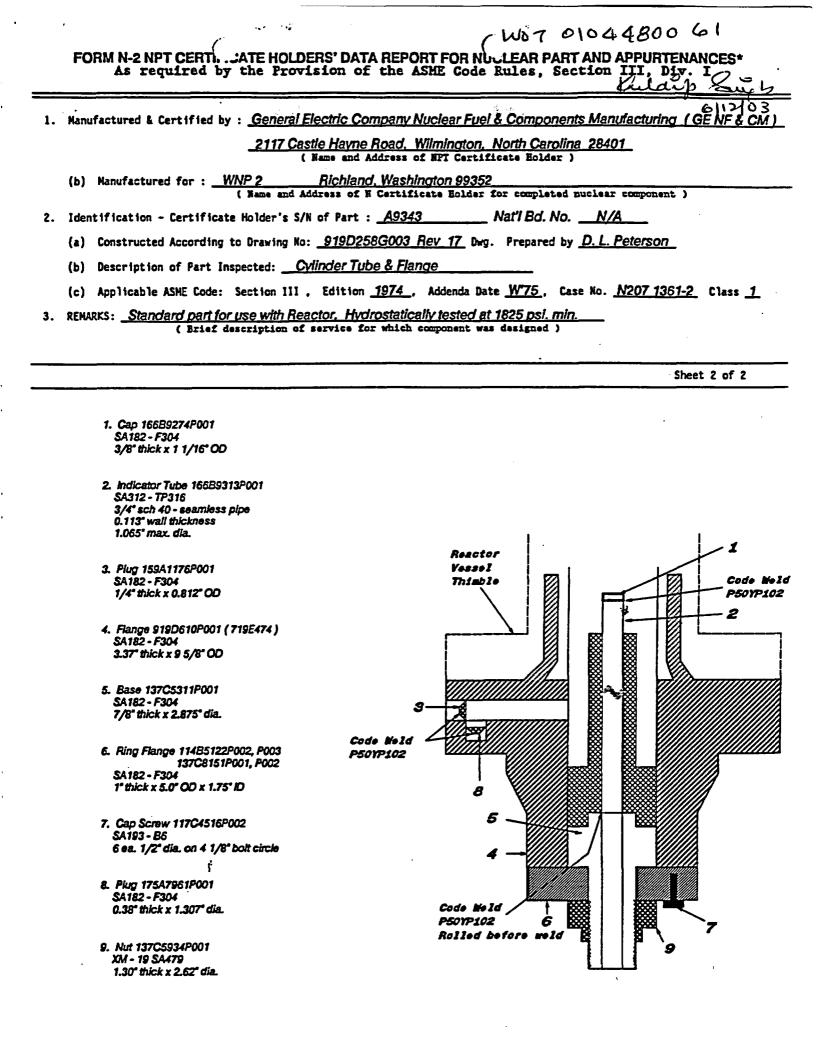
(07/30)

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		Girth _			н.т.1		R.T.		No. of	Courses	
6.	Heads:	(a) Mat	erial			T.S	(b) X	laterial	T	.s	
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								Locatio			
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17.	Inspect Opening	s: Hand	in les, No. Ino les, No. laded, No.		·	Size Size Size	L	.ocation			
18.	Support	s: Skir						ther(Describe)			a How)

1 - If Postweid Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (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, 1974 Edition with Winter 1975 Addenda, Code Case: 1361-2
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	4608	N/A	N/A	1975	Replaced	Yes, Code Class 1
CRD	GE	A8461	N/A	N/A	1988	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 14-43. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No 4608.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No A461.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

#### NOTES -

1) The replacement CRD assembly, Serial No A8461 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

WOT No 01044800 70 ENERGY NORTHWEST People: Vision: Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       •         Test Pressure: 1030 Psig       Test Temperature: 199.8° F         Component Design Pressure: 1250 Psig       Temperature: 575° F
<ul> <li>9. Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8461.</li> <li>2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8<sup>o</sup> F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".</li> </ul>
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Pfogram Lead Engineer (PLE)         Date       6/12/03
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford_Connecticut have inspected the components described in this Owner's Report during the period <u>(-12-C)</u> to <u>7-1-C</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Jum

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-,	WO7 01044800 70
	Thebaup Surph
FORM H-2 HPT CERTIFICATE BOLDERS' DATA REPORT As required by the Provision of the ASE	FOR NUCLEAR PART AND APPERTNUMCES* E Code Rules, Section III, Div. 1
1. Manufactured & Certified by: GE Company, 2117 Castl	e Eayne Rd., Wilmington, N.C. 28402
1. Manufactured & Certified by: <u>GE Company, 2117 Cast</u> (Name and Acc (b) Manufactured for: <u>WNP-2, RICHIA</u> (Name and Accress of N Certificate	
2. Identification-Certificate Holders's S/N of Part:	A8461 Nat'l Bd. No. N/A
(a) Constructed According to Drawing No: 919D258G	
(b) Description of Part Inspected: CYLINDER	NEE & FLANGE
(c) Applicable ASAE Code: Section III, Edition 1974, A	idenda Date <u>W'75</u> Case No. <u>1361-2</u> Class <u>1</u>
3. REMARKS: <u>Sub-assembly of Control Rod Drive for use w</u> (Brief description of service for w Evdrostatically tested at 1825 psi. min.	ith reactor. lich component was designed)
*Sheet 1 of 2	
We certify that the statements in this report are corre as defined in the code conforms to the rules of cons (The applicable Designed Specification and Stress Report Certificate Bolder for parts. An NPT Certification B for furnishing a separate Design Specification and Stress included in the component Design Specification and Stress	truction of the ASME Code Section III. t are not the responsibility of the NPT older for appurtenances is responsible ress Report if the appurtenance is not as Report).
DATE: 12/31 ,19 88 Signed GE-NERG-NERG (NPT Certificate	HOA BY HACMIN
Certificate Of Authorization Expires: 6/16/90 Certificate	tion of Authorization No.: NPT N-1151
CHRITIPICATION OF DESIGN FOR	AFFURTMARCE
Design information on file at GE COMPANY, SAN JOST	;, CALIFORNIA
Stress analysis report on file at <u>GE COMPANY, SAN JOSE</u> DC22A6253 Rev. 0	;, CALIFORNIA
Design specification certified by BJORN HAABERG Pr DC22A6254 Rev. 0.	of. Eng. State CALLF. Reg. No. 15570
Stress analysis report certified by EDWARD YOSHIO Pr	of. Eng. State CALLF. Reg. No. M018646
CHRITICATION OF SHOP 1	NSPRCTION
I, the undersigned, holding a valid commission by the K Inspectors and/or the State or Province of NORTH CAROLINA of STATE OF NORTH CAROLINA have inspected the part of Partial Data Report on $(2 - 3)$ 19 80, and st and belief, the NPT Certificate Holder has constructed to Code Section III. By signing this certificate, neither the Inspector no expressed or implied, concerning the part described in the neither the Inspector nor his employer shall be liable in or property damages or a loss of any kind arising from on	ational Board of Boiler and Pressure and employed by <u>DEPARIMENT OF LABOR</u> a pressure vessel described in this ate that to the best of my knowledge his part in accordance with the ASME or his employer makes any warranty.
DATE 1988 1.7. Juon Mc	NC 779, PAWC2L60, OHIO National Board, State, Province and No.
*Supplemental sheets in form of lists, sketches or drawin 8-1/2" X 11", (2) information in 1-2 on this Data Report each sheet is numbered and number of sheets is recorded	g may be used provided (1) size is is included on each sheet, and (3) in Item 3. "REMARKSs"
(10/77) VERIFIED & ACCEPTED	V Willer #1 1-18-85
i RLin	spector Date

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of hest exchangers.
Mandan 1 Bannadan
Nominal Corrosion 4. Shell: MaterialT.SThicknessin. Allowancein Diaftin. Lengthftin
4. Shelli ReterialI.SInternessIn. AllowanceIn DiattIn. Lengthftin (Kind & Spec.No) (Hin.ofRange Specified)
5. Seams: LongH.T.1R.TR.TEfficiencyX
GirthH.T. <sup>1</sup> R.TNo. of Courses 6. Heads: (a) MaterialT.S(b)MaterialT.S
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(a)
If removable, bolts used Other fastening
(Material,Spec.No., T.S. Size Number) (Describe or attach akatch) 7. Jacket Closure:
(Describe as ogen and weld, bar, stc. If bar give dimensions, if bolts, describe or shate
8. Design Pressure 2 1250 psi at 575 F Charpy Impact ft-1b
st 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, Balted Floating. Material Dia Thicknessin. Attachment inches
inches 10. Tubes: MaterialO.Din. Thicknessor gags. NumberType
(Str. or U)
Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers
Nominal Corresion
11. Shelly MaterialT.SThicknessin. Allowancsin. Disftintengthftin.
(Kind&Spec.No.) (Min.ofRanga 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.
13. Heads (a) Material T.S. (b)Material T.S.
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End (b)Channel
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End (b)Channel (f removable, bolts used (a) (b) (c) Other Fastening (Describe or attach sketch Drop Weightft-li
End (b)Channel (f removable, bolta used (a) (b) (c) Other Fastening (Describe or attach aketch Drop Weight Charpy Impact ft-11
End (b)Channel If removable, bolta used (a) (b) (c) Other Fastening (Describe or attach aketch Drop Weight Charpy Impactft-li 14. Design pressure <sup>2</sup> psi at <sup>PF</sup> at temp. of <sup>PF</sup>
End (b)Channel If removable, bolts used (a) (b) (c) Other Fastening (Describe or attach aketch Drop Weight Charpy Impact ft-li 14. Design pressure <sup>2</sup> psi at <sup>PF</sup> at temp. of <sup>PF</sup> (tems below to be completed for all vessels where applicable.
End (b)Channel If removable, bolta used (a)(b)(c)Other Fastening (Describe or attach aketch Drop Weight Charpy Impactft-li 14. Design pressure <sup>2</sup> psi at <sup>0</sup> F at temp. of <sup>0</sup> F Items below to be completed for all vessels where applicable. 15. Safety Valve Outlets: NumberSizeLocation
End (b)Channel If removable, bolta used (a)(b)(c)Other Fastening (Describe or attach aketch Drop Weight Charpy Impactft-li 14. Design pressure <sup>2</sup> psi at <sup>0</sup> F at temp. of <sup>0</sup> F Items below to be completed for all vessels where applicable. 15. Safety Valve Outlets: NumberSizeLocation 16. Nozzles:
End (b)Channel If removable, bolta used (a)(b)(c)Other Fastening (Describe or attach aketch Drop Weightft-li Charpy Impactft-li 14. Design pressure <sup>2</sup> psi at <sup>0</sup> F at temp. of <sup>0</sup> F (tems below to be completed for all vessels where applicable. 15. Safety Valve Outlets: NumberSizeLocation
End (b)Channel If removable, bolts used (a) (b) (c) Other Fastening (Describe or attach aketch Drop Weight Charpy Impact ft-li La. Design pressure <sup>2</sup> psi at <sup>BF</sup> at temp. of <sup>PF</sup> (tems below to be completed for all vessels where applicable. I5. Safety Valve Outlets: Number Size Location 16. Nozzles: Purpose (Inlet Reinforcement
End (b)Channel If removable, bolts used (a) (b) (c) Other Fastening (Describe or attach aketch Drop Weight Charpy Impact ft-li A. Design pressure <sup>2</sup> psi at <sup>BF</sup> at temp. of <sup>PF</sup> Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable. Items below to be completed for all vessels where applicable.
End (b)Channel If removable, bolts used (a)(b)(c)Other Fastening
End (b)Chennel If removable, bolts used (a)(b)(c)Other Fastening(Describe or attach sketch
End       (b)Channel         If removable, bolts used (a)
End
End (b)Channel
End (b)Channel
End

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 no Addenda, Code Case: 1361-1
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	A8664	N/A	N/A	1988	Replaced	Yes, Code Class 1
CRD	GE	6552	N/A	N/A	1975	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 18-07. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

- 2) Removed existing CRD assembly, Serial No A8664.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No 6552.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

#### NOTES -

1) The replacement CRD assembly, Serial No 6552 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

WOT No 01044800 7. ENERGY NORTHWEST People Vision Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Test Temperature: 199.8° F Component Design Pressure: 1250 Psig Temperature: 575° F
<b>9. Remarks:</b> 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 6552. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8 <sup>0</sup> 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       Judy         Kuldip Singh - Program Lead Engineer (PLE)         Date       6/12/03
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have Inspected the components described in this Owner's Report during the period $\underline{\int -p - cy^2}$ to $\underline{\neg - p - cy^2}$ and state to the best of my knowledge and bellef, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Jum

u: z	As required by the Provisions of the ASME. Lade Kules therein Sure
. ^ ( #)	) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N. C. 6/12/07
čh)	Manufactured for General Electric Company, San Jose, California
. Id	entification-Manufucturer's Serial No. of Part6552
(a)	) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
(b)	) Description of Part Inspected Control Rod Drive, Model #7RDB144 Ci
(c)	) Applicable ASME Code: Section III, Edition <u>1971</u> , Addenda date <u>None</u> , Case No. <u>1361-1</u> Class <u>1</u>
. Re	marks: Standard part for use with Reactor. Hydrostatically tested at 1620 ps_
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	MD INCOMMENTAL ONLY
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Date_ Certifi De: Stro Stro and of_ ing shall	component Design Specification and Stress Report.) January 24 19 75 Signed GE, BWRSD - REM ByCorright Second Stress June 20, 1975 (Manufacturer) icate of Authorization Expires June 20, 1975 Certificate of Authorization No. NPT - 462 CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) sign information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington ess analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington sign specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488 ess 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 Inspector /or the State of North Carolina and employed by Department of Labor State of North Carolina have inspected the part of a pressure vessel described in this mafacturer's Partial Data Report on <u>January 24</u> 19.75, and state that to the best of my knowledge belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III. Dy signing this certificate, neither the Inspector nor his employer makes any waranty, cypressed or implied, concern- the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer makes any waranty, cypressed or implied, concern- the base is analytic in a this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer makes any waranty, cypressed or implied, concern- the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer and the soft and in attising from or connected
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Date_ Certifi De: Stre Stre Stre Man and of_ Man and ing shal	component Design Specification and Stress Report.) <u>January 24</u> 19 75 Signed <u>GE</u> , <u>BWRSD - REM</u> <u>(Manufectury)</u> icate of Authorization Expires <u>June 20</u> , 1975 Certificate of Authorization No. <u>NPT - 462</u> <u>CERTIFICATION OF DESIGN FOR APPURTENANCE</u> (when applicable) sign information on file at <u>General Electric Co.</u> , <u>BWRSD-REM</u> , <u>Castle Ilayne Rd.</u> , <u>Wilmington</u> cess analysis report on file at <u>General Electric Co.</u> , <u>BWRSD-REM</u> , <u>Castle Hayne Rd.</u> , <u>Wilmington</u> sign specifications certified by <u>Vernon W. Pence</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>14488</u> cess analysis report certified by <u>Vernon W. Pence</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>14488</u> <u>CERTIFICATE OF SHOP INSPECTION</u> I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectory /or the State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> State of North <u>Garolina</u> have inspected the part of a pressure vessel described in this miscurer's Partial Data Report on January 24 1975, and state that to the best of my knowledge belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III. Dy signing this certificate, neither the Inspector nor bis employer makes any warranty, expressed or implied, concern- The part described in this Manufacturer's Partial Data Report. Furthermore, there the Inspector on the employer It be liable in any manner for any personal injury or property damage or a loss of any kind atising from or connected th is inspection.

# 761E387G002 6552

# FORM N-2 (back)

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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, 1974 Edition with Winter 1975 Addenda, Code Case: 1361-2
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	A8713	N/A	N/A	1988	Replaced	Yes, Code Class 1
CRD	GE	A4709	N/A	N/A	1984	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 38-03. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No A8713.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No A4709.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. Leakage was observed during pressure test and was evaluated to be acceptable.

NOTES -

1) The replacement CRD assembly, Serial No A4709 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

ENERGY NORTHWEST People · Vision · Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Component Design Pressure: 1250 Psig Temperature: 575° F
<b>9. Remarks:</b> 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A4709. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8 <sup>o</sup> 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       Judyb       Signed By       Judyb       Signed By         Kuldip Singh - Program Lead Engineer (PLE)       Signed By       Kuldip Singh - Program Lead Engineer (PLE)         Date       6/12/03       Date       6/12/03
<b>CERTIFICATE OF INSERVICE INSPECTION</b> I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int - / \hat{f} - d\hat{f}^{*}$ to $\tilde{f} - / - d\hat{f}^{*}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or
implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Image: Commissions 148660/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/748600/7486000/748600/7486000/7486000/7486000/7486000/7486000/7486000/7486000/7486000/7486000/7486000/7486000/74
Date 7-1-05

	WOF0104480074
	SOSM N-1 NPT CERTIFICAHOLDERS' DATA REPORT FOR NUCLEAART AND APPURTENANCES*
	As required by the Provision of the ASME Code Rules, Section III, Div. 1
	Children Surge D
U	L (a) Manufactured by General Electric Co., Castle Hayne Rd., Wilmington, N.C. 6/12/03
	(b) Hanufactured for HANFORD -
	(b) Manufactured for the sol address of N Certificate Holder for completed success composed
	2. Identification-Certificate Holder's Serial No. of Part A4709Nar'l Bd. No
•	•
	(a) Constructed According to Drawing No Drawing Prepared by D. L. Peterson
	(b) Description of Part Inspected Cylinder Tube and Flange
	(c) Applicable ASHE Code: Section III, Edition 1974, Addenda date W'75, Case No. 1361-2 Class 1
	1 Reneter Standard part for use with reactor
	3. Remarker SCZBDATG DET IOT USE WILL TERCOL
	Everestatically tested at 1825 psi.
C.	
	CORRECTED COPY: ITEM 1. (b) ADDED SITE -LOCATION
	* Number of sheets - 2
្លោ	We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code cos
Ċ	forms to the rules of construction of the ASME Code Section III. (The applicable Dentri Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certi-
	icate Holder for appartenances is responsible for furnishing a separate Design Specification and Stress Report if the appartenance is >
֥	included in the component Design Specification and Stress Report.)
	Date 6/13 19 84 Signed GE-NEPD-WAD-EM By (J. E. Moullumue)
ٽي.	
2	Certificate of Authorization Expires_June 16. 1984 Certificate of Authorization No. N-1151
~	CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)
2	
	Design information on file et GENERAL ELECTRIC CO., SAN JOSE, CALIF.
2	GENERAL ELECTRIC CO., SAN JOSE, CALIF.
	Design specifications certified by Vernon W. Pence Prof. Eng. State Reg. No
• .	Vernon W. Pence Calif. 14488
	Stress analysis report certified byReg. NoReg. NoReg. NoReg. No
-	CERTIFICATE OF SHOP INSPECTION
-	
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors
	and/or the Scare or Province of North Carolina and employed by Dept of Labor
	of <u>State of North Calouldin</u> have inspected the part of a pressure vessel described in this Partial Data Report en 6/18 19 81 and state that to the best of my knowledge
-	and denies. The NPT certaines holder has constructed this persion accordance with the ASME code Section III.
	By signing this certifican, arither the inspector nor his employer maker any warranty, expressed or implied, concern- ing the part described in this Partial Data Report. Furthermore, neither the inspector nor his employer
	shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from of conjected with this inspection.
C-	6/13 84
	· Date 0/15 19 19
-	Ch Abornill NG-723, PA. WC1766, OHIO
	Laspetter's Signature Lonin's Sich's National Board, State, Province and No.

This form (E00040) may be obtained from the Order Deat, ASME, 345 E. 47th St., New York, N.Y. 100

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	1.5		
	A CALL	FORM N-2 NPT CERTIFICATE GOLDERS' DA	TA REPORT FOR NUCLEAR STAND APPORTENTION
	•	As required by the Provision	of the ASME Code Rules, Section III, Div. 1
-			CORRECTED COPY
	-		
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	). (-	Manufactured by General Electric Co., Ca	sela Eayne Rd., Wilmington N.C.
	·		UNAME ADD DEATER OF NPT CATEGORIE Houders .
•		Meanfactured for HANFORD	•
	(a	Maduraciated inc	ares of N Caralanse Holder the completes nuclear compenses
			A4709 ·
	Z Idi	mtificanco-Certificate Holder's Senial No. of Part	Nar'l Bd. No
		91 97 2586	D. L. Petarson
	(=)	Constructed According to Drawing No.	003 Draving Prepared by
		• •	· ·
	(5)	Description of Part Inspected Cylinder	Tube and Flazze
		1974	Addends dese W'75 1361-2 1
•	· (c)	עלאיייינגעריייינגער אומגאיייינגער אומגאוועראיי	
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	3. Re		ef service for which composing was designed
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	_	* Number of sheets - 2	
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	,	Cap 167234371	
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		(167A2343)	Code Weld,
9		SA132-F304	P3GYP11
		3/8 thick x 1 1/15 CD	
		• • • • • • • • •	
<u></u>	2.	Indicator Tube 1043133671	
· 👝		SA312-T7316	
		3/4 sch 40-seatless pipe	
0	•	0.113 yall thickness	
2		1.065 zaz. dia.	
			Reactor vessel
N	-	Plug 159A117671	chimile 1
	3.		
	••	SA182-7304	
		1/4 thick x 0:812 0D	
2	•	•	
	4.	Flange 919D610P1 (719E474)	
		SA182-7304	- Code weld
		3.37 thick x 9 5/8 0D	PBGYP79
		neck 1 1/16 thick x 5.0 OD	
		2.875 ID	
	e	·	
•	ב.	Bead 12933539P1	STINI/A IVAN
		SA182-7304	
•		7/8 zhiek x 2.975 Dia.	
		<b>.</b>	
	6.	Ring Flange 1143512292	
	-	SA152-7304	· · · · · · · · · · · · · · · · · · ·
		1" thick x 5.0 0D x 1.75 ID	· · · ·
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	7.	Cap Serey 117C451672	Colled before weld
- 3 <u>,</u>		SA193-35	•
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		FORM N-2 NPT CERTIFICATE FOLD	DERS' DATA REPORT FOR NUCLEAR TAND AFTATENANCES
		As required by the P	corrected Code Rules. Section III. Div. 1 Heldy Serie h
Co	<b></b>		
(	) (=)	Handscared by General Elecande C	Co., Castle Eayne Ed., Wilmington N.C. Mane and adarma of NPT Carabonia Houdern
	(ъ)	Magufactured for	NFORD
	2. Ide	ntifennoo-Certificate Holder's Senal No. & P.	
	(z)	91 Constructed According to Draving No	9D2586003 Drawing Prepared by
		Description of Part Inspected Cy	· · ·
	• •		1974 . Addenda da- W'75 . Care No. 1367-2 1
•			
	3. Re	(Brief 4)	the reactor. Eydrostatically tested at 1825 psi.
Ð		* Number of sheets - 2	· · · · · · · · · · · · · · · · · · ·
	<u></u>	RRECTED COPY: ITEM 1. (b) ADD	ED SITE LOCATION
10	1.	Cap 167A2343P1	
ш <b>г</b>		(1672343)	Cade Weld,
0		52152-7304 3/8 thick x 1 1/16 0D	PSGYP11
		•	
	<b>z.</b>	Indicator Tube 1048133671	
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2		1.065 mm. dia.	
N	-	• •	Reactor vessel
••	3.	Plug 155A1176P1 SA182-F304	
	••	1/4 thick = 0:812 OD	
2	•		
	4.	Flange 919D610P1 (719E474) SA182-7204	
		3.37 thick x 9 5/8 OD	Code veld
		neck 1 1/16 thick x 5.0 OD	PEGYE79
		2.875 ID	
•	2.	Bead 1293333991 SA182-7304	
		7/8 chick x 2.875 Dia.	
	6.	Ring Flange 11485122F2	
		SA162-F304 1" thick x 5.0 0D x 1.75 ID	
••			Code veld FSCYF7
	7.	Cap Serey 117C451672	Rolled before weld
	•	52193-36 6 ez 1/2 diz. on 4 1/8 bolz o	•
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	8	- Plug 1754796121 SA132-7304	•
		0.38 chick x 1.307 dia.	
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		·	



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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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, 1974 Edition with Winter 1975 Addenda, Code Case: 1361-2
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	A8470	N/A	N/A	1988	Replaced	Yes, Code Class 1
CRD	GE	A8974	N/A	N/A	1993	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 42-03. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

- 2) Removed existing CRD assembly, Serial No A8470.
- 3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.
- 4) Installed replacement CRD assembly, Serial No A8974.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

### NOTES -

1) The replacement CRD assembly, Serial No A8974 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

WOT No 01044800 75 ENERGY NORTHWEST People · Vision · Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       •         Test Pressure: 1030 Psig       Test Temperature: 199.8° F         Component Design Pressure: 1250 Psig       Temperature: 575° F
<ul> <li>9. Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8974.</li> <li>2) * Pressure test on the CRD botted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8<sup>o</sup> F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 *Reactor Pressure Vessel Leakage Test*.</li> </ul>
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       We certify Singh - Program Lead Engineer (PLE)         Date       6/12/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $5 - 17 - 62$ to $5 - 7 - 1 - 62$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. 1. M.

(WOT 01044800 75 FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* As required by the Provision of the ASHE Code Rules, Section III, Div, I
6)12(03 1. Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GENF &amp; CM)</u>
2117 Castle Havne Road, Wilmington, North Carolina 28401
(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 : <u>A8974</u> <u>Nat'l Bd. No.</u> <u>N/A</u>
(a) Constructed According to Drawing No: <u>919D258G003 Rev 17</u> Dwg. Prepared by <u>D. L. Peterson</u>
(b) Description of Part Inspected: <u>Ovinder Tube &amp; Flange</u>
(c) Applicable ASHE Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> ( 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 ASHE Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the MPT 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: <u>01/28/93</u>
Certification of Design for Appurtenance
Design information on file atGECompany, San Jose, California
Stress analysis report on file atGE Company. San Jose. California
DC22A6253 Rev. 1 Design specification certified by <u>Biorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
DC22A6254 Rev 1 Stress analysis report certified by <u>Ectward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
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 <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>1256</u> , <u>1993</u> , 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     1 come     P E merz     NC 1231. Ohio. WC 3686 PA       Date     Inspector's Signature     Mational Board, State, Province And Ho.
*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". (17/10)

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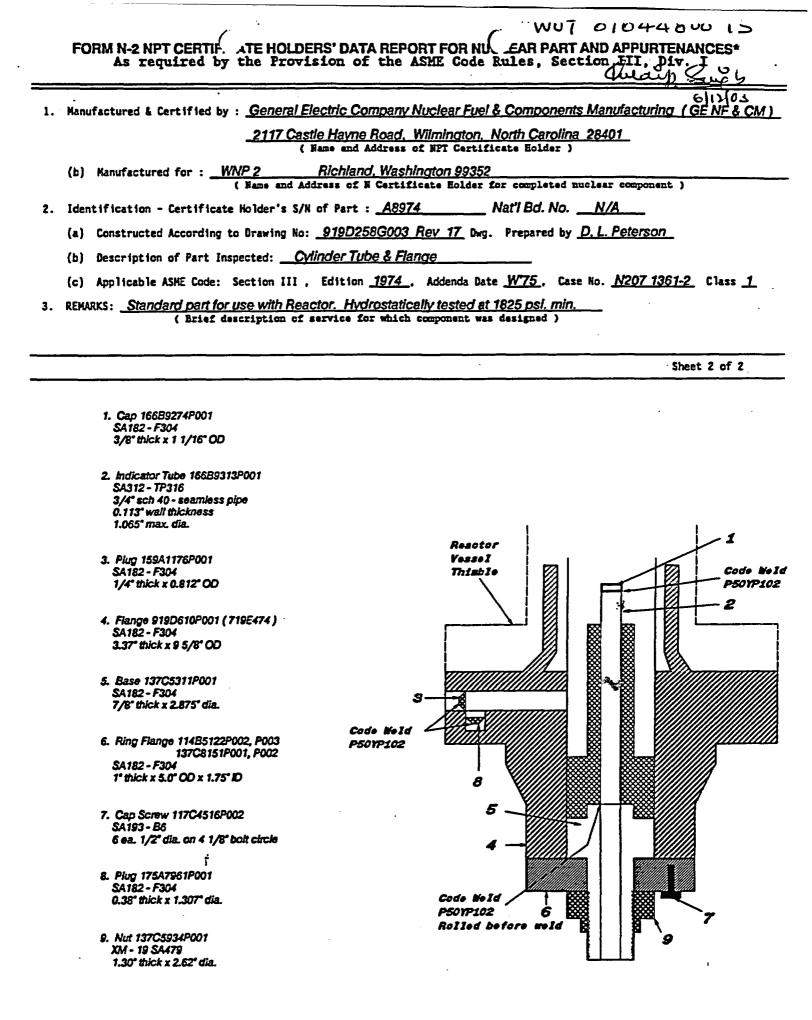
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				. (	-	form N-2	( back	, C		-
Ite	ms 4-8	Incl. to	be complet	ed for sin	gle wall v	ssels, jacke	ts vessels, or	shells of heat	exchangers	•
-		Hateria		T.S	Nominal Thicknes:	0				Length ft i
5.	Seams:				1					iencyX
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5.	Heads:	(a) Hat	erial			T.S	(b) H	Saterial	1	r.s
(a)	Bottom,	on ( Top , Ends )		Crown s Radius	Knuck le Radius		Concial Apex Angle	Hemispherical Radius		Side to Press. ( conv. or conc. )
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7				( Materia	d, Spee, No., 7.3	Size Number)		ning(	Describe or attach	sketch)
7.	Jacket	C IOSUTE:	<u></u>		ecribe as ogee a	nd weld, bar, ste. If		If bolts, describe or stat	ch)	ft-1b
8.	Design	pressure	2	1250	ps	i at	575	F_atter	mp of	°F
Ite	ms 9 and	10 to b	a complete	d for tube	sections					••••••••••••••••••••••••••••••••••••••
9.	Tube Sh	eets: S	tationary.	Materia]	( Kind & Sp	D1a	(Subject to pressu	Thickness	in. A	ttachment
10.	Tubes:	r Materia	1		0.0	in. Thic	kness	Inches or gage. N	umber	Type(Str. or U)
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		Materia		r.s	Nominal Thickness	Co	rrasion			Length ft in
12.	Seams:	•		•	1		R.T.		Effici	encyX
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13.	Heads:	(a) Mat:	erial			T.S.				.s
	Loca	tion	Thickness	Crown	Knuckle Radius		Concial Apex Angle	Hentspherical		Side to Press. ( conv. or conc. )
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						applicable.				
15.	Safety	Valve Out	tlets: Num	ber		Size		Locati		······································
16.	Nozzles	: Purpose ( Outlet, Dri		umber	Die. or Size	Туре	Material	Thickness	Fisinforcer Material	ment How Attached
							·····			
17.	Inspect Opening:		iholes, No	·		Size Size Size		ocation		
18.	Support	s: Skii	rt(Yes or No	Lugs	(Number)	Legs(	Ot Number)	ther(Describe)	Attac	(Where & How)

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1 - If Postweid Heal-Treated. 2 - List other internal or external pressure with coincident temperature when applicable.



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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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, 1974 Edition with Winter 1975 Addenda, Code Case: 1361-2
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	6178	N/A	N/A	1975	Replaced	Yes, Code Class 1
CRD	GE	A9270	N/A	N/A	1995	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 26-31. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No 6178.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No A9270.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

## NOTES -

1) The replacement CRD assembly, Serial No A9270 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

Test Pressure:       1030 Psig       Test Temperature:       199.8° F         Component Design Pressure:       1250 Psig       Temperature:       575° F         9. Remarks:       1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9270.       2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8° F recorded during ASME	
8 Tests Conducted: Hydrostatic Pressure: 1030 Psig       Isst Temperature: 198.8°F         7 Test Pressure: 1030 Psig       Test Temperature: 198.8°F         9. Remarks: 11) See attached N-2 Code Data Report for the replacement CRD assembly. Serial No A3270.       Temperature: 575° F         9. Remarks: 11) See attached N-2 Code Data Report for the replacement of 1030 Psig and test temperature: 575° F       Temperature: 575° F         9. Pressure Set on the CRD bolad flanged connection. Test pressure to 1030 Psig and test temperature: 575° F       F         Section XI pressure test in accordance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".       F         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the ortholocitable         Test God, Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Certificate Of Authorization No.: Not Applicable         Kuidip Singh - Program Lead Engineer (PLE)         Date       G[10 [03         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission Issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by	WOT No 01044800 7 ENERGY NORTHWEST People · Vision · Bolutions
Test Pressure       Test Pressure: 193.0°F         28. Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly. Serial No A9270.       27. Pressure is to the CRD ball fanged connection. Test pressure of 1030 Paig and test temperature of 193.0°F recorded during ASME         29. Pressure is to the CRD ball fanged connection. Test pressure of 1030 Paig and test temperature of 193.0°F recorded during ASME         Section XI pressure test in accordance with PPM No DSP-RPV-RB01 "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 Cocide, Section XI.         Type Code Symbol Stamp: NA Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Luthorization No.: Not Applicable         Kudip Singh - Program Lead Engineer (PLE)       Nuddip Singh - Program Lead Engineer (PLE)         Date       G[10]03         Date         G[10]03         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steem Boiler Of Connecticut of Hartford, Connecticut and these corrective measures described in this Owner's Report In accordance with the requirements of the ASME Cocide, Section XI.	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
2)* Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8° 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 Not. Not Applicable         Expiration Date: Not Applicable         Certificate of Juthorization Not. Not Applicable         Kudip Singh - Profram Lead Engineer (PLE)         Date         G [10] 0.3         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Haritord Steam Boiler Of Connecticut of Haritord. Connecticut have Inspected the components described in this Owner's Report during the period for Connecticut have Inspected the components described in this Owner's Report for the accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer shall be label in this Owner's Report for implicit, concerning the examinations and corrective measures described in this Owner's Report Intecord in this Owner's Report Inteco	Test Pressure: 1030 Psig Test Temperature: 199.8° F
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Juach         Kuldip Singh - Program Lead Engineer (PLE)         Date       61003         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period         Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing the scatificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer shalle liable in any manner for any personal injury o	9. Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A9270. 2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8 <sup>o</sup> F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 *Reactor Pressure Vessel Leakage Test*.
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Juach         Kuldip Singh - Program Lead Engineer (PLE)         Date       61003         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period         Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing the scatificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer shalle liable in any manner for any personal injury o	
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	CERTIFICATE OF COMPLIANCE
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have Inspected the components described in this Owner's Report during the period <u>f-17-02</u> to <u>1-1-03</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         M. M. Mathematications       Commissions <u>2416/11/1416 v J ws</u> National Board, State, and Endorsements	to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By Lucy Suight Signed By Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have Inspected the components described in this Owner's Report during the period <u>f-17-02</u> to <u>1-1-03</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         M. M. Mathematications       Commissions <u>2416/11/1416 v J ws</u> National Board, State, and Endorsements	
I I I I I I I I I I I I I I I I I I I	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>-17-07</u> to <u>1-1-07</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         M. M. M. M. Commissions <u>Commissions</u> <u>241601110486 v32 w5</u> National Board, State, and Endorsements

	WOT 01044	800 77
F	ORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APP As required by the Provision of the ASME Code Rules, Section III,	BITENANCES* BIT. I aup_Suys
1. Man	ufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufactu	GINUS Iring (GENF&CM)
	<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> ( Name and Address of NPT Certificate Holder )	
(b)	Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> ( Name and Address of N Certificate Bolder for completed nuclear compo	nent )
2. Ide	ntification - Certificate Holder's S/N of Part : <u>A9270</u> Nat'l Bd. No. <u>N/A</u>	
(a)	Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Dwg. Prepared by <u>D.L. Peters</u>	<u>on</u>
(b)	Description of Part Inspected:	
(c)	Applicable ASME Code: Section III, Edition 1974, Addenda Date W75, Case No. 136	<u>1-2</u> Class <u>1</u>
3. REM	ARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (Brief description of service for which component was designed)	
confo Repor is re the c	ertify that the statements in this report are correct and this vessel part or appurtenance as de orms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specific t are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Hold esponsible for furnishing a separate Design Specification and Stress Report if the appurtenance component Design Specification and Stress Report ).	ication and Stress ler for appurtenances
	06/27/95 Signed <u>GE-NEBG-NF&amp;CM-QA</u> By	<u>L.</u>
Certi	<u>06/27/95</u> Signed <u>GE-NEBG-NF&amp;CM-QA</u> ( BFT Certificate Bolder ) Ficate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPT N - 11</u>	
Certi		
	ficate of Authorization Expires: $6/16/96$ Certification of Authorization No. : <u>NPT N - 11</u>	
Desi	ficate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPTN-11</u> Certification of Design for Appurtenance	
Desi Stre DC22	ficate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPT N - 115</u> Certification of Design for Appurtenance gn information on file at <u>GE Company. San Jose, California</u>	
Desi Stre DC22 Desi DC22	ficate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPT N - 11</u> <b>Certification of Design for Appurtenance</b> gn information on file at <u>GE Company. San Jose, California</u> ss analysis report on file at <u>GE Company. San Jose, California</u> A6253 Rev. 1	<u>51</u>
Desi Stre DC22 Desi DC22	ficate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPT N - 118</u> <b>Certification of Design for Appurtenance</b> gn information on file at <u>GE Company. San Jose. California</u> ss analysis report on file at <u>GE Company. San Jose. California</u> A6253 Rev. 1 gn specification certified by <u>Blorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u> A6254 Rev 1	<u>51</u>

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.

Inspector's Signature <u>6/27.1995</u> Aura NC 1231, Ohio, WC 3686 PA Date National Board, State, Province And No.

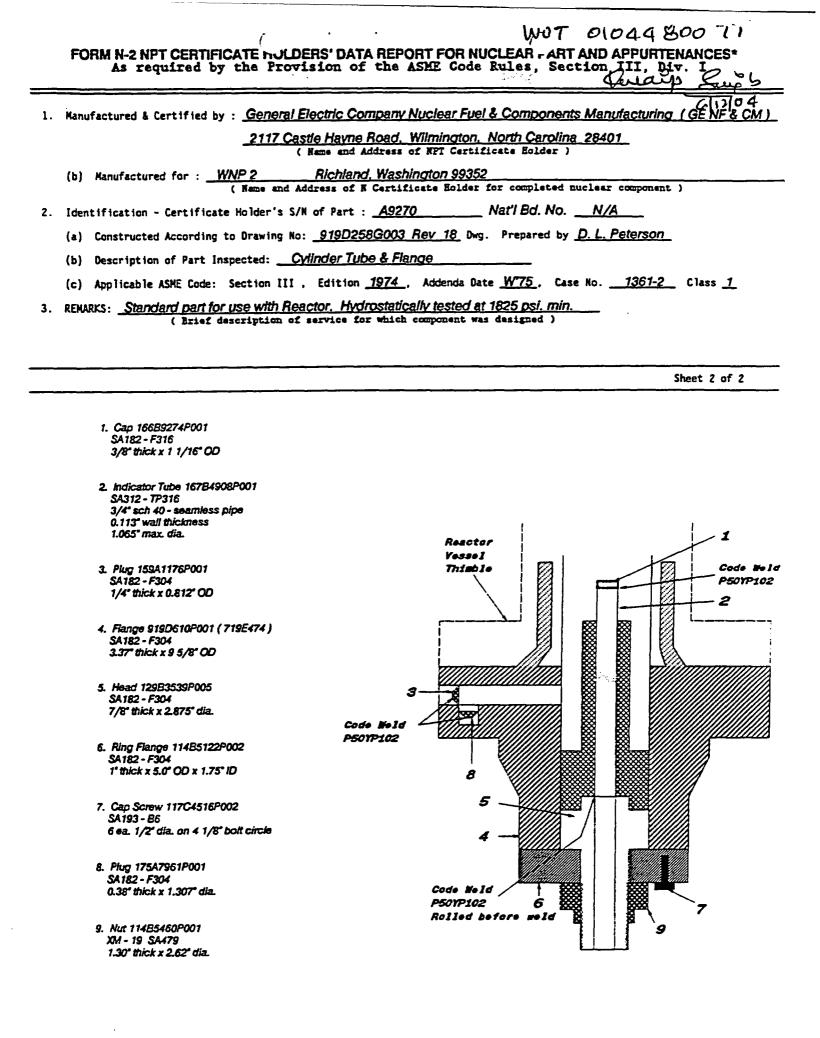
\*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

Items 4-6 Incl. to be completed for single wall vessels, jackets vessels, or shells of hest exchangers.          4. Shell: Material       T.S.       Moninal       Correstor       in. Dis.       ft.       in. Length       ft.         5. Sens: Long       N.T.       R.T.       R.T.       No. of Courses       No. of Courses         6. Hedd: (a) Naterial       T.S.       (b) Naterial       Ft.       No. of Courses         1. deats: (a) Naterial       T.S.       (b) Naterial       Ft.       No. of Courses         1. deats: (a) Naterial       T.S.       (b) Naterial       Ft.       No. of Courses         1. deats: (a) Naterial       Corone       Knuck & Elliptical       Concial       Neetspherical       Flat       Side to Press.         1. deats: (a) Naterial       Course in Gram Manuella (in m. Th Sim Number)       (Duest's action anno)       The manual (in manuella)       The fastening       (Duest's action anno)         7. Jacket Closure:       (Duest's actions       Dis.       Ft actions       in. Attachment       Moninal         8. Design pressure <sup>2</sup> 1250       pit at       575       F at temp of       f f       f         9. Tube Sheats: Stationary, Material       100 at Small (in mar chalabars of Jacketed vessels, or chanals of hast exchangers.       (Small (in Manuella)       (Small (in Manuella)       (Small (in	_					1	Form N-2	( back	)			
4. Shell: Material	It	ems 4-8	incl. to	be complet	ed for si	ngla wall v	essels, jacks	ets vessels, o	or shells of hea	it exchanger	<b>3</b> .	
Girth       H.T.       R.T.       No. of Courses         8. Heads: (a) Naterial       T.S.       (b) Naterial       T.S.         Location (Top Botton, Ends)       Thickness Radius Radiu	4.	Shell:	Materia (	a ) Kind & Spec. No	T.S	Thicknes	( sin. /	Corrosion	_ in. Dia	ft in	. Length _	ft ii
Girth	5.	Seams:	Long	·		н.т.'		R.T.		Effic	ciency	X
Location (Top Bottom, Ends ) Thickness Radius Radius Ratio (a)			Girth _			н.т.'		R.T.	·	No. (	of Courses	
Bottom, Ends       Thickness       Radius       Ages Angle       Radius       Diameter ( conv. or conc. )         (b)       If renovable, bolts used       (Messea, Spea, Na, 7,8 Ste Number)       (Descrete ar seeks)       (Descrete ar seeks)         7.       Jacket Closure:       (Descrete ar seeks)       (Descrete ar seeks)       (Descrete ar seeks)         (Concrete ar seeks)       (Descrete ar seeks)       Drop Meight       F         1 terms 5 and 10 to be completed for tube sections       575       F at temp of	6.	Heads :	(a) Hat	terial			T.S	(b)	Material		T.S	·
7. Jacket Closure:       (Desche an open and welk, ber, de. Fler give dimension, Block, describe or saved.)         (Desche an open and welk, ber, de. Fler give dimension, Block, describe or saved.)       Drop Weightft-1b         8. Design pressure?       1250psi at575F at temp of		Bottom,	Ends )	Thicknes	s Radius	Radius	Ratio	Concial Apex Angle	Hemispherica Radius	l Flat Diameter		
7. Jacket Closure:       (Desche an open and welk, ber, de. Fler give dimension, Block, describe or saved.)         (Desche an open and welk, ber, de. Fler give dimension, Block, describe or saved.)       Drop Weightft-1b         8. Design pressure?       1250psi at575F at temp of	(5	) If remo	wable, b	olts used		·		Other fast	ening			
(Decode as oges and web, bar, etc. Fiber give dimensions, Flods, denotes an each)       Drop Weight	7.				( MILLING	ni, Spec. No., T.S	L Size Number)			(Describe of attac	ch sketich )	
8. Design pressure       1250       psi at       575       F       at temp of       F         Items 9 and 10 to be completed for tube sections         9. Tube Sheets: Stationary. Material       Dia.       Thickness       in. Attachment       (Waded, Bowell         10. Tubes: Material       0.0.       in. Thickness       in. Attachment       (Waded, Bowell         10. Tubes: Material       0.0.       in. Thickness       in. Attachment       (Waded, Bowell         11. Tubes: Material       0.0.       in. Thickness       in. Attachment       (Waded, Bowell         11. Shell: Naterial       T.S.       Thickness       in. Allowance       in. Dia.       ft.       in. Length       ft.       in         12. Seams: Long       H.T.       R.T.       R.T.       Efficiency       X         6irth       N.T.       R.T.       R.T.       No. of Courses       in.         13. Heads: (a) Material       Crown       Knuckle Elliptical Concial Heatignerical Flat       Side to Press.         14) Cop.bottom.ends       Grow Knuckle Elliptical Concial Heatignerical Flat       Side to Press.       Concor. )         16) Chapp Unpott       ft-1b       F at temp of       ft-1b         4. Design pressure       psi at       F at temp of       F					(D	escribe 25 ogee	and weld, bar, etc. I	l bar give dimensions	· · · · ·	11-1-1-1		ft-lb
9. Tube Sheets: Stationary. Material	8.	Design	pressure	2	1250	p:	si at	575	F at to	emp of		<sup>°</sup> F
Floating.       Material	Ite	and 9 and	10 to b	a complete	d for tube	sections					······	
10. Tubes: Material	9.	Tube Sh				(Xind & Si	Dec. No. )	{ Subject to press	ure )			(Welded, Bolted)
(St. oru)         Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.         Noainal       Corrosion         II. Shell: Naterial       T.S.         (Nand & Spea, Na.) (Mn. of Parge Opeonted)       in. Allowance         II. Shell: Naterial       T.S.         (Nand & Spea, Na.) (Mn. of Parge Opeonted)       in. Allowance         II. Shell: Naterial       T.S.         (Nand & Spea, Na.) (Mn. of Parge Opeonted)       in. Allowance         II. Shell: Naterial       T.S.         (St. aru)       R.T.         (St. aru)       R.T.         (St. aru)       No. of Courses         (St. aru)       No. of Courses         (St. aru)       No. of Courses         (a) Material       T.S.         (b) Channel       Corown         (A) Top, bottom, ends       Radius         (A) Top, bottom, ends       Material         (B) Channel       (Coloration         (A) Top, bottom, ends       (Design pressure         (B) Channel       (Design pressure         (B) Channel       (Design pressure         (Coloration washelp to botts used (a)       (Design pressure         (Costion pressure       Size         (Costion pre	10.	Tubes:										
1. Shell: MaterialT.SThicknessin. Allowancein. Diaftin. Lengthftin. [xdrd & Spee, Na.] (Men. of Range Cookined)         2. Seams: LongH.TR.TR.TR.T					· · · · ·						·	(Str. or U)
11. Shell: Material T.S. Thickness in. Allowance in. Dia. ft. in. Length ft. in         (And & Spee, Ma.) (Mm. of Parge Specified)         12. Seams: Long	Ite	ms 11 -	14 incl.	to be com	leted for	inner chan	bers of jacks	ted vessels,	or channels of	heat exchang	jers.	
12. Seams: Long	1.	Shell:				Thickness			in. Dia f	t in.	Length	_ ft in.
Girth	2.	Seams:	Long			н.т		R.T.		Effici	iency	x
Crown       Knuckle       Elliptical       Concial       Hemispherical       Flat       Side to Press.         (a) Top, botton, ends			Girth _					R.T.		No. of	Courses _	
Location       Thickness       Radius       Ratio       Apex Angle       Radius       Diameter       ( conv. or conc. )         (a) Top, bottom, ends	3.	Heads:	(a) Mate	erial			T.S	(b) M	aterial	1	.s	
If removable, bolts used (a)	(a)			Thickness				Concial	Hemispherical	Flat	Side to F	Press.
(Describe or attach stretch)     Orop Weight	(b)		vable, bo	olts used (	a)	(b)	(c)	Other	r fastening			
4. Design pressure psi at F at temp of F         Items below to be completed for all vessels where applicable.         5. Safety Valve Outlets: Number Size Location         6. Nozzles: Aurose (Iniet, Ouder, Drain)         Number       Dia. or Size         Type       Material         Thickness       Material         How Attached         Inspection       Manholes, No         Size       Location				<b>-</b>					Orop \	leight		•
5. Safety Valve Outlets: Number Size Location         6. Nozzles: Purpose (Inlet, Outlet, Drain)       Number       Dia. or Size       Type       Meterial       Thicknesse       Meterial       How Attached	4.	Design p		·			osi at	<u> </u>	°Fatten	np of		
5. Nozzles: Purpose (Inlet, Outist, Drain)     Reinforcement	Ite	ns below	to be co	mpleted fo	r all vess	als where a	applicable.					
5. Nozzles: Purpose (Inlet, Outlet, Drain)     Number     Dia. or Size     Type     Material     Thicknesse     Material     How Attached	5.	Safety V	alve Out	lets: Num	ber		Size	·	Locati	ion		
Openings: Handholes, No Size Location Threaded, No Size Location		-	Purpose (1	niel.				Material	Thickness			w Attached
Openings: Handholes, No Size Location Threaded, No Size Location												
3. Supports: Skirt Lugs Legs Other Attached	۲.		: Hand	holes, No	•		Size	L	ocation			
	3.	Supports	: Skir	t	_ Lugs _		_ Legs	0t	her	Attac	:hed	

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1 - If Postweid Heal-Treated, 2 - List other internal or external pressure with coincident temperature when applicable.





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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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, 1974 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 Bulit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6389	N/A	N/A	1974	Replaced	Yes, Code Class 1
CRD	GE	6565	N/A	N/A	1974	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 34-03. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No 6389.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No 6565.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. Np leakage was observed during pressure test.

NOTES -

1) The replacement CRD assembly, Serial No 6565 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with no Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

Prepared By     Correction No: Not Applicable     Prepared By     Kuding Singh - PAgram Laad Engineer (PLE)     Signed By     Kuding Singh - PAgram Laad Engineer (PLE)     Date     G [12] 0.3     Date     Date     G [12] 0.3     Date     Date     G [12] 0.3     Date     Date     Date     Date     Connections     Differentiation     Support     Date     Date     Date     Connection     Support     Date     Dat	
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other         Test Pressure: 1000 Psig       Test Temperature: 199.0° F         Component Design Pressure: 1250 Psig       Temperature: 575° F         Remarks: 1) See atached N-2 Code Data Report for the replacement CRD assembly, Serial No 6556.       Pressure test on the CRD botted Imaged connection - Test pressure used of 1030 Psign and test tomperature of 199.8° F recorded during ASM action XI pressure test in accordance with PPM No OSP-RPV-R801 'Reactor Pressure Vessel Leakage Test'.         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Prepared By	ENERGY NORTHWEST People · Vision · Solutions
Test Pressure: Toto Psig       Test Temperature: 193,0° F         Component Design Pressure: 1250 Psig       Temperature: 575° F         Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 6585.       Precoded during ASM         Pressure test on the CRD botted flanged connection - Test pressure used 1030 Psig and test temperature of 199,8° F recorded during ASM       Precorded during ASM         ection XI pressure test in accordance with PPM No OSP-RPV-R801 'Reactor Pressure Vessel Laskage Test'.       Precorded during ASM         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.       Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable       Signed By       Juach         Criticate Of Authorization No.: Not Applicable       Signed By       Ludop Sumbol Stamp: Not Applicable         Prepared By       Juach       Signed By       Ludop Sumper Stamperature (PLE)         Date       6 [12 03       Date       6 [12 03         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure       Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler (O connecticut of Hartford, Connecticut and Inservice measures described in this Owner's Report In accordance with the requirements of the ASME Code, Section XI.         By signing this certifficc	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
	Test Pressure: 1030 Psig Test Temperature: 199.8° F
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Junch         Kuldip Singh - Program Lead Engineer (PLE)         Date       6 12 03         Date       6 12 03         Date       6 12 03         Date       6 12 03         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>1 - 1 - 2 - 2</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any pers	* Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8 <sup>0</sup> F recorded during ASI
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Julian         Kuldip Singh - Program Lead Engineer (PLE)         Date       6 12 03         Date       6 12 03         Date       6 12 03         Date       6 12 03         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut         of Hartford, Connecticut have inspected the components described in this Owner's Report during the         period $-12^{-2}$ and state to the best of my knowledge and bellef, the         Owner has performed examinations and taken corrective measures described in this Owner's Report         in accordance with the requirements of the ASME Code, Secton XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or         implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or         implied, concerni	
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No: Not Applicable Expiration Date: Not Applicable Prepared By	CERTIFICATE OF COMPLIANCE
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -IP - CP$ to $\boxed{P - I - CP}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements National Board, State, and Endorsements	to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By Uudup Surgh- Signed By Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -IP - CP$ to $\boxed{P - I - CP}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, and Endorsements	CERTIFICATE OF INSERVICE INSPECTION
Inspector's Signature National Board, State, and Endorsements	Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\underline{\int -IP - CP}$ to $\underline{T - I - CP}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal
Date	Inspector's Signature National Board, State, and Endorsements
	Date

<b>FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES</b>
As required by the Provisions of the ASME Code Rules Quarp Such
L (a) Manufactured by <u>General Electric Company, Castle Hayne Rd.</u> , Wilmington, N.C. G/12/03 (Name and address of Manufacturer of part)
(b) Manufactured for <u>General Electric Company, San Jose, California</u> (Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part6565Nat'l Bd. NoNat'l Bd. No
(a) Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
(b) Description of Part Inspected <u>Control Rod Drive</u> , Model #7RDB144 Cl
(c) Applicable ASME Code: Section III, Edition 1974_, Addends date NONE, Case NoClass
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi (Brief description of service for which component was designed)
<u>minimum</u>
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We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code con- forms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance
Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)
Date December 15, 19 74 Signed <u>GE, BWRSD - REM</u> By <u>Here</u>
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 <u>General Electric Co., BWRSD-REM, Castle Havne Rd. Wilmington</u>
Stress analysis report on file at _General_Electric_Co., BWRSD-REM, Castle Hayne Rd., Wilmington
Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488
Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488
CERTIFICATE OF SHOP INSPECTION FOR INFORMATION ON
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 <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on <u>December 3</u> , <u>19.74</u> , 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, concern- ing 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 Jecneber 15, 19 74 Elizaber 21 60 Ohio
Inspector's Signature National Board, State, Province and No.
PROJECT NAME HANFORD Z CUSTOMER OPDER NUMBER 3758-014 ITEM NUMBER 1

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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, 1974 Edition with Summer 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
CRD	GE	7151	N/A	N/A	1975	Replaced	Yes, Code Class 1
CRD	GE	7166	N/A	N/A	1975	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 38-19. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No 7151.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No 7166.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

## NOTES -

1) The replacement CRD assembly, Serial No 7166 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Summer 1974 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

		~ ===		WOT No 0104480
			ERGY RTHWEST Islan Bolution	<b>Г</b>
FO	RM NIS-2 OWNER	'S REPORT F	OR REPAIRS C	OR REPLACEMENTS (Back)
ests Conducte	d: Hydrostatic Test Pressure: 104 Component Desig	•		perating Pressure D Other est Temperature: 199.8° F emperature: 575° F
Pressure test on th		nnection - Test pres	sure of 1030 Psig a	nbly, Serial No 7166. and test temperature of 199.8 <sup>0</sup> F recorded during A re Vessel Leakage Test".
		CERTIFICATI	E OF COMPLI,	ANCE
to the rules of Type Code Syl	the ASME Code, So mbol Stamp: Not App Authorization No.: N	ection XI. Dicable	er's Report are	correct and this replacement conforms
Prepared By _	Kuldip Singh - Program	Euch Lead Engineer (PLF	Signed By	Kuldip Singh - Program Lead Engineer (PLE)
Date	6/12/03		Date	6/17/03
	······			
	CEF	RTIFICATE OF	INSERVICE IN	SPECTION
Vessel Inspect of Hartford, Cor period <u>5-77</u> Owner has per in accordance By signing this implied, conce Furthermore, r	tors and the State of necticut have inspec- rformed examination with the requirements certificate neither erning the examination neither the inspector	of Washington ai ected the comp (-0) ons and taken c ents of the ASM the Inspector r tions and corrector or nor his emplo	nd employed by onents describ and state to the orrective meas E Code, Section for his employed ctive measures byer shall be lia	ational Board of Boiler and Pressure y Hartford Steam Boiler Of Connecticut ed in this Owner's Report during the best of my knowledge and belief, the sures described in this Owner's Report on XI. For makes any warranty, expressed or described in this Owner's Report. able in any manner for any personal connected with this inspection.
<u>)-/ ////</u> Ini Date 7-/-	Spector's Signature		Commissions	74/6/1/71/86 nº I no
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• •	FORM N-2 MANUFACTURERS DATA R	EPORT FOR N	WCLEAR PART AND .	17 UIDAA BOO B Appurtenances
	As required by the l	Provisions of t	e ASME Code Rules	Quaip Sing
	L (a) Manufactured by General Electric Co	EDANY, Cast (Name and addres	le Hayne Rd., Wil	mington, N.C. 6 (12)03
	(b) Manufactured for General Electric Co	mpany, San		
:	2. Identification-Manufacturer's Serial No. of Part		-	
	(a) Constructed According to Drawing No. 761E38	7 <u>62</u> Drav	ing Prepared by D. L.	Peterson
	(b) Description of Part Inspected <u>Control Ro</u>	d Drive, Mo	<u>de1 #7RDB144 C1</u>	
	(c) Applicable ASME Code: Section III, Edition	74, Addenda da	ue_ <u>\$'74</u> , Case No.	Class
	3. Remarks: Standard part for use with (Brief description)	Reactor. H	vdrostatically te	ested at 1820 psi
	minimum	<u></u>		
		•		MILY
			FOR Milling	KINN UNLI
	Ve certify that the statements made in this report are forms to the rules of construction of the ASME Code Sec (The applicable Design Specification and Stress Report Manufacturer is responsible for furnishing a separate Do in the component Design Specification and Stress Report Dare_January 13. 19.75 Signed	tion III. ort are not the re esign Specification L.)	sponsibility of the part	Manufacturer. An appurtenance
	Certificate of Authorization Expires June 20, 19		entificate of Anthonizatio	n No. <u>NPT - 452</u>
	- CERTIFICATION OF DESIGN	N FOR APPUR	TENANCE (when appli	cable)
	Design information on file atGeneral_Flectr	ic Co., BWB	SD-REM, Castle H	eyne Rd. Wilmington
	Stress analysis report on file at <u>General Flect</u>	ric Co., BV	RSD-REM. Castle	Havne Rd., Wilmington
	Design specifications certified by Vernon W. P	Pence .	Prof. Eag. State	<u>Calif.</u> Reg. No. 14488
	Stress analysis report certified by Vernon W.	Pence	Prof. Eng. State	<u>Calif. Reg. No. 14488</u>
•	CERTIFICA	TE OF SHOP I	NSPECTION .	-
-	Nanufacturer's Partial Data Report on <u>January</u> and belief, the Manufacturer has constructed this part By signing this certificate, neither the Inspector ing the part described in this Manufacturer's Parti	and employed have inspects by t in accordance with not his employer al Data Report.	by <u>Department</u> or d the part of a pressur 9 <u>75</u> , and state that t with the ASME Code Secti makes any warranty, exp Furthermore, neither the	f Labor e vessel described in this to the best of my knowledge ion III. pressed or implied, concern- e Inspector nor his employer
	shall be liable in any manner for any personal inju with this inspection.			
	Dere January 13. 1975	<u> </u>	NC 779. PA. WC	2160 Obje
Ì	Inspectors Signature	- Commissions		State, Province and No.
	· · ·		PROJECT NAME_ CUSTOMER ORDER	HANFORD Z NUMBER-3758-012

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													(Sg. of U)
-	·						Nominal	Corre	els, or channe				
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 3. (a) Work Performed By: Energy Northwest

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

(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, 1974 Edition with Winter 1975 Addenda, Code Case: 1361-2
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	A8591	N/A	N/A	1988	Replaced	Yes, Code Class 1
CRD	GE	A8552	N/A	N/A	1988	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 38-55. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No A8591.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No A8552.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

### NOTES -

1) The replacement CRD assembly, Serial No A8552 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

ENERGY NORTHWEST People - Vision - Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
<ul> <li>8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other</li> <li>8 Test Pressure: 1030 Psig</li> <li>7 Test Pressure: 199.8° F</li> <li>Component Design Pressure: 1250 Psig</li> <li>9. Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No A8552.</li> <li>2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8° F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 *Reactor Pressure Vessel Leakage Test*.</li> </ul>
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By <u>Fueldy</u> Signed By <u>Fueldy</u> Signed By <u>Kuldip Singh - Program Lead Engineer (PLE)</u> Date <u>61203</u> Date <u>61203</u>
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period <u>I-IP-OP</u> to <u>T-I-OP</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Mathematical Inspector's Signature       Commissions <u>THREMYTURE</u> with this inspection.
Date 7-1-05

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WOT 01044800 82
FORM H-2 HPT CERTIFICATE BOLDERS' DATA REPORT FOR NUCLEAR PART AND APPERTMENTES* As required by the Provision of the ASME Code Rules, Section III, Div. 1 6/17
I Manufactured & Cartified by: CE Company, 2117 Castle Rause Ed. Wilmington N.C. 28402
(b) Manufactured for: WNP-2, RICHAND, Wa. 99352 (Name and Accress of N Certificate Holder) (b) Manufactured for: WNP-2, RICHAND, Wa. 99352
2. Identification-Certificate Holders's S/N of Part:
(a) Constructed According to Drawing No: 919D258G003 Dwg. Prepared by D. L. Peterson
(b) Description of Part Inspected: <u>CYLINDER TUBE &amp; FLANGE</u>
(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) Bydrostatically tested at 1825 psi. min.
*Sheet 1 of 2
(The applicable Designed Specification and Stress Report are not the responsibility of the NE Certificate Bolder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report 1f the appurtenance is no included in the component Design Specification and Stress Report). DATE: 12/31 ,19 88 Signed GE-NEBG-NF4CM-QA By
Certificate Of Authorization Expires: 6/16/90 Certification of Authorization No.: NPT N-1151
CHRITIFICATION OF DESIGN FOR APPERTMANCE
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 HAAEERG Prof. Eng. State CALIF. Reg. No. 15570
DC22A6254 Rev. 0. Stress analysis report certified by EDWARD YOSHIO Prof. Eng. State CALLF. Reg. No. MO18646
CIRCIPICATION OF SHOP IRSPECTION
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 DEPARIMENT OF LABOR of STATE OF NORTH CAROLINA have inspected the part of a pressure vessel described in this Partial Data Report on $/2 - 3/$ 19%, and state that to the best of my knowledge and balief, the NPT Certificate Bolder 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. 12-3/, 1988
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. "REMARKSs"
(10/77) VERIFIED & ACCEPTED <u>Il Willer</u>

VERIFIED & ACCEPTE	0 11 Meller II
	1-18-89
	R.I. Inspector Date

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<pre>L1. Shell: Material (Kind&amp;Spe L2. Seams: Long Girth L3. Heads (a) Materia Location (a)Top, Bottom, Tic End (b)Channel f removable, bolts un A. Design pressure<sup>2</sup></pre>	T.S C.No.) (Min 	Nominal Thickness	Corros in. Allows cified) N SN Elliptical Ratio (c) at	ion incein.[ ifficiency_ ko. of Cours (b) Concial Apex Angle Other Fast	Diaft daterial Hemispheris Radius tening (Descr: Drop We Charpy ef at tem	channels of h _inLength_ 3 7 ical fst Diameter  ibe or attach sight Impact	eat exchangers ftin. .Sin. Side to Pres (Conv.or Conc  aketch
<pre>L. Shell: Material (Kind&amp;Spe L2. Seams: Long Girth L3. Heads (a) Materia Location (a) Top, Bottom, Tic End (b) Channel f removable, bolts un A. Design pressure<sup>2</sup> tems below to be communication</pre>	T.S c.No.) (Min. H.T.1 H.T.1  crown nkess Radio sed (a)	Nominal Thickness	Corros in. Allows cified) N 5N 5N Elliptical Ratio  (c) at mere appli	ion incein.[ ifficiency_ ko. of Cours (b) Concial Apex Angle Dther Fast	Diaft aterial Hemispheri Radius coning (Descr Drop Wo Charpy of at tem	channels of h _inLength37 ical fst Diameter1 ibe or attach sight1 spact2 o. of	eat exchangers ftin. .Sin. Side to Pres (Conv.or Conc  aketch
<pre>Il. Shell: Material (Kind&amp;Spe I2. Seams: Long Girth I3. Heads (a) Materia Location (a)Top, Bottom, Tic End (b)Channel f removable, bolts u A. Design pressure<sup>2</sup> tems below to be com 5. Safety Valve Outl</pre>	T.S c.No.) (Min. H.T.1 H.T.1  crown nkess Radio sed (a)	Nominal Thickness	Corros in. Allows cified) N 5N 5N Elliptical Ratio  (c) at mere appli	ion incein.[ ifficiency_ ko. of Cours (b) Concial Apex Angle Dther Fast	Diaft aterial Hemispheri Radius coning (Descr Drop Wo Charpy of at tem	channels of h _inLength37 ical fst Diameter1 ibe or attach sight1 spact2 o. of	eat exchangers ftin. .Sin. Side to Pres (Conv.or Conc  aketch
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<ol> <li>Shell: Material</li></ol>	T.S. (Min. c.No.) (Min. H.T.1 H.T.1 Crown nkess Radiu sed (s) pleted for al	Nominal Thickness	Corros in. Allows cified) N SN SN Elliptical Ratio N 	cable.	Diaft Bes	channels of h _inLength37 ical fst Diameter ibe or attach sight1 npact c. of Reinforcemes	eat exchangers ftin. .Sin. .Sin. .Side to Pres (Conv.or Conc in. in. in. in. 
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<pre>L1. Shell: Material</pre>	T.S C.No.) (Min. H.T.1  ICrown nkess Radiu sed (s) sed (s) pleted for al ets: Number Number	Nominal Thickness	Corros in. Allows cified) E S. Elliptical Ratio (c) at pere appli Size Type	fficiency	Diaft Bes	channels of h _inLength377777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777	eat exchangersftinSinSide to Pres (Conv.or Concefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefe
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<ol> <li>Shell: Material (KindàSpe</li> <li>Seama: Long Girth</li> <li>Hasda (a) Hateria Location</li> <li>(a) Top, Bottom, Tic End</li> <li>(b) Channel</li> <li>f removable, bolts un</li> <li>A. Design pressure<sup>2</sup></li> <li>tems below to be com</li> <li>Safety Valve Outl</li> <li>Safety Valve Outl</li> <li>Nozzles: Purpose (Inlet Dutlet, Drain)</li> <li>J. Inspection Manha Openings: Hand</li> </ol>	T.S C.No.) (Min. N.T.1 N.T.1 Crown nkess Radiu sed (s) sed (s) sed (s) sets: Number Number  Number  oles, No	Nominal Thickness	Corros in. Allows cified) E S. Elliptical Ratio (c) at pere appli Size Type ize	fficiency	Diaft Bes	channels of h _inLength377777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777	eat exchangersftinSinSide to Pres (Conv.or Concefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefe
<ol> <li>Shell: Material (Kind&amp;Spe)</li> <li>Seams: Long Girth</li> <li>Heads (a) Materia Location</li> <li>(a) Top, Bottom, Tic End</li> <li>(b) Channel</li> <li>f removable, bolts und</li> <li>A. Dessign pressure<sup>2</sup></li> <li>tems below to be commons</li> <li>Safety Valve Outl</li> <li>Nozzles: Purpose (Inlet Butlet, Drain)</li> <li>Timpection Manha Openings: Hand</li> </ol>	T.S C.No.) (Min. 	Nominal Thickness	Corros in. Allows cified) E S. Elliptical Ratio (c) at pere appli Size Type ize	fficiency	Diaft Bes	channels of h _inLength377777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777	eat exchangersftinSinSide to Pres (Conv.or Concefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefefe
<ul> <li>1. Shell: Material (Kind&amp;Spe (Kind&amp;Spe</li> <li>2. Seama: Long</li></ul>	T.S C.No.) (Min. 	Nominal Thickness	Corros in. Allows cified) Elliptical Ratio (c) at at First appli Corros Type Type Leg Leg	ion ncein. [ ifficiency lo. of Cours (b) Concial Apex Angle Dther Fast  Other Fast  cable.  Haterial	Diaft ass	channels of h _inLength377777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777777	eat exchangersftinS
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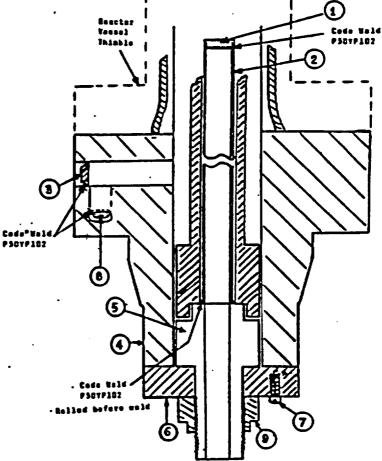
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	W07 01044800 82
FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPO As required by the Provision of the	ASME Code Rules, Section III, Div. I furanp Sur
(b) Manufactured for: WNP-2, RICHLAND, Wa	Address of NPT Certificate Holder)
2. Identification-Certificate Holders's S/N of Part:	A8552 Nat'l Bd. N. N/A
(a) Constructed According to Drawing No: 919D258G (b) Description of Part Inspected: CYLINDER TUBE	
(C) Applicable ASME Code: Section III, Edition 1974	,Addenda Date W'75, Case No. 1361-2 Class 1
. REMARKS: Sub-assembly of Control Rod Drive for u	
(Brief description of service fo Hydrostatically tested at 1825 psi. min	
*Sheet 2 of 2	
1. Cap 167A2343P1 SA182-F304 3/8 thick X 1 1/16 CD	Instar 1

- 2. Indicator Tube 104B1336P3 SA312-TP316 3/4 sch 40-seamless pipe 0.113 wall thickness 1.065 max. dia.
- 3. Plug 159All76Pl SA182-F304 1/4 thick x 0.812 CD
- 4. Flange 919D610P1 (719E474) SA182-F304 3.37 thick x 9 5/8 OD
- 5. Head 129B3539P3, P5 SA182-F304 7/8 thick x 2.875 Dia.
- 6. Ring Flange 114B5122P2 SA182-F304 1" thick x 5.0 CD x 1.75 ID
- 7. Cap Screw 117C4516P2 SA193-B6 6 ea. 1/2 dia. on 4 1/8 bolt circle
- Plug 175A7961P1 SA182-F304
   0.38 thick x 1.307 dia.
- Nut 114B5460P1
  SA193-B8A
  1.30 thick x 2.62 dia.





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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 06/12/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(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 no Addenda, Code Case: 1361-1
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Repiaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7034	N/A	N/A	1974	Replaced	Yes, Code Class 1
CRD	GE	7041	N/A	N/A	1975	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced Control Rod Drive (CRD) assembly at Core Location 46-27. The replacement work was performed in accordance with plant procedure PPM No 10.5.7 "Control Rod Drive Removal And Replacement" as follows:

1) Removed all eight (8) existing cap screws from the CRD assembly bolted flanged connection.

2) Removed existing CRD assembly, Serial No 7034.

3) Performed VT-1 visual examination on all eight (8) new replacement cap screws. VT-1 visual examination results acceptable.

4) Installed replacement CRD assembly, Serial No 7041.

5) Installed eight (8) VT-1 visually examined new replacement cap screws for the CRD assembly bolted flanged connection.

6) Torqued the cap screws for the CRD assembly bolted flanged connection to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

## NOTES -

1) The replacement CRD assembly, Serial No 7041 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

2) New replacement cap screws, SA-540 Gr. B23, Class 4, Heat No 184813, Heat Code No J144.

WOT No 01044800 84
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Component Design Pressure: 1250 Psig Test Temperature: 575° F
<ul> <li>9. Remarks: 1) See attached N-2 Code Data Report for the replacement CRD assembly, Serial No 7041.</li> <li>2) * Pressure test on the CRD bolted flanged connection - Test pressure of 1030 Psig and test temperature of 199.8<sup>o</sup> F recorded during ASME Section XI pressure test in accordance with PPM No OSP-RPV-R801 *Reactor Pressure Vessel Leakage Test*.</li> </ul>
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
Prepared By <u>Ruldip Singh - Program Lead Engineer (PLE)</u> Kuldip Singh - Program Lead Engineer (PLE) Date <u>GINO3</u> Date <u>GINO3</u> Date <u>GINO3</u>
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $\int -17 - c^2$ to $7 - 1 - c^2$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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     National Board, State, and Endorsements       Date

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	WO T CLOCK CON CON FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES
	An required by the Provisions of the ASME Code Rules Querp Sup
l. (c	) Manufautured by General Electric Company, Castle Heyne Rd., Wilmington, N. C. 6/12/03 (Name and address of Manufasturer of puri)
(b)	) Manufactured for General Electric Company, San Jose, California (Name and address of Manufacturer of completed nuclear component)
2. Id	entification-Manufacturer's Sesial No. of Past7041
(4)	Constructed According to Drawing No. 761E387G2 Drawing Prepared by D. L. Peterson
(Þ	Description of Part Inspected Control Rod Drive, Model \$7RDB144 C1
	Applicable ASME Code: Section III, Edition 1971, Addenda date None, Case No. 1361-1 Class 1
L Re	emarkesStandard part for use with Reactor. Hydrostatically tested at 1820 psi (Brief description of service for which component was designed)
	minimum.
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ia the	acturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included component Design Specification and Stress Report.)
	July 31 19 75 Signed GE, BWRSD - REM (Manufacturer) By Game - Control By Game - Control Control By Game - Control Cont
	(Manufacturer) Icare of Authorization Expires June 20, 1978 Certificate of Authorization No. <u>NPT - 462</u>
Certif	(Manufactures)
Certif De	(Manufacturer) lease of Authorization Expires June 20, 1978 Certificate of Authorization No. <u>NPT - 462</u> CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)
De: Sur	(Manufacturer) Acate of Authorization Expires June 20, 1978 Certificate of Authorization No. <u>NPT - 462</u> CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) aign information on file at <u>General Electric Co.</u> , BWRSD-REM, Castle Hayne Rd., Wilmington
Certif De Sur De	(Manufacturer) Icare of Authorization Expires June 20, 1978 Certificate of Authorization No. <u>NPT - 462</u> CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) aign information on file at <u>General Electric Co.</u> , BWRSD-REM, Castle Hayne Rd., Wilmington case analysis report on file at <u>General Electric Co.</u> , BWRSD-REM, Castle Hayne Rd., Wilmington
Certif De Sur	(Manufacturer) Acate of Authorization Expires June 20, 1978 Certificate of Authorization No. <u>NPT - 462</u> CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) aign information on file at <u>General Electric Co.</u> , EWRSD-REM, Castle Hayne Rd., Wilmington ess analysis report on file at <u>General Electric Co.</u> , EWRSD-REM, Castle Hayne Rd., Wilmington sign specifications certified by <u>Vernon W. Pence</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>14488</u>
Certif De: Sur De: Stre	(Manufactures) lease of Authorization Expires June 20, 1978 Certificate of Authorization No. NPT - 462 CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) aign information on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington ess analysis report on file at General Electric Co., BWRSD-REM, Castle Hayne Rd., Wilmington algn specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488 ess 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 /or the State or Province of North Caroline and employed by Department of Labor
Certif De: Stri De: Stri Man and ol Man and ing	(Manufactures) lease of Authorization Expires_June 20, 1978 Certificate of Authorization No. <u>NPT - 462</u> CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) aign information on file at <u>General Electric Co.</u> , BWRSD-REM, Castle Hayne Rd., Wilmington ease analysis seport on file at <u>General Electric Co.</u> , BWRSD-REM, Castle Hayne Rd., Wilmington algn specifications certified by <u>Vernon W. Pence</u> prof. Eng. State <u>Calif.</u> Reg. No. <u>14488</u> ease analysis report certified by <u>Vernon W. Pence</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>14488</u> CERTIFICATE OF SHOP INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors /or the State or Province of North Carolina and employed by <u>Department of Labor</u>

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WOT No 01059767 02



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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 08/19/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (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 no Addenda, Code Case: 1361-1
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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	GE	5399	N/A	N/A	1974		Yes, Code Class

7. Description Of Work Performed: Replaced parts for Control Rod Drive (CRD) assembly Serial No 5399 at Core Location 58-31. The replacement work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Removed all six (6) existing ring flange cap screws from the CRD assembly.
- 2) Removed existing ring flange from the CRD assembly.

3) Performed VT-1 visual examination on all six (6) new replacement ring flange cap screws. VT-1 visual examination results acceptable.

4) Installed replacement ring flange cap screw.

5) Installed six (6) VT-1 visually examined new replacement ring flange cap screws for the CRD assembly.

6) Torqued the ring flange cap screws for the CRD assembly to the required torque values.

7) Performed VT-2 visual examination during pressure test on CRD assembly bolted flanged connection to confirm pressure boundary integrity of the joint. No leakage was observed during pressure test.

## NOTES -

1) VT-1 visual examination Report No 4-01-2-1 for the new replacement ring flange cap screws.

WOT No 01059767 02 ENERGY NORTHWEST People-Vision-Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 1030 Psig Component Design Pressure: 1250 Psig Temperature: 575° F
<b>9. Remarks:</b> 1) * Pressure test on the CRD assembly - Test pressure of 1030 Psig and test temperature of 199.8° 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       Mulcup Suich         Kuldip Singh - Program Lead Engineer (PLE)         Date       \$16
<b>CERTIFICATE OF INSERVICE INSPECTION</b> I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Hartford Steam Boiler Of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period $5-27-02$ to $97/19/02$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
<u>M-MM</u> Inspector's Signature Date <u>8-19-c'</u> Commissions <u>74464</u> 7486 <u>I w w</u> National Board, State, and Endorsements

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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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 Piston Tube Piston Tube	General Electric General Electric General Electric	6108 5358 0865	N/A N/A N/A	N/A N/A N/A	1974 1974 1994	Replaced Replacement	Yes, Code Class Yes, Code Class Yes, Code Class

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6108. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

1) Disassembled Control Rod Drive (CRD) assembly for overhaul.

2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6108. Liquid penetrant (PT) examination results acceptable.

3) Performed visual examination on the existing Piston Tube assembly Serial No 5358. Visual examination results unacceptable (pitting).

- 4) Installed replacement Piston Tube assembly Serial No 0865.
- 5) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.
- 6) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.

7) Reassembled parts and materials for Control Rod Drive (CRD).

## NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No 0865. 2) The existing Piston Tube assembly Serial No 5358 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

3) The replacement Piston Tube assembly Serial No 0865 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

4) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No 6108. The Cylinder Tube And Flange (CT&F) Serial No 6108 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

WOT No 01044801 05	
	WOT No 01044801 0 ENERGY NORTHWEST People - Vision - Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None X Test Pressure: Psig Component Design Pressure: Psig Temperature: ° F	Test Pressure: Psig Test Temperature: <sup>o</sup> F
9. Remarks: See attached N-2 Code Data Report for the replacement Piston Tube assembly Serial No 0865.	. Remarks: See attached N-2 Code Data Report for the replacement Piston Tube assembly Serial No 0865.
CERTIFICATE OF COMPLIANCE	CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the period	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>11120102</u> to <u>0122100</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <u>Minipuddations</u> Inspector's Signature Mational Board, State, and Endorsements

WOT NO. 01044801 05
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 Cuedup Build
1. Nanufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GE NF &amp; CM)</u>
<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> ( Name and Address of NPT Certificate Bolder )
(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Bolder for completed nuclear component )
2. Identification - Certificate Holder's S/N of Part : <u>0865</u> Nat'l Bd. No. <u>N/A</u>
(a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg. Prepared by <u>D.L.Peterson</u>
(b) Description of Part Inspected: <u>Piston Tube Assembly</u>
(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (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: <u>01/19/94</u> Signed <u>GE-NEBG-NF &amp; CM-OA</u> (NPT Certificate Bolder ) Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization And. : <u>NPT N - 1151</u>
Certification of Design for Appurtenance
Design information on file at <u>GE Company, San Jose, California</u>
Stress analysis report on file at <u>GE Company, San Jose, California</u>
DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
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 <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>Stale of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>1/5</u> , <u>1994</u> , 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.
<u>1/20, 1994</u> <u>Junne PÉnere</u> <u>NC 1231, Ohio, WC 3686 PA</u> Date Inspector's Signature National Board, State, Province And No.
Date V Inspector's Signature Rational Board, State, Frovince And Ro.
*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".

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					F	ORM N-2	( back	)	-	•
Iter	ns 4-8 In	cl. to	be complete	ed for sing	le wall ve	ssels, jacke	ts vessels, or	shells of heat	exchangers.	•
4.	Shell:		] ] Gnd & Spec, No.			in. A	orrosion llowance	in. Dia fi	t in. Lengi	:h ft 1n.
5.	Sears:	Long			н.т.	<u></u>	R.T.	<u></u>	Efficiency	X
	(	Girth _			н.т.'		R.T.		No. of Cour	'ses
6.	Heads:	(a) Mate	erial			T.S	(b) M	laterial	T.S	· · · · · · · · · · · · · · · · · · ·
(a)		Ends )	Thickness		Radius	Elliptical Ratio			Flat Sic Diameter (c	le to Press. conv. or conc. )
(5)			olts used				Other faste	ning		
7.				(Materia)		Size Number)			Describe of altach skeich )	)
			_	{De	scribe as ogee a	nd weld, bar, elc. 1	i bar give dimensions,	# bolts, describe or skets Drop \ Charpy	h) Height Hapact	ft-1b
8.	Design p	ressure	2	1250	ps	i at	575	Fattem	p of	F
Ite	ns 9 and	10 to b	e completed	d for tube	sections					
9.	Tube She	ets: S	tationary.	Material	/Kind & Sn	Dia Dia	a	Thickness	in. Attach	ment
		F	loating.	Material		D14		Thickness	in. Attach	(Welded, Botted)
10.	Tubes:	Materia	י		0.D	in. Thic	ckness	_ inches or gage, N	umber	Type(Sr. or U)
′ Iter	ns 11 - 1	4 incl.	to be com	leted for	inner cham	bers of jacks	eted vessels.	or channels of h	eat exchangers.	(
<u>́п.</u>	Shell:		1 1 Gnd & Spec. No.				prrosion llowance	in. Dia ft	in. Lengt	h ft in.
12.	Seams:	Long			н.т		R.T.		Efficiency	X
	(	Girth _			н.т.'		R.T.		No. of Cour	ses
13.	Heads:	(a) Mate	erial			T.S	(b) M	aterial	T.S	
	Locat Top, bott		Thickness	Crown s Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	- · · ·	e to Press. onv. or conc. )
(8)	Channel If remov	able, b	olts used (	(a)	_ <u>(b)</u>	(c)	Othe	r fastening	(Describe of a	
								Drop W		
14	Region -		2					•	_	
	Design p					applicable.		F at tem		「
			tlets: Num					Locati		
	Nozzles:					3126	<u></u>	Loogt 1	Beinforcement	
14.		Outlet, Dr		lumber	Dia, or Siza	Туре	Material	Thickness	Material	How Attached
	•								· ······	
17	Inspecti	07 ¥22	holes. No	 `						<del></del>
47.	Openings	: Han	dholes, No	o		Size		Location		
••	<b>*</b>			D		51Z8				
10.	Supports	: 281	rt (Yes or N		(Number)		(Number)	ther(Describe)	Attached	(Where & How)

••

t - # Postweid 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 WOT NO 01044801 05 1. Kanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM) ais Supp 2117 Castle Hayne Road, Wilmington, North Carolina 28401 ( Name and Address of NPT Certificate Holder ) 1/1/03 (b) Manufactured for : WNP 2 Richland, Washington 99352 ( Name and Address of N Certificate Eolder for completed nuclear component ) 2. Identification - Certificate Holder's S/N of Part : \_0865\_ \_\_\_\_ Nat'l Bd. No. \_\_<u>N/A</u>\_\_\_\_ (a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg. Prepared by D.L. Peterson (c) Applicable ASME Code: Section III, Edition <u>1974</u>, Addenda Date <u>W75</u>, Case No. <u>1361-2</u> Class <u>1</u> 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 16689274P001 SA182 - TP316 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. 1 Reactor Vessel 3. Plug 159A1176P001 Thisble Code Nold SA182 - F304 P5017102 1/4" thick x 0.812" OD 2 4. Flange 919D610P001 (719E474) SA182 - F304 3.37" thick x 9 5/8" OD 5. Head 129B3539P005 3 SA182 - F304 7/8" thick x 2.875" dia. Code Nold P50YP102 6. Ring Flange 114B5122P002 SA182 - F304 1" thick x 5.0" OD x 1.75" ID 8 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. Code Neld P501P102 6 Rolled before weld 9. Nut 11485460P001 XM - 19 SA479 1.30° thick x 2.62° dia.



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

#### 1. Owner: Energy Northwest

**Address:** Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 **2.** *Plant:* Columbia Generating Station Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1 - See Notes 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	General Electric	6660	N/A	N/A	1975		Yes, Code Class 1
CT&F	General Electric	6660	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	General Electric	<b>A9</b> 270	N/A	N/A	1995	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6660. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

1) Disassembled Control Rod Drive (CRD) assembly for overhaul.

2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6660. Liquid penetrant (PT) examination results unacceptable.

3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9270.

4) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.

5) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.

6) Reassembled parts and materials for Control Rod Drive (CRD).

## NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9270.

2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6660 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9270 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

4) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9270. The Cylinder Tube And Flange (CT&F) Serial No A9270 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

				WOT No 01044
			KGY THWEST	
FO	RM NIS-2 OWNE	R'S REPORT FOI	REPAIRS C	DR REPLACEMENTS (Back)
ests Conducte	ed: Hydrostatic Test Pressure: P Component Des			perating Pressure None est Temperature: <sup>o</sup> F emperature: <sup>o</sup> F
<b>?emarks:</b> See at	tached N-2 Code Data	Report for the replaceme	ent Cylinder Tube	And Flange (CT&F) assembly Serial No A9270.
		CERTIFICATE	OF COMPLIA	ANCE
to the rules of Type Code Sy	t the ASME Code, a mbol Stamp: Not A Authorization No.:	Section XI. pplicable	's Report are	correct and this replacement conforms
Prepared By _	Kuldip Singh - Program	Rugh m Lead Engineer (PLE)	Signed By	Kuldip Singh - Program Lead Engineer (PLE)
Date	17/03			1/103
				······································
	CE	ERTIFICATE OF IN	ISERVICE IN	SPECTION
Vessel Inspec Johnston, Rhod period //// Owner has pe in accordance	tors and the State le Island have insp 2012 to 2 rformed examinate with the requiren	e of Washington and lected the compon- <u>1177</u> and tions and taken con- nents of the ASME	l employed by ents describe nd state to the rrective meas Code, Sectio	ational Board of Boiler and Pressure / Factory Mutual Insurance Company of ed in this Owner's Report during the best of my knowledge and belief, the sures described in this Owner's Repo on XI. er makes any warranty, expressed or
	erning the examina neither the Inspec	ations and correct tor nor his employ	ive measures /er shall be lia	described in this Owner's Report. able in any manner for any personal connected with this inspection.
injury or prop	nspector's Signature		Commissions	THSELD IN NS       National Board, State, and Endorsements

WOT NO. 01044801 31
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
۲۵/۲۵ ۱. Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GE NF &amp; CM</u>
<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> ( Name and Address of NPT Certificate Bolder )
(b) Manufactured for : <u>WNP 2</u> <u>Richland. Washington 99352</u> ( Name and Address of N Certificate Holder for completed nuclear component )
2. Identification - Certificate Holder's S/N of Part : <u>A9270</u> Nat'l Bd. No. <u>N/A</u>
(a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Dwg. Prepared by <u>D.L. Peterson</u>
(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>
(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (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 ASNE 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 <u>GE-NEBG-NF&amp;CM-QA</u> By ( MPT Certificate Holder ) CC QA_Representive )
Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPT N - 1151</u>
Certification of Design for Appurtenance
Design information on file at <u>GE Company. San Jose, California</u>
Stress analysis report on file at <u>GE Company, San Jose, California</u>
OC22A6253 Rev. 1 Design specification certified by <u>Blorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
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 <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>State of North Carolina</u> have 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.

P Even <u>6/27, 1995</u> Aura 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".

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t	ems 4-8 Incl. to be completed for	single wall ve	ssels, jacket	ts vessels, or	r shells of heat	exchangers.	•
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	Girth	н.т.'		R.T.		No. of	Courses
6.	Heads: (a) Material		T.S	(b) ¥	lateria]	T	.s
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(b	If removable, bolts used			Other faste	ning		
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	Jacket Closure:	(Describe as ogee ar	nd weld, bar, etc. If t	bar give dimensions,	# bolts, describe or skets Drop \ Charpy	n) /eight / Impact	ft-1b
8.	2 Design pressure1250	) ps1	i at	575	F at ten	mp of	°F
It	ems 9 and 10 to be completed for t	ube sections					
σ.	Tubes: Material	0.0	<b></b>		and the of galger, in	(Line)	
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t - If Postweid Heal-Treated,

2 - List other internal or external pressure with coincident temperature when applicable.

WOT NO. 0104801 31 FORM N-2 NPT CERTIFICATE NULDERS' DATA REPORT FOR NUCLEAR - ART AND APPURTENANCES As required by the Provision of the ASHE Code Rules, Section III, Div. I As required by the Provision of the ASHE Code Rules, Section III, Div. I
۱۱۱۵، ۱. Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing</u> (GENF & CM)
2117 Castle Havne Road, Wilmington, North Carolina 28401 (Name and Address of RFI Certificate Holder )
(b) Manufactured for : <u>WNP 2 Richland, Washington 99352</u>
( Name and Address of N Certificate Holder for completed nuclear component )
2. Identification - Certificate Holder's S/N of Part : <u>A9270</u> Nat'l Bd. No. <u>N/A</u>
(a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Dwg. Prepared by <u>D.L. Peterson</u>
(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>
(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W775</u> , Case No. <u>1361-2</u> Class <u>1</u>
3. RENARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (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. Reactor 1
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
SA 182 - F304 7/8" thick x 2.875" dia.
Code Weld P50YP102
6. Ring Flange 114B5122P002 SA182 - F304
1° thick x 5.0° OD x 1.75° ID 8
7. Cap Screw 117C4516P002 5
SA 193 - B6 6 ea. 1/2" dia. on 4 1/8" bolt circle 4
8. Plug 175A7961P001
SA182 - F304 0.38° thick x 1.307° dia. Code We Id
PSOYPIO2 6 7 Rolled before wold 8 7
9. Nut 114B5460P001 XM - 19 SA479 1.30° thick x 2.62° dia.



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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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	General Electric	7053	N/A	N/A	1975		Yes, Code Class 1
CT&F	General Electric	7053	N/A	N/A	1975	Replaced	Yes, Code Class
CT&F	General Electric	A9322	N/A	N/A	1993	Replacement	Yes, Code Class
Piston Tube	General Electric	5723	N/A	N/A	1975	Replaced	Yes, Code Class
Piston Tube	General Electric	0914	N/A	N/A	1995	Replacement	Yes, Code Class

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7053. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

1) Disassembled Control Rod Drive (CRD) assembly for overhaul.

2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 7053. Liquid

penetrant (PT) examination results unacceptable.

3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9322.

4) Performed visual examination on the existing Piston Tube assembly Serial No 5723. Visual examination results unacceptable (pitting).

5) Installed replacement Piston Tube assembly Serial No 0914.

6) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.

7) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.

8) Reassembled parts and materials for Control Rod Drive (CRD).

#### NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9322.

2) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No 0914.

3) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 7053 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

4) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9322 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

5) The existing Piston Tube assembly Serial No 5723 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

6) The replacement Piston Tube assembly Serial No 0914 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda

7) The entire Control Rod Drive (CRD) assembly is now identified by the replacement Cylinder Tube And Flange (CT&F) Serial No A9322.

WOT No 01044801 35
People · Vision · Solutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9. Remarks: See attached N-2 Code Data Reports for the following replacement parts:
Cylinder Tube And Flange (CT&F) assembly Serial No A9322. Piston Tube assembly Serial No 0914.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
Prepared By Juldib Sungy Signed By Guldip Sungy
Kuldip Singh - Program Lead Engineer (PLE)     Kuldip Singh - Program Lead Engineer (PLE)       Date     103     Date
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/</u>
Inspector's Signature Commissions 7486.10 NI nS National Board, State, and Endorsements
Date <u>2/1//05</u>
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. ( . (	WOT NO. 0104480135
FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUC As required by the Provision of the ASHE Code R	LEAR PART AND APPURTENANCES* ules, Section III, Div. I Aluant Eury
1. Nanufactured & Certified by : General Electric Company Nuclear Fuel &	Components Manufacturing (GENET (M)
2117 Castle Havne Road, Wilmington, N	
( Name and Address of NPT Certific	
(b) Manufactured for : <u>WNP 2</u> <u>Richland. Washington 99352</u> ( Name and Address of N Certificate Holder for	r completed nuclear component )
2. Identification - Certificate Holder's S/N of Part :	Nat'i Bd. No. <u>N/A</u>
(a) Constructed According to Drawing No: <u>919D258G003 Rev 17</u> Dwg.	Prepared by <u>D.L. Peterson</u>
(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>	
(c) Applicable ASME Code: Section III , Edition <u>1974</u> , Addenda Date	<u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1</u> ( Brief description of service for which component was	
	Sheet 1 of 2
Report are not the responsibility of the NPT Certificate Holder for parts. is responsible for furnishing a separate Design Specification and Stress R	An API Certification holder for appurtenances
	and his
Date: 01/28/93 Signed <u>GE-NEBG-NF&amp;CM-QA</u> (NPT Certificate Holder )	y SC Qr Representive )
Date: 01/28/93	y SC Qr Representive )
Date: 01/28/93 Signed <u>GE-NEBG-NF &amp; CM-QA</u> ( NFT Certificate Rolder )	y SC Q4 Representive ) Ration No. : <u>NPTN-1151</u>
Date: <u>01/28/93</u> Signed <u>GE-NEBG-NF &amp; CM-QA</u> ( MPT Certificate Holder ) Certificate of Authorization Expires: <u>6/16/93</u> Certification of Authorization	y SC Q4 Representive ) Ration No. : <u>NPTN-1151</u> purtenance
Date: 01/28/93 Signed <u>GE-NEBG-NF&amp;CM-QA</u> ( MPT Certificate Rolder ) Certificate of Authorization Expires: <u>6/16/93</u> Certification of Authorization Certification of Design for Ap	y SC Q4 Kepresentive ) Tation No. : <u>NPTN-1151</u> purtenance
Date: 01/28/93	y SC Q4 Representive ) Ration No. : <u>NPTN-1151</u> purtenance
Date: 01/28/93 Signed <u>GE-NEBG-NF &amp; CM-QA</u> (NPT Certificate Rolder) Certificate of Authorization Expires: <u>6/16/93</u> Certification of Authorization of Authorization of Design for Ap Design information on file at <u>GE Company, San Jose, California</u> Stress analysis report on file at <u>GE Company, San Jose, California</u> DC22A6253 Rev. 1	y SC Q4 Representive ) Ration No. : <u>NPTN-1151</u> purtenance R R Reg. No. <u>15570</u>
Date: 01/28/93 Signed <u>GE-NEBG-NF &amp; CM-QA</u> (MPT Certificate Rolder) Certificate of Authorization Expires: <u>6/16/93</u> Certification of Authorization of Authorization of Design for Ap Design information on file at <u>GE Company, San Jose, California</u> Stress analysis report on file at <u>GE Company, San Jose, California</u> DC22A6253 Rev. 1 Design specification certified by <u>Biorn Haaberg</u> Prof. Eng. State <u>G</u> DC22A6254 Rev 1	y SC Q4 Representive ) Ration No. : <u>NPTN-1151</u> purtenance R R Reg. No. <u>15570</u>
Date: 01/28/93 Signed <u>GE-NEBG-NF &amp; CM-QA</u> (MPT Certificate Rolder) Certificate of Authorization Expires: <u>6/16/93</u> Certification of Authorization Design information on file at <u>GE Company</u> . San Jose, California Stress analysis report on file at <u>GE Company</u> . San Jose, California DC22A6253 Rev. 1 Design specification certified by <u>Biorn Haaberg</u> Prof. Eng. State <u>G</u> DC22A6254 Rev 1	y <u>SC Q4 Representive</u> ) Tation No. : <u>NPTN - 1151</u> purtenance a <u>2alif.</u> Reg. No. <u>15570</u> <u>Calif.</u> Reg. No. <u>M018545</u>

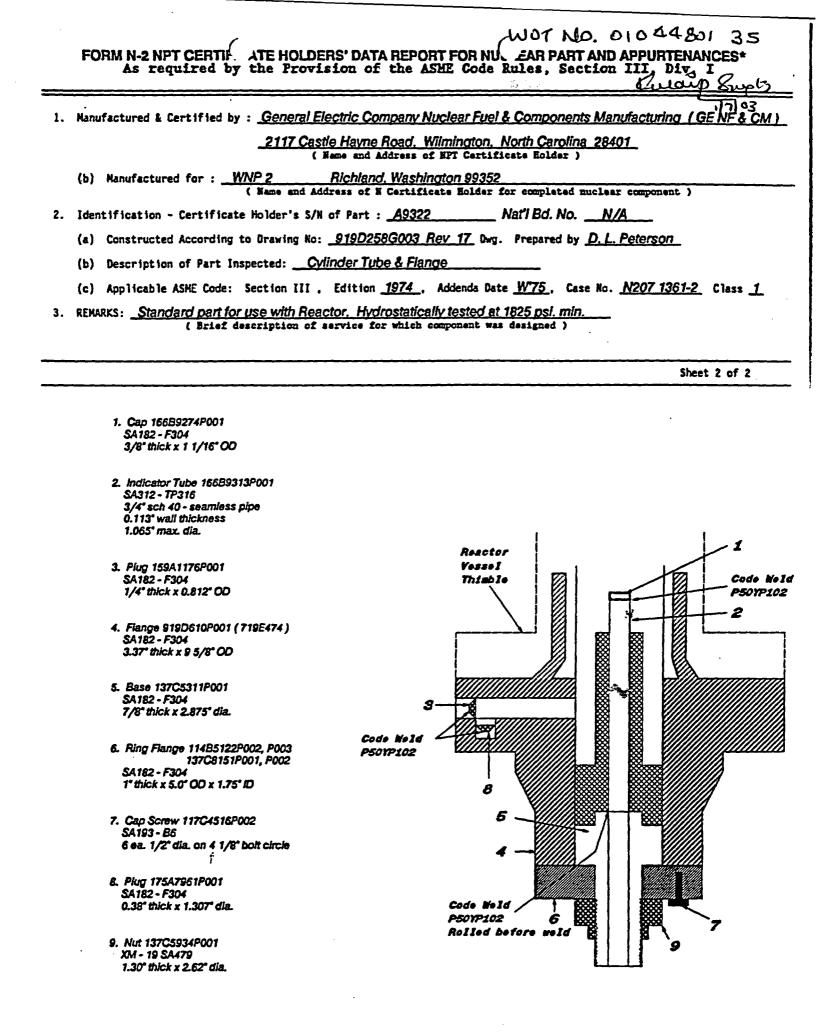
 1/28
 1993
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 NC 1231. Ohio. WC 3686 PA

 Date
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 Inspector's Signature
 Bational 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". 

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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 Aurop Aurop 1003 1. Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GENF &amp; CM)</u> <u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> (Bame and Address of NPT Certificate Eolder) (b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Eolder for completed nuclear component) 2. Identification - Certificate Holder's S/N of Part : <u>0914</u> Nat'l Bd. No. <u>N/A</u> (a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg. Prepared by <u>D. L. Peterson</u>
<ol> <li>Manufactured &amp; Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GENF &amp; CM)</u> <u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> ( Hame and Address of NFT Certificate Eolder )</li> <li>(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> ( Name and Address of N Certificate Eolder for completed nuclear component )</li> <li>Identification - Certificate Holder's S/N of Part : <u>0914</u> <u>Nat'l Bd. No. N/A</u></li> </ol>
( Hame and Address of NFT Certificate Holder ) (b) Nanufactured for : <u>WNP 2</u> <u>Richland. Washington 99352</u> ( Name and Address of N Certificate Holder for completed nuclear component ) 2. Identification - Certificate Holder's S/N of Part : <u>0914</u> <u>Nat'l Bd. No. <u>N/A</u></u>
( Name and Address of N Certificate Holder for completed nuclear component ) 2. Identification - Certificate Holder's S/N of Part : <u>0914</u> Nat'l Bd. No. <u>N/A</u>
(a) Constructed Asserting to Desving No. 708D228G012 Roy 36 Day Brenzred by D / Potorson
(a) constructed according to brawing no. <u>Trobberoover nor by</u> bwg. Trepared by <u>p. p. received</u>
(b) Description of Part Inspected: <u>Piston Tube Assembly</u>
(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (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: <u>06/27/95</u> Signed <u>GE-NEBG-NF &amp; CM-QA</u> By
( MFT Certificate Holder ) ( GC QA Representive )
Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPTN-1151</u>
Certification of Design for Appurtenance
Design information on file at GE Company, San Jose, California
Stress analysis report on file at <u>GE Company. San Jose. California</u>
DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshlo</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018645</u>
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 <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have

inspected the part of a pressure vessel described in this Partial Data Report on <u>7/13</u>, <u>7/99</u>, 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

6/27.1995Jume P EnumNC 1231. Ohio. WC 3686 PADateVInspector's SignatureNational Board, State, Province And No.

connected with this inspection.

\*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".

					I	form N-2	( back	>		
Ite	ms 4-8 1	Incl. to	be complete	d for sin	gle wall ve	assels, jacket	s vessels, or	r shells of heat	exchangers.	
4.	Shell:		a ] 1 Kind & Spec. No.			Co s in. A1	lowance	in. Dia f	t in. Leng	th ft in.
5.	Seams:	Long			н.т		R.T.		Efficiency	x
					1					rses
6.	Heads :	-								
	Locatio Bottom,	on ( Top , Ends )		Crown		Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Si	de to Press. conv. or conc. )
(b)			bolts used	· · · · · · · · · · · · · · · · · · ·			Other fasts	ening		
-			-	(Materia	I, Spec. No., T.S	Size Number)	Ariidi 189rc	(	Describe or attach sketch	)
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									/eight / Impact	ft-lb
8.	Design	pressuri	2	1250	ps	i at	575	F attem	mp of	9 F
Ite	ms 9 and	1 10 to 1	a completed	for tube	sections					
9.	Tube St	neets: !	Stationary.	Material		Dia	•	Thickness	in. Attacl	ment
					( )Gnd & Sc	Sec. No. 1	/ Subject to press	um )		(Weided, Solted)
10.	Tubes:								umber	
Ite	ms 11 -	14 incl.	to be comp	lated for	inner cham	bers of jacke	ted vessels.	or channels of h	eat exchangers.	
11.	Shell:	Materia (	a1T Kind & Spec. No.	.S) (Min. of Rang	Nominal Thickness • Specified)	Con in. A1	rrosion lowance	in. Dia ft	in. Lengt	:h ft in.
12.	Seams:	Long _			н.т.'		R.T.		Efficiency	x
		Girth _			н.т		R.T.		No. of Cour	'ses
13.	Heads:									
(a)	Loca Top, bot	tion tom, ends	Thickness	Crown	Knuck le Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Sid	le to Press. conv. or conc. )
(b)	Channel If remo	vable, b	olts used (	a)	<u>(b)</u>	(c)	Other	r fastening		
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10.	1022163	Outlet, D		umber	Dis. or Size	Туре	Material	Thickness	Reinforcement Material	How Atlached
17.	Inspect Opening	s: Han	dholes, No	•		Size		LOCATION		
18.	Support	s: Ski	rt (Yes or No		(Number)	Legs		ther(Describe)	Attached	

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1 - If Postweid Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

•	WOT NO. 01044801 35 FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR FART AND APPURTENANCES* As required by the Provision of the ASHE Gode Rules, Section III, Dir. I Guidup Supp
1.	Nanufactured & 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 : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Eolder for completed nuclear component )
2.	Identification - Certificate Holder's S/N of Part : <u>0914</u>
	(a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg. Prepared by <u>D.L.Peterson</u>
	(b) Description of Part Inspected: <u>Piston Tube Assembly</u>
	(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>1361-2</u> Class <u>1</u>
3.	REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (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.
	Code NeId P50YP102 6. Ring Flange 114B5122P002
	SA182 - F304 1° thick x 5.0° OD x 1.75° ID 8
	7. Cap Screw 117C4516P002 5 SA193 - B6 6 ea. 1/2" dia. on 4 1/8" bolt circle 4
	8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dia. Code Ne Id P50YP102 6
	9. Nut 11485460P001 XM - 19 SA479 1.30° thick x 2.62° dia.



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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station

Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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 CT&F CT&F	General Electric General Electric General Electric	6706 6706 A8974	N/A N/A N/A	N/A N/A N/A	1975 1975 1993	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6706. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6706. Liquid
- penetrant (PT) examination results unacceptable.
- 3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A8974.
- 4) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.
- 5) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.
- 6) Reassembled parts and materials for Control Rod Drive (CRD).

#### NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A8974.

2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6706 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A8974 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

4) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A8974. The Cylinder Tube And Flange (CT&F) Serial No A8974 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

WOT No 01044801 36
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9. Remarks: See attached N-2 Code Data Report for the replacement Cylinder Tube And Flange (CT&F) assembly Serial No A8974.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
Prepared By Guide Signed By Guide Signed By Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 1/7/03 Date 1/7/03
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $\frac{11/20/02}{02}$ to $\frac{2/2/02}{02}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 74/8/6/8/ N/T m/ National Board, State, and Endorsements
Date <u>2/21/03</u>

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WOT Not O 104 4 Bol 36 FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTEMANCESS As required by the Provision of the ASNE Gode Bules, Section III, Div, T. <i>Ustation</i> , Some J. <i>Ustation</i> , Some J. <i>Ustation</i> , Some J. <i>Ustation</i> , <i>Some J.</i> <i>Exercise</i> , <i>Some J.</i> <i>Exerci</i>	FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTEN As required by the Provision of the ASME Code Rules, Section_III, Div.	
FORM M-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPUITEMANCES' As required by the Provision of the ASKE Code Rules, Section III, Div. (1) Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GR MF &amp; CM)</u> 2117 Castle Hayne Roed. Wilmington, North Caroling 28401 (Base and Address of Brit Cattificates Bolder 2 (Base and Address of Brit Cattificate Bolder 2 (Base and Address of Bret : <u>ABS74</u> (a) Constructed According to Draving Mc: <u>B1902586703 Rev IT</u> Deg. Prepared by D.L. Peterson. (b) Bearingtion of Part Inspected: <u>Orlinder Tube &amp; Flance</u> (c) Applicable ASHE Code: Section III. Edition <u>1974</u> . Addenda Date <u>WTE</u> , Case No. <u>M207 1361-2</u> Class <u>1</u> FEMARS: <u>Standard part for use with Reactor. <u>Hydrostatically tested at 1825 post. min.</u> ( Brisef description of the ASHE Code Section III. ( The applicable Designed Specification and Stress Report as not the responsibility of the NT Card Stress Report I : the component being specification and Stress Report I : Cattification Address Report 3. Signed <u>GE-NEEDG-NF &amp; CM -OA</u> By <u>MC Categoreannes</u> is not included in the component Being Specification and Stress Report 3. Cartification Capiters: <u>6/15/93</u> Cartification of Author Maxifor No. <u>NPTN - 1151</u> Cartification of Design for Appurtenance Design information certified by <u>Eloward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u> Stress analysis report on file at <u>GE Company</u>. San Jose, <u>California</u> <u>1</u> Stress analysis report certified by <u>Eloward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u> 1, the undersigned, holding a valid comission by the Ristional Baard of Boiler and Pressure Inspectors and/or the State or Provis of Moling A valid </u>	FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTEN As required by the Provision of the ASME Code Rules, Section_III, Div.	
Visited Scription       Visited Scription         Namufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GE NF &amp; CM)</u> 2117 Castle Hayne Road, Wilmington, North Caroling 28401         (b) Namufactured for : <u>WNP 2</u> <u>Richland, Washington 89352</u> (c) Base and Address of B Cartification Bolder & Companent )         (d) Constructed According to Draving Nic. <u>2192258(2003 Rev II</u> , Deg. Prepared by <u>D.L. Peterson</u> (e) Constructed According to Draving Nic. <u>2192258(2003 Rev II</u> , Deg. Prepared by <u>D.L. Peterson</u> (e) Constructed According to Braving Nic. <u>2192258(2003 Rev II</u> , Deg. Prepared by <u>D.L. Peterson</u> (e) Description of Part Inspected: <u>Ovinder Tubo &amp; Flange</u> (c) Applicable ASHE Code: Section III. Edition <u>1974</u> . Addends Bate <u>WTE</u> . Case No. <u>NZOI 1361-2</u> . Class 1         REMARKS: <u>Standard part for uses with Reactor. Hydrostatically tested at 1925 pol. min.</u> (Bited description of services for which component was designed )         Sheet 1 of Z         Ve 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 ANE Code Section III. (The applicable Bayed Specification and Stress Report 1.         Date: <u>01/28/33</u> Signed <u>GE - NEBG - NF CM - OA</u> By <u>Materian Stress Report 1.</u> Date: <u>01/28/33</u> Signed <u>GE - NEBG - NF CM - OA</u> By <u>Materian Stress Report 1.</u> Date: <u>01/28/35</u> Signed <u>GE - NEBG - NF S CM - OA</u>	As required by the Provision of the ASME Code Rules, Section III, Div.	
Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GE NF &amp; CM)</u> 2117 Castle Haves Food, Wilmington, North Caroling 28401 (Rees and Address of RT Cartificate Roldar)         (b) Manufactured for : <u>WNP 2</u> <u>Richland Washington 99352</u> (b) Manufactured for : <u>WNP 2</u> <u>Richland Washington 99352</u> (c) Constructed According to Dearing No: <u>SIPD2586003 Rev 17</u> Dag. Prepared by D.L. Peterson.         (c) Applicable ASNE Code: Section III. Edition <u>1974</u> . Addenda Date <u>W755</u> , Case No. <u>NZ07 1361-2</u> Class 1.         (c) Applicable ASNE Code: Section III. Edition <u>1974</u> . Addenda Date <u>W755</u> , Case No. <u>NZ07 1361-2</u> Class 1.         (c) Applicable ASNE Code: Section III. Edition <u>1974</u> . Addenda Date <u>W755</u> , Case No. <u>NZ07 1361-2</u> Class 1.         (c) Applicable ASNE Code: Section III. Edition <u>1974</u> . Addenda Date <u>W755</u> , Case No. <u>NZ07 1361-2</u> Class 1.         (c) Applicable ASNE Code: Section III. Edition <u>1974</u> . Addenda Date <u>W755</u> , Case No. <u>NZ07 1361-2</u> Class 1.         (c) Applicable ASNE Code: Section III. Edition and Stress Report if the appurtance is not included in the code conforms to the rules of construction of the ASNE Code Section III. (Deepplicable Designed Specification and Stress Report 1).         Sheet 1 of 2         We eartify that the statements in this report are correct and this vessel part of appurtance is not included in the code conforms to the rules of construction of Stress Report 1.       Street and Stress Report 1).         Date: <u>01/28/93</u> Signed <u>GE-NFEGC-NF &amp; CM -OA</u> By <u>Conformina</u> Street analysis report on file at <u>GE Compa</u>		,I
Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GE NF &amp; CM)</u> 2117 Castle Harm Road, Willmington, North Carolina 22401. ( Base and Address of BT Castlifeste Bulder 1)         (b) Nanufactured for : <u>WNP 2</u> Richland, Washington 99352 ( Base and Address of BT Castlifeste Bulder for completed muclear component )         Identification - Cartificate Bulder's SN of Part : <u>ASP4</u> Naff Bd. No. <u>N/A</u> (a) Constructed According to Draving No: <u>919025850003 Rev 17</u> Deg. Prepared by <u>D. L. Peterson</u> (b) bescription of Part Impected: <u>CMINder Tube &amp; Flance</u> (c) Applicable ASHE Code: Section III., Edition <u>1914</u> . Addends Date <u>WTE</u> . Case No. <u>N207 1361-2</u> Class 1         REMARKS: <u>Standard part for USD with Reactor. Hydrostatically tested at 1825 Col. min.</u> ( Brief description of service for which economent was designed )         Ve certify that the statements in this report are correct and this wessel part or appurtenance as defined in the code conforms to the rules of construction of the ANE Code Section 111. ( The applicable Designed Specification and Stress Report ).         Date: <u>01/28/93</u> Signed <u>GE-NEEG NF &amp; CM-OA</u> By <u>CC UNPOPUTENANCE is at included in the code conforms to the rules of construction of Design for Appurtenance         Design information on file at <u>GE Company</u>, <u>San Jose</u>, California       <u>YEC Currentance</u>         Date: <u>01/28/93</u>       Signed <u>GE-NEEG NF &amp; CM-OA</u> By <u>CC UNPOPUTENANCE</u>         Design information on file at <u>GE Company</u>, <u>San Jose</u>, California       <u>YEC DESECO</u>         Design information on file at <u>GE</u></u>		
( Here and Address of BT Cartificate Bolder ) (b) Namufactured for : <u>WWP 2</u> <u>Richland, Washington 99352</u> (b) Mamufactured for : <u>WWP 2</u> <u>Richland, Washington 99352</u> (c) Namufactured According to Drawing No: <u>919D2506003 Rov 17</u> Deg. Prepared by <u>D. L. Peterson</u> (e) Description of Part Inspected: <u>Collader Tube &amp; Flange</u> (c) Applicable ASK Code: Section III. Edition <u>1974</u> . Addends Date <u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u> REMARKS: <u>Standard part for use with Rescior. Hydrostatiogily tosted at 1625 poi.min</u> ( b) Description of part in sector. <u>Hydrostatiogily tosted at 1625 poi.min</u> ( b) Exerciption of the sector in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASK Code Section III. ( The applicable Designed Specification and Stress Report are not the regonstillity of the MT Certificate Holder for papurtenance is not included in the component besign Specification and Stress Report if the appurtenance is not included in the component Design Specification Expires: <u>6/16/93</u> Certification for Appurtenances Design information on file at <u>GE Company</u> . <u>San Jose</u> . California <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u>		
(b) Namufactured for : <u>WNP 2</u> <u>Richland. Washington 99352</u> (Name and Address of # Certificate Enider for completed nuclear component) Identification - Certificate Holder's S/H of Part : <u>A8974</u> <u>Nat'Bd. No. <u>N/A</u> (a) Constructed According to Drawing No: <u>919025860003 Rey 17</u> Deg. Prepared by <u>D. L. Peterson</u> (b) Description of Part Inspected: <u>Odinder Tube &amp; Flance</u> (c) Applicable ASHE Code: Section III. Edition <u>1974</u>. Addenda Date <u>W755</u>. Case No. <u>N207 1361-2</u>. Class <u>1</u> REMARS: <u>Standard part for uses with Reactor. Hydrostatioofly tested at 1825 Spt. min. ( Brief description of service for which component was designed ) Sheet 1 of 2 Ve 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 ASHE Code Section III. ( The applicable Designed Spc)rification and Stress Report are not the regular Different Relation of Stress Report II the appurtenance is not included in the component Design Spc Different Stress Report III. ( The applicable Designed Spc)rification and Stress Report are not the responsibility of the MT Certificate Rolder for papurtenance is not included in the component Design Spc Different Stress Report III. ( The applicable Designed Spc)rification and Stress Report are not the responsibility of the MSHE Code Section III. ( The applicable Designed Spc)rification and Stress Report are not the responsibility of the MSHE Code Section III. ( Desc) MSC MASHE Code Section IIII. ( Desc) MSC MASHE Code Section III. ( Desc) MSC MASHE Code Se</u></u>	2117 Castle Havne Road, Wilmington, North Carolina 28401	
( Here and Address of H Cartificate Holder's SN of Part : <u>A8974</u> NatiBd. No. <u>NA</u> (a) Constructed According to Drawing No: <u>B10258G003 Ray 17</u> Dwg. Prepared by <u>D.L.Peterson</u> (b) Description of Part Inspected: <u>Odinder Tube &amp; Flange</u> (c) Applicable ASNE Code: Section III. Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u> REMARKS: <u>Standard part for uses with Reactor, Hydroxatically tested at 1625 pol. min.</u> (2) Excertify that the statements in this report are correct and this wessel part or appurtenance as defined in the code conforms to the rules of construction of the ASNE Code Section III. ( The applicable Designed Specification and Stress Report are not the rules of construction of the ASNE Code Section III. ( The applicable Designed Specification and Stress Report are not the rules of construction of the ASNE Code Section III. ( The applicable Designed Specification and Stress Report are not the rules of construction of the ASNE Code Section III. ( The applicable Designed Specification and Stress Report are not the rules of construction of the ASNE Code Section III. ( The applicable Designed Specification and Stress Report are not the rules of construction of the ASNE Code Section III. ( The applicable Designed Specification included in the component Design Specification and Stress Report 1 the appurtenance is not included in the component Design Specification and Stress Report 1. Date: <u>01/28/93</u> Signed <u>GE - NEBG-NF &amp; CM - OA</u> By <u>Certification Expires: <u>6/16/83</u> Certification of Authoritation No. <u>NPTN-1151</u> <u>Certification of Design for Appurtenance</u> Design specification certified by <u>Biom Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>10570</u> <u>DC2A62358 Rev 1</u> Stress analysis report certified by <u>Biom Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u> <u>North Carofing</u> and employed by <u>Department of Alseport on</u> <u>State Of Morth Carofing</u> have Stress or Province of <u>MORTH Carofing</u> and employed by <u>Department of Baber</u> and Pressure Inspectors and/or the Stress an</u>	( Name and Address of NPT Certificate Holder )	
Identification - Certificate Holder's S/N of Part : <u>AS974</u> <u>Nat'IBd.No. <u>N/A</u> (a) Constructed According to Braving No: <u>919D258G003 Rev 17</u> Dog. Prepared by <u>D.L.Peterson</u> (b) Bescription of Part Inspected: <u>Ovlinder Tube &amp; Flange</u> (c) Applicable ASNE Code: Section III. Edition <u>1974</u>. Addenda Date <u>W75</u>. Case No. <u>N207 1361-2</u> Class <u>1</u> REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi.min</u> (2) Exist description of service for which compound was designed ) Sheet 1 of 2 Ve 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 ASNE Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the M7 Certificate Holder for parts. An RPT Certification Mider for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification of Design for Appurtenance Dettification of Puesign for Appurtenance Design information on file at <u>GE Company. San Jose</u>. Cellfornia Stress analysis report on file at <u>GE Company. San Jose</u>. Cellfornia Stress analysis report certified by <u>Blom Haabern</u> Prof. Eng. State <u>Califf</u>. Reg. No. <u>15570</u> DC22A5254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Califf</u>. Reg. No. <u>M018646</u> Interstification of Shop Inspection I, the undersigned, holding a valid commission by the Rational Board of Boiler and Pressure Inspectors and/or the State of North Caroling. And envire the Inspection I, the undersigned, holding a valid commission by the Rational Board of Boiler and Pressure Inspectors and/or the State of North Caroling. And envire the Inspection III. By signing this certificate, mether the Inspector. Firther Moler has constructed this part in accordance with the ASK Code Section III. By signing this certificate, mether the Inspector, Firthermore, entither the Inspector</u>	(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Hame and Address of H Certificate Holder for completed nuclear component.)	
<ul> <li>(a) Constructed According to Drawing No: <u>919D256G003 Rev 17</u> bvg. Prepared by <u>D.L.Peterson</u>.</li> <li>(b) Description of Part Inspected: <u>Ovlinder Tube &amp; Flange</u>.</li> <li>(c) Applicable ASNE Code: Section III. Edition <u>1974</u>. Addenda Date <u>W75</u>. Case No. <u>N207 1361-2</u> Class <u>1</u> REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi.min.</u> ( brist description of service for which component was designed )</li> <li>Sheet 1 of 2</li> <li>Ve 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 ASNE Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NT Certificate Holder for parts. An MRT Certification Holder for appurtenance is not included in the code conforms to the responsibility of the NT Certificate Holder for parts. An MRT Certification Holder for appurtenance is not included in the code is separate Design Specification and Stress Report if the appurtenance is not included in the component Besign Specification Stress Report }.</li> <li>Date: <u>01/28/93</u></li></ul>		
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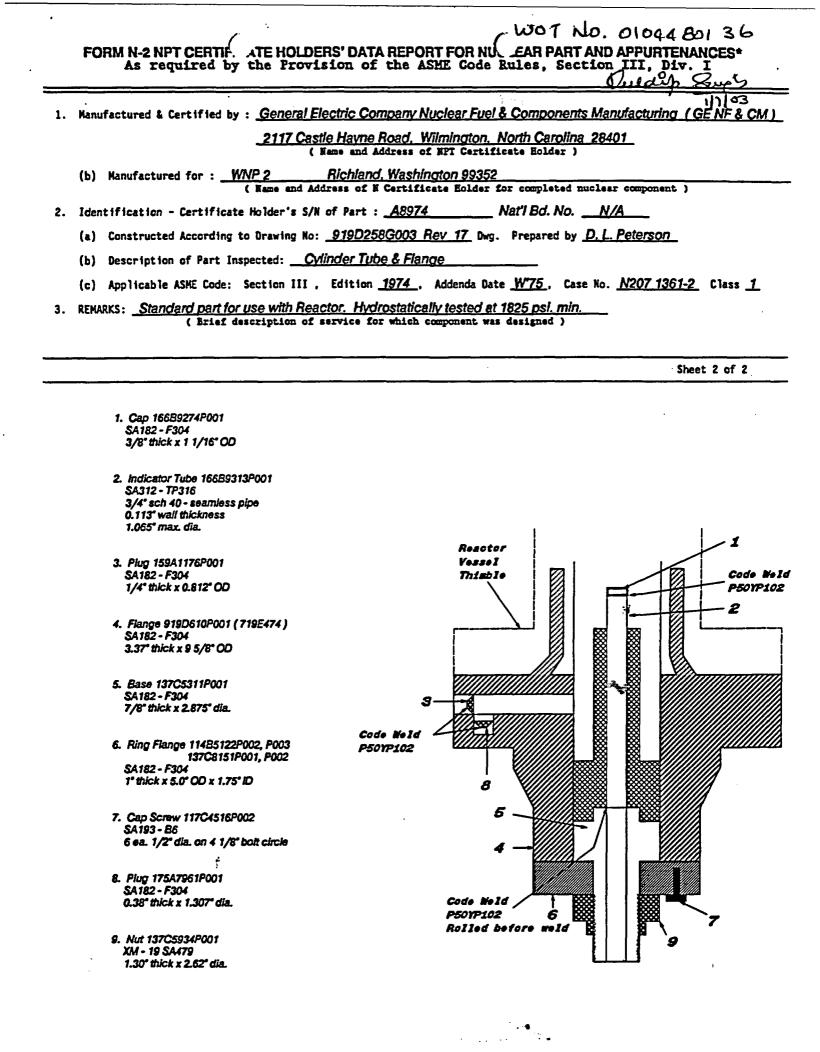
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6.	Heads:	(a) Materia	n]			T.S	(b) H	aterial	T.S	•	
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(5)	If remo	wable, bolt	used				Other faste	ning(C	· · · · · · · · · · · · · · · · · · ·		
7.		Closure:		( Material	, Spec. No., T.S	. Size Number)				Ach }	
				(De	ecribe as ogee a	nd weld, bar, etc. ¥	ber give dimensions,	¥bolta, describe or shutc Drop ¥ Charpy	einht	r	t-16
8.	Design	pressure _	<u></u>	1250	ps	i at	575	_ F at tem	p of		F ;
Ite	ms 9 and	10 to be co	mplated i	for tube	sections						
9.	Tube Sh	eets: Stati	ionary. )	laterial .		Dia	•	Thickness	in. Att	achment	+
		Float	ing. )	laterial .	( Kind & Sj		(Subject to pressu	Thickness Thickness	<u> </u>	(Welde	d, Boited )
10.	Tubes:	Material	<u></u>		0.D	in. Thic	kness	_ inches or gage. N	mber		zarU)
Ite	ms 11 -	14 incl. to	be comple	ted for	inner cham	bers of jacke	ted vessels, a	or channels of h	eat exchanger:	 B.	
11.	Shell:		T.S Spec. No. ) (			Co 1n. A1	rrosion lowance	in. Dia ft	in. Le	ngth ft.	in.
12.	Seams:	Long				····-	R.T		_ Efficient	су	×
		6irth			н.т.'		R.T.		_ No, of Co	ourses	
13.	Heads:	(a) Materia	1			T.S	(b) Ma	sterial	T.S.	•	
		tom, ends	ickness			Elliptical Ratio	Apex Angle	Hemispherical Radius	Flat !	Side to Press. ( conv. or cond	
(0)	Channel If remo	vable, bolts	used (a)		_(b)	(c)	Other	fastening	· · · · · · · · · · · · · · · · · · ·		
								Drop We Charpy	(Describe sight Impact	or attach statch)	<u>t-15</u>
14.	Design	pressure				psi at		8	o of	8	5
_		to be comp?					· · · · · · · · · · · · · · · · · · ·	<u></u>		<u></u>	
15.	Safety	Valve Outlet	s: Numbe	r		Size		Locatio	nn		
		: Purpose (inist, Outiel, Drain)	Num	ber	Dia. or Size	Туре	Minderial	Thicinese	Reinforcemer Material		
17.	Inspect Opening:	ionr Manhole s: Handhol Threade	s, No. es, No.			Size	L				
18.	Support	s: Skirt_	(Yes or No)	Lugs	(Number)	Legs(	()t Number)	(Describe)	Attache	d(Where & How	<b></b> -

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1 - If Postweid Heal-Treated. 2 - List other internal or external pressure with coincident temperature when applicable.





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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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	General Electric	6503	N/A	N/A	1975		Yes, Code Class 1
CT&F	General Electric	6503	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	General Electric	A9343	N/A	N/A	1993	Replacement	Yes, Code Class
Piston Tube	General Electric	5429	N/A	N/A	1975	Replaced	Yes, Code Class 1
Piston Tube	General Electric	0843	N/A	N/A	1994	Replacement	Yes, Code Class

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6503. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6503. Liquid

penetrant (PT) examination results unacceptable.

3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9343.

4) Performed visual examination on the existing Piston Tube assembly Serial No 5429. Visual examination results unacceptable (pitting).

5) Installed replacement Piston Tube assembly Serial No 0843.

6) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.

7) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.

8) Reassembled parts and materials for Control Rod Drive (CRD).

#### NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9343.

2) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No 0843.

3) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 6503 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

4) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9343 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

5) The existing Piston Tube assembly Serial No 5429 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

6) The replacement Piston Tube assembly Serial No 0843 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda

7) The entire Control Rod Drive (CRD) assembly is now identified by the replacement Cylinder Tube And Flange (CT&F) Serial No A9343.

ENERGY Property Vision Boluvision FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back) Test Pressure 'big Test Pressure' big Test Pressure 'big Test Pressure' big Test Pressur				
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure: Interpretation: Test Temperature: F       None X         Test Pressure: Psig       Test Temperature: F         Remarks: See attached N-2 Code Data Reports for the following replacement parts:         Winder Tube And Flange (CT&F) assembly Serial No A9343.         Iston Tube assembly Serial No 0843.         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Prepared By		EN E People	NERGY ORTHWEST	WOT No 0104480
Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F         Remarks: See attached N-2 Code Data Reports for the following replacement parts:       Image: CT&F) assembly Serial No A9343.         ston Tube And Flange (CT&F) assembly Serial No A9343.       Image: CT&F) assembly Serial No 0843.         CERTIFICATE OF COMPLIANCE       Vecerify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable       Expiration No: Not Applicable         Certificate of A uthorization No: Not Applicable       Signed By         Muldip Singh - Program Lead Engineer (PLE)       Kudip Singh - Program Lead Engineer (PLE)         Date       Ipl 0 3         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Islang have inspected the components described in this Owner's Report during the period         Johnston, Rhode Islang have inspected the components described in this Owner's Report fin accordance with the requirements of the ASIE Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his e	FORM	VIS-2 OWNER'S REPORT	FOR REPAIRS	OR REPLACEMENTS (Back)
Interpretation of the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island, have inspected the components described in this Owner's Report and employed by Factory Mutual Insurance Company of Johnston, Rhode Island, have inspected the components described in this Owner's Report and employed by Factory Mutual Insurance Company of Johnston, Rhode Island, have inspected the components described in this Owner's Report during the period in the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island, have inspected the components described in this Owner's Report during the period in this of the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island, have inspected the components described in this Owner's Report for in accordance with the requirements of the ASME Code, Section XI.         By signing the examinations and corrective measures described in this Owner's Report. Functional function is a state to the best of my knowledge and belief, the Owner is Report. Function is accordance with the requirements of the ASME Code, Section XI.         By signing the scattificate neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	Tes	t Pressure: Psig	<i>T</i> (	est Temperature: ° 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         Explicit Of Authorization No.: Not Applicable         Date       United Singh - Program Lead Engineer (PLE)	Remarks: See attached	N-2 Code Data Reports for the follo	owing replacement par	arts:
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Linch         Kuldip Singh - Program Lead Engineer (PLE)         Date       Int 0.3         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period Int 20112 to 201111 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. <td></td> <td></td> <td></td> <td></td>				
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       User Super Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Up 03         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period         priod	r			
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Expiration Date: Not Applicable Prepared By		CERTIFICA	TE OF COMPLI	IANCE
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>1112112</u> to <u>212113</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	to the rules of the A Type Code Symbol Certificate Of Autho Expiration Date: Not Prepared By Kuldip	ASME Code, Section XI. Stamp: Not Applicable orization No.: Not Applicable Applicable	Signed By	
Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>11/22122</u> to <u>22/21/22</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	I the undersigned			
	Vessel Inspectors a Johnston, Rhode Islar period <u>///2////</u> Owner has perform in accordance with By signing this cert implied, concerning Furthermore, neither	and the State of Washington nd have inspected the com 2 to 2/2/25 the examinations and taken the requirements of the As tificate neither the inspector g the examinations and cor- er the inspector nor his em	and employed b ponents describ and state to the corrective meas SME Code, Section of his employ rective measures ployer shall be li	by Factory Mutual Insurance Company of the d in this Owner's Report during the the best of my knowledge and belief, the sures described in this Owner's Report fon XI. Yer makes any warranty, expressed or the described in this Owner's Report. iable in any manner for any personal
Date		r's Signature	Commissions	
	Date <u> </u>			

e) .	
	( WOT NO. 01044801 40
FC	DRM 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. Manu	factured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GENF &amp; CM)</u>
	2117 Castle Havne Road, Wilmington, North Carolina 28401 ( Name and Address of NPT Certificate Holder )
(b)	Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> ( Hame and Address of M Certificate Holder for completed muclear component )
2. Iden	tification - Certificate Holder's S/N of Part : <u>A9343</u> Nat'l Bd. No. <u>N/A</u>
(a)	Constructed According to Drawing No: <u>919D258G003 Rev 17</u> Dwg. Prepared by <u>D.L. Peterson</u>
(b)	Description of Part Inspected:
(c)	Applicable ASHE Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u>
3. REMAI	aks: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psl. min.</u> (Brief description of service for which component was designed )
	• •
	Sheet 1 of 2
confor Report is res the co Date:	The statements in this report are correct and this vessel part or appurtenance as defined in the code must to the rules of construction of the ASHE Code Section III. (The applicable Designed Specification and Stress that are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances sponsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in supponent Design Specification and Stress Report ). <u>01/28/93</u> Signed <u>GE-NEBG-NF&amp; CM-OA</u> (NPT Certificate Holder ) Signed <u>GE-NEBG-NF&amp; CM-OA</u> (NPT Certificate Holder ) Signed CE-NEBG-NF& CM-OA (NPT Certificate Holder ) Signed CE-NEBG-NF& CM-OA (NPT Certificate Holder ) Signed NPT Certification of Authorization Ho. : <u>NPT N - 1151</u>
	Certification of Design for Appurtenance
	m information on file atGE Company. San Jose, California
Stre	as analysis report on file at <u>GE Company. San Jose. California</u>
DC22/ Destg	N6253 Rev. 1 In specification certified by <u>Biorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
DC22/ Stres	16254 Rev 1 is analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
	Certification of Shop Inspection
State	e undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have octed the part of a pressure vessel described in this Partial Data Report on <u>1266</u> , <u>1983</u> . Itate that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in

Accordance with the ASAC 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.

Inspector's Signature <u>1/28,199</u>3 NC 1231. Ohio. WC 3686 PA Q rom 0 National Board, State, Province And No. Date

\*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".

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2 - List other internal or external pressure with coincident temperature when applicable.

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(	(WOT NO. 01044801 40
FORM N-2 NPT CERTIN. JATE HOLDE	RS'DATA REPORT FOR NULLEAR PART AND APPURTENANCES* sion of the ASME Code Rules, Section, III, Div. I
as required by one reove	children Druch
1. Manufactured & Certified by : <u>General El</u>	ectric Company Nuclear Fuel & Components Manufacturing (GENF & CM)
2117 Cas	tle Havne Road, Wilmington, North Carolina_28401_
	Name and Address of HPT Certificate Holder )
(b) Hanufactured for : <u>WNP 2</u>	Richland, Washington 99352
( Name and Ad	dress of N Certificate Holder for completed nuclear component )
2. Identification - Certificate Holder's S/N	of Part : <u>A9343</u> Nat'l Bd. No. <u>N/A</u>
(a) Constructed According to Drawing No:	919D258G003 Rev 17 Dwg. Prepared by D.L.Peterson
(b) Description of Part Inspected: <u>Cy</u>	linder Tude & Flange
(c) Applicable ASME Code: Section III .	Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Rea</u>	ctor, Hydrostatically tested at 1825 psi. min.
	service for which component was designed >
	Sheet 2 of 2
1. Cap 166B9274P001	
SA 182 - F304 3/8" thick x 1 1/16" OD	
2. Indicator Tube 16689313P001	
SA312 - TP316	
3/4° sch 40 - seamless pipe 0.113° wall thickness	
1.065" max. dia.	
	Reactor
3. Plug 159A1176P001	Vessel
SA 182 - F304 1/4" thick x 0.812" OD	Thimble Code Weld P50YP102
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 11485122P002, P003	P50YP102
137C8151P001, P002 SA182 - F304	
1" thick x 5.0" OD x 1.75" ID	s V//////
7. Cap Screw 117C4516P002	
SA 193 - B6 6 ea. 1/2° dia. on 4 1/8° bolt circle	
f	
8. Plug 175A7961P001	
SA182 - F304	
0.38° thick x 1.307° dia.	Code Weld / 1 2000
	Rolled before weld
9. Nut 137C5934P001 XM - 19 SA479	<b>9</b>
1.30" thick x 2.62" dia.	<u>▶ ↓ _ ↓ </u>

WOT NO. 01044801 40
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
ין און און און גערער אין
2117 Castle Hayne Road, Wilmington, North Carolina 28401 ( Name and Address of NPT Certificate Bolder )
(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> ( Name and Address of N Certificate Holder for completed nuclear component )
2. Identification - Certificate Holder's S/N of Part : Nati Bd. NoNA
(a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg. Prepared by <u>D.L. Peterson</u>
(b) Description of Part Inspected: <u>Piston Tube Assembly</u>
(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (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: 01/19/94 Signed <u>GE - NEBG - NF &amp; CM - QA</u> By St Contended by SC Of Representive )
Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPTN-1151</u>
Certification of Design for Appurtenance
Design information on file at GE Company, San Jose, California
Stress analysis report on file atGE Company. San Jose, California
DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
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 <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>15</u> , <u>1994</u> , 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 mor 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.       I/RO     Igg     Image: Construction       Date     NC 1231, Ohio, WC 3686 PA       Date     Inspector's Signature       Note     Note
*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". (17/10)

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Ite	ms 4-8 Ind	cl. to be comp	leted for si	ngla wall ve	ssels, jacket	s vessels, o	r shells of heat	exchangers.	
4.	Shell: 1		T.S c. No. ) (Min. of Re		Co in. Al	Prrosion Nowance	in. Dia fi	: in. Le	ngth ft
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(b)		able, bolts us				Other fast	ening	·	·····
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							-	Impact	ft-1
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_		10 to be compl				<u> </u>			
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				r inner cham	bers of jacke	ted vessels,	or channels of h		). 
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1 - # Postweid Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

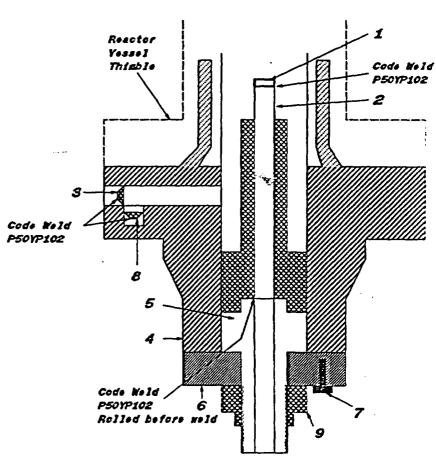
# FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES\* As required by the Provision of the ASME Code Rules, Section III, Div. I WOI NO. 0104480140

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM) flears Sur 2117 Castle Havne Road, Wilmington, North Carolina 28401 ( Name and Address of NPT Certificate Holder ) (b) Manufactured for : <u>WNP 2</u> Richland, Washington 99352 ( Name and Address of N Certificate Holder for completed nuclear component ) 2. Identification - Certificate Holder's S/N of Part : 0843 \_\_\_ Nat'l Bd. No. \_\_\_N/A\_ (a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg. Prepared by <u>D. L. Peterson</u> (b) Description of Part Inspected: <u>Piston Tube Assembly</u> (c) Applicable ASME Code: Section III, Edition <u>1974</u>, Addenda Date <u>W75</u>, Case No. <u>1361-2</u> Class <u>1</u> 3. REHARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> ( Brief description of service for which component was designed ) Sheet 2 of 2 1. Cap 166B9274P001 SA182 - TP316 3/8" thick x 1 1/16" OD 2. Indicator Tube 167B4908P001 SA312 - TP315 3/4\* sch 40 - seamless pipe 0.113 wall thickness 1.065° max. dia. 1 Reactor Yessel 3. Plug 159A1176P001 Thisble Code Nold SA182 - F304

- 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.

1/4" thick x 0.812" OD

- 6. Ring Flange 11485122P002 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
- 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 NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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 CT&F CT&F	General Electric General Electric General Electric	4835 4835 A9264	N/A N/A N/A	N/A N/A N/A	1974 1974 1995	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 4835. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 4835. Liquid penetrant (PT) examination results unacceptable.

3) Installed replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9264.

- 4) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.
- 5) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.
- 6) Reassembled parts and materials for Control Rod Drive (CRD).

#### NOTES -

1) ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9264.

2) The existing Cylinder Tube And Flange (CT&F) assembly Serial No 4835 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

3) The replacement Cylinder Tube And Flange (CT&F) assembly Serial No A9264 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

4) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9264. The Cylinder Tube And Flange (CT&F) Serial No A9264 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

			WO	T No 01044801 4
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FO	TM NIS-2 OWNER'S REPO	ORT FOR REPAIR:	S OR REPLACEMENTS (B	ack)
ests Conducte	d: Hydrostatic Pneun Test Pressure: Psig Component Design Press		I Operating Pressure Test Temperature: <sup>o</sup> F Temperature: <sup>o</sup> F	None X
<b>Remarks:</b> See att	ached N-2 Code Data Report for th	e replacement Cylinder T	ube And Flange (CT&F) assembly S	Serial No A9264.
	CERTI	FICATE OF COMP	LIANCE	
to the rules of Type Code Syl	the ASME Code, Section X nbol Stamp: Not Applicable Authorization No.: Not Applica	ا. ble کوہے Signed I	By Fuldup Singh - Program Lead	26
,				
		TE OF INSERVICE		
Vessel Inspect Johnston, Rhod period _///2 Owner has per in accordance	ors and the State of Washir Island have inspected the CCC to CCC formed examinations and with the requirements of the	ngton and employed components descr and state to taken corrective me he ASME Code, Sec	National Board of Boiler ar by Factory Mutual Insurance ibed in this Owner's Report the best of my knowledge a easures described in this Ou- tion XI. oyer makes any warranty, e	Company of during the nd belief, the wner's Report
implied, conce Furthermore, I	rning the examinations and neither the Inspector nor hi	d corrective measures in the second sec	res described in this Owner a liable in any manner for an or connected with this insp	's Report. ly personal
<u></u>	Spector's Signature	Commissio	ns <u>7486.00</u> NE National Board, State, and E	and or sements
	( / K /			

WOT NO. OU	04480141
FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND A As required by the Provision of the ASME Code Rules, Section I	II, Div. I
1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufa	د ادر (GENF&CM)
<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> ( Name and Address of MPT Certificate Holder )	
(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> ( Name and Address of N Certificate Holder for completed nuclear co	wponent )
2. Identification - Certificate Holder's S/N of Part : <u>A9264</u> Nat'l Bd. No. <u>N/A</u>	- 
(a) Constructed According to Drawing No: <u>919D258G003 Rev 19</u> Dwg. Prepared by <u>D.L. Pe</u>	terson
(b) Description of Part Inspected: <u>Cvlinder Tube &amp; Flange</u>	·
(c) Applicable ASNE Code: Section III , Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No	<u>1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (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 conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Spe Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification H is responsible for furnishing a separate Design Specification and Stress Report if the appurtenant the component Design Specification and Stress Report ). Date: 06/27/95	cification and Stress Holder for appurtenances
( HET Certificate Holder )	(entive )
Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPTN-</u>	1151
Certification of Design for Appurtenance	
Design information on file at <u>GE Company, San Jose, California</u>	
Stress analysis report on file at <u>GE Company, San Jose, California</u>	
DC22A6253 Rev. 1 Design specification certified by <u>Biorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>1557(</u>	<u> </u>
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>MO</u> 1	18646
Certification of Shop Inspection	
I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspe	1

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.

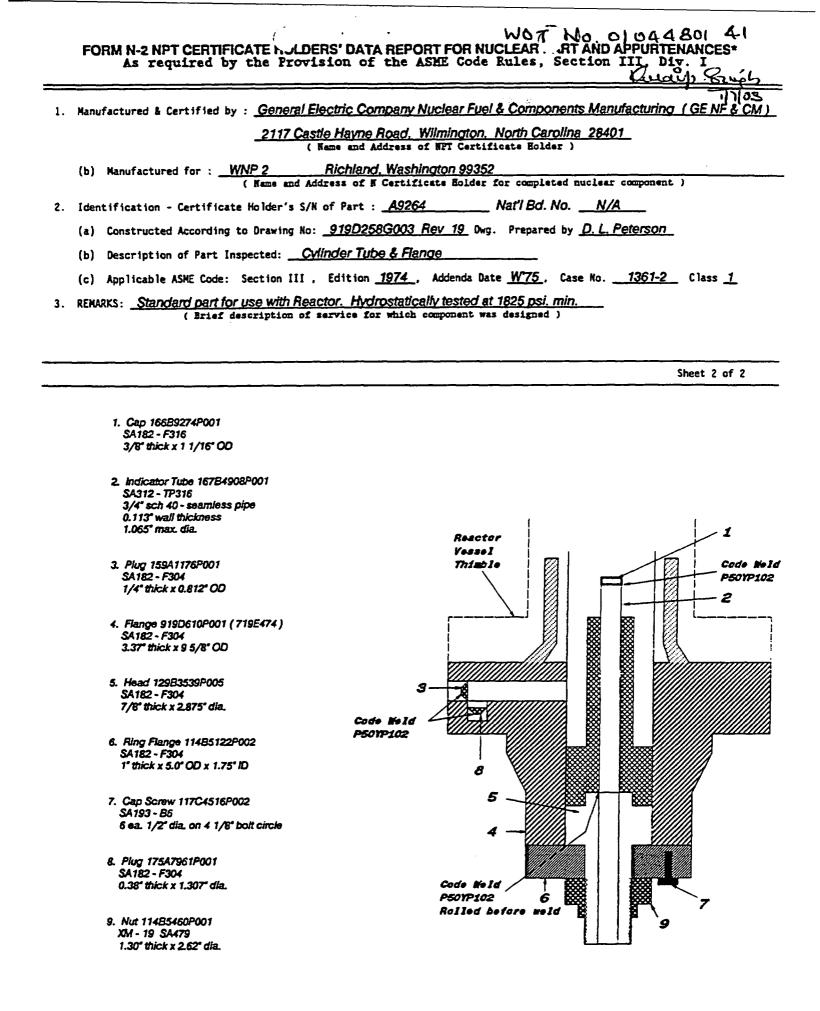
Jurne P Even NC 1231, Ohio, WC 3686 PA National Board, State, Province And No. 6/27,1995\_ Date

\*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".

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1 - If Postweid Heat-Treated.

2 - List other internal or axternal pressure with coincident temperature when applicable.





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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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	General Electric	7166	N/A	N/A	1974		Yes, Code Class

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7166. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 7166. Liquid penetrant (PT) examination results acceptable.
- 3) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.
- 4) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.
- 5) Reassembled parts and materials for Control Rod Drive (CRD).

## NOTES -

1) ASME Section III Code Cases are as listed on the N-2 Code Data Report for the Control Rod Drive (CRD) assembly Serial No 7166. 2) ASME pressure boundary (retaining) parts and materials were not replaced during CRD overhaul activities.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No 7166. The Control Rod Drive (CRD) assembly Serial No 7166 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Summer 1974 Addenda.

	WOT No 01044801 42
ENERGY NORTHWES People: Vision : Solution	T
FORM NIS-2 OWNER'S REPORT FOR REPAIRS	OR REPLACEMENTS (Back)
Test Pressure: Psig	Operating Pressure None X Test Temperature: ° F Temperature: ° F
9. Remarks: None	
CERTIFICATE OF COMPL	LIANCE
We certify that the statements made in this Owner's Report at to the rules of the ASME Code, Section XI.	re correct and this replacement conforms
Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable	
Expiration Date: Not Applicable	$\beta$ $\beta$ $\beta$
Prepared By Kuldip Singh - Program Lead Engineer (PLE)	Kuldip Singh - Program Lead Engineer (PLE)
DateDateDate	1/103
CERTIFICATE OF INSERVICE	INSPECTION
I, the undersigned, holding a valid commission issued by the Vessel inspectors and the State of Washington and employed Johnston, Rhode Island have inspected the components description $\frac{1}{2}$ to $\frac{2}{2}$ and state to the state of the	by Factory Mutual Insurance Company of bed in this Owner's Report during the
Owner has performed examinations and taken corrective me in accordance with the requirements of the ASME Code, Sec	tion XI.
By signing this certificate neither the Inspector nor his emploid implied, concerning the examinations and corrective measure Furthermore, neither the Inspector nor his employer shall be	es described in this Owner's Report. liable in any manner for any personal
injury or property damage or a loss of any kind arising from o	or connected with this inspection.
Inspector's Signature	National Board, State, and Endorsements
Date <u>1/1////</u>	



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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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	General Electric	6552	N/A	N/A	1975		Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6552. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

1) Disassembled Control Rod Drive (CRD) assembly for overhaul.

2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6552. Liquid

penetrant (PT) examination results acceptable.

3) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.

- 4) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.
- 5) Reassembled parts and materials for Control Rod Drive (CRD).

#### NOTES -

1) ASME Section III Code Cases are as listed on the N-2 Code Data Report for the Control Rod Drive (CRD) assembly Serial No 6552. 2) ASME pressure boundary (retaining) parts and materials were not replaced during CRD overhaul activities.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No 6552. The Control Rod

Drive (CRD) assembly Serial No 6552 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

WOT No 01044801 4 ENERGY NORTHWEST People - Vision - Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
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       Fully for the full state of the state of
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>117677</u> to <u>272770</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         M.M.M.J.J.J.J.J.J.J.J.J.J.J.J.J.J.J.J.J
Date <u>2/31/03</u>

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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

2. Plant: Columbia Generating Station

Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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	General Electric	7041	N/A	N/A	1975		Yes, Code Class
Piston Tube	General Electric	5785	N/A	N/A	1975	Replaced	Yes, Code Class
Piston Tube	General Electric	0867	N/A	N/A	1994	Replacement	Yes, Code Class

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7041. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

1) Disassembled Control Rod Drive (CRD) assembly for overhaul.

2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 7041. Liquid

penetrant (PT) examination results acceptable.

3) Performed visual examination on the existing Piston Tube assembly Serial No 5785. Visual examination results unacceptable (pitting).

- 4) Installed replacement Piston Tube assembly Serial No 0867.
- 5) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.
- 6) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.

7) Reassembled parts and materials for Control Rod Drive (CRD).

## NOTES -

ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No 0867.
 The existing Piston Tube assembly Serial No 5785 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

3) The replacement Piston Tube assembly Serial No 0867 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda.

4) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No 7041. The Cylinder Tube And Flange (CT&F) Serial No 7041 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

	,		,	WOT No 01044801
	( F		WEST	
FOI	RM NIS-2 OWNER'S REF	PORT FOR REF	PAIRS OR REP	LACEMENTS (Back)
ests Conducted	d: Hydrostatic Pneu Test Pressure: Psig Component Design Pres			perature: ° F
R <b>emarks:</b> See atta	ached N-2 Code Data Report for t	the replacement Pist	on Tube assembly S	Serial No 0867.
				······································
	CERT	TIFICATE OF C	OMPLIANCE	
to the rules of t	the statements made in t the ASME Code, Section 2 nbol Stamp: Not Applicable		port are correct	and this replacement conforms
Certificate Of A	uthorization No.: Not Applic	able		
Expiration Date	: Not Applicable		1	
Prepared By	Kuldip Singh - Program Lead Eng	gineer (PLE)	Ined ByKuldip	Singh - Program Lead Engineer (PLE)
Date	1/1/03	Dat	e	1/2/03
			<u></u>	
	CERTIFIC	ATE OF INSER	VICE INSPECT	
Vessel Inspect	ors and the State of Wash	ington <i>and emp</i>	loyed by Factory	Board of Boiler and Pressure where Mutual Insurance Company of
Johnston, Rhode	a Island have inspected the			s Owner's Report during the first fi
Owner has per	formed examinations and	taken correction	ve measures de	scribed in this Owner's Report
	with the requirements of		•	s any warranty, expressed or
implied, conce	rning the examinations ar	nd corrective m	easures descril	bed in this Owner's Report.
	neither the inspector nor learny damage or a loss of a			ny manner for any personal ted with this inspection.
<u>1. 111.</u>	TAT	Comm		The NI nd nal Board, State, and Endorsements
ins	porior a signature		INATIO	nai Duaru, State, anu Enuorsements
	1/2			

ů

# WO7 NO. 01064801 48 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. Nanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GENF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401 (Name and Address of NPT Certificate Bolder)
(b) Manufactured for : <u>WNP 2 Richland, Washington 99352</u> ( Name and Address of N Certificate Holder for completed nuclear component )
2. Identification - Certificate Holder's S/N of Part : <u>0867</u> Nat'l Bd. No. <u>N/A</u>
(a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg. Prepared by <u>D.L.Peterson</u>
(b) Description of Part Inspected: <u>Piston Tube Assembly</u>
(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>1361-2</u> Class <u>1</u>
3. REWARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psl. min.</u>
( 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: <u>01/19/94</u>
Certification of Design for Appurtenance
Design information on file at GE Company, San Jose, California
Stress analysis report on file atGE Company, San Jose, California
DC22A5253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshlo</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
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 <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>1/5</u> . <u>7797</u> , and state that to the best of my knowledge and belief, the NPT Certificate Kolder 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. <u>1/20</u> . <u>1999</u> <u>Jucom</u> <u>Surve</u> , <u>NC 1231, Ohio, WC 3686 PA</u> Inspector's Signature Rational Board, State, Province And No.
Date C 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".

			•	F	ORM N-2	( back )	)		
Ite	ns 4-8 Ir	ncl. to be comp	leted for sin	gle wall ve	ssels, jacket	s vessels, or	shells of heat	exchangers.	-
4.	Shell:	Material	T.S. No.) (Min. of Rang	Nominal Thickness (# Specified)	Co in. A1	rrosion lowance	in. Dia fi	t in. Lengt	h ft in.
5.	Seams:	Long		н.т.		R.T.		Efficiency	X
		Girth		н.т.'		R.T.		No. of Cour	ses
6.	Heads:	(a) Material _			T.S	(ь) и	aterial	T.S	
(a)		Ends ) Thick		Radius	Ratio	Apex Angle	Hemispherical Radius		e to Press. onv. or conc.")
(b)						Athon forte			
,		vable, bolts us	دايما وللالا	I SAME MA TR	Size Mumber I		(1	Describe or attach sketch )	
1.	Jackel	, IOSUFE:	{De	rscribe as ogee al	nd weld, bar, etc. If t	bar give dimensions,	l' bolta, describe or stato Drop is Charpy	h) /eight / Impact	ft-lb
2	Detion r	2 Dressure	1250		í at	575	•	p of	•
		10 to be compl							
					Dia		Thickness	in. Attach	pent
э.	TUDE She	Floating	. Material	(Kind & Sp	oc. No.) Dia	(Subject to pressu	Thickness	in. Attach	(Welded, Bolled )
<b>10.</b> <i>;</i>	Tubes:			-	in. Thic		_ inches or gage. N	unber	Type(Str. or U)
Ite	ms 11 - 1						or channels of h	eat exchangers.	
ท่.	Shell:		T.S E. No. ) ( Min. of Pary		Con in. Al	rrosion lowance	in. Dia ft	in. Length	nft in.
12.	Seams:	Long		н.т.		R.T.		Efficiency	x
		Girth		н.т.'	- <b>-</b>	R.T	<u> </u>	No. of Cours	ies
13.	Heads:	(a) Material _			T.S	(b) Ma	aterial	T.S	·····
	Locat Top.bott Channel		Crown ness Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Side Diameter (cc	e to Press. onv. or conc. )
(0)	If remov	vable, bolts us	ed (a)	(b)	(c)	Other	r fastening	(Describe or at	
							Drop W • Charpy		ft-1b
14.	Design p	2 pressure		1	psi at		F at tem	p of	•F
Ite	ns below	to be complete	d for all ves	sels where a	applicable.				
15.	Safety N	alve Outlets:	Number		Size		Locati	on	· · · · · · · · · · · · · · · · · · ·
16.	Nozz les:	: Purpose (Iniel, Outlet, Drain )	Number	Dia. or Size	Туре	Material	Thickness	Reinforcement Material	How Attached
			· ·				······································		
17.	Inspect		No		Size	!	Location		
	Openings	: Handholes, Threaded,	M -		Size	l	Location Location		
18.	Supports		Lugs	(Number)	Legs(	01 Number}	ther(Describe)	Attached _	(Where & How)
		•		•	-	-	-		•

1 - # Postweid 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 WOT 0104480148

1. Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GENF & CM)

<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> (Name and Address of NFT Certificate Bolder)

(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Eolder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : <u>0867</u> Nat'l Bd. No. <u>N/A</u>

(a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg. Prepared by <u>D.L. Peterson</u>

(b) Description of Part Inspected: <u>Piston Tube Assembly</u>

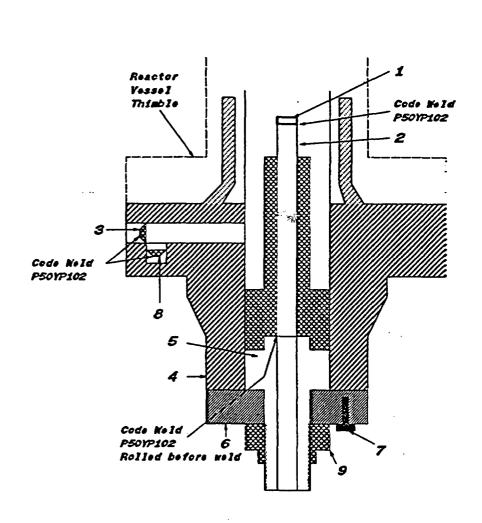
(c) Applicable ASME Code: Section III, Edition <u>1974</u>, Addenda Date <u>W75</u>, Case No. <u>1361-2</u> Class <u>1</u>

3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (Brief description of service for which component was designed)

Sheet 2 of 2

60000 August

- 1. Cap 166B9274P001 SA 182 - TP316 3/8" thick x 1 1/16" OD
- 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 SA 182 - 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
- 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 NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

2. Plant: Columbia Generating Station Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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	General Electric	6565	N/A	N/A	1974		Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6565. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

1) Disassembled Control Rod Drive (CRD) assembly for overhaul.

2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6565. Liquid

penetrant (PT) examination results acceptable.

3) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.

4) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.

5) Reassembled parts and materials for Control Rod Drive (CRD).

## NOTES -

1) ASME Section III Code Cases are as listed on the N-2 Code Data Report for the Control Rod Drive (CRD) assembly Serial No 6565.

2) ASME pressure boundary (retaining) parts and materials were not replaced during CRD overhaul activities.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No 6565. The Control Rod Drive (CRD) assembly Serial No 6565 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with no Addenda.

					WOT No 01	044801 5
			RGY THWEST			
FOF	M NIS-2 OWNER'S I	IEPORT FOR	REPAIRS O	R REPLACEN	IENTS (Back)	
ests Conducted	: Hydrostatic Pi Test Pressure: Psig Component Design F	neumatic	Tes	erating Press at Temperature nperature: ° F		X
Remarks: None						
	Ci	ERTIFICATE C	OF COMPLIA	NCE		
to the rules of t Type Code Syn	the statements made he ASME Code, Section bol Stamp: Not Applicate uthorization No.: Not A : Not Applicable	o <b>n XI.</b> le	Report are of Signed By	1. 0.	is replacement contor	'ms
Date	Culdip Singh - Program Lead	-	Date		rogram Lead Engineer (F	²LE)
	<i>/ (</i>					
	CERTIF	ICATE OF INS	SERVICE INS	PECTION		
Vessel Inspecto Johnston, Rhode period <u>// / 20</u> Owner has peri in accordance By signing this implied, concer	ed, holding a valid co ors and the State of W Island have inspected <u>2</u> to <u>2</u> / <u>2</u> / formed examinations with the requirements certificate neither the ning the examination	ashington and a the component and taken corr of the ASME ( Inspector nor and correctiv	employed by nts described I state to the rective measu Code, Section his employed re measures	Factory Mutual I in this Owner best of my known wes described NI. makes any w described in ti	Insurance Company r's Report during to owledge and belief I in this Owner's Re varranty, expressed his Owner's Report	of he , the eport d or t.
	either the inspector n ty damage or a loss of	of any kind aris	sing from or o		h this inspection.	nal
Date 2/3/	Dector's Signature				, State, and Endorsemen	its



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

# 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 01/02/03 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1 See Notes 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	General Electric	6088	N/A	N/A	1974		Yes, Code Class 1

7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6088. The overhaul work was performed in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Disassembled Control Rod Drive (CRD) assembly for overhaul.
- 2) Performed liquid penetrant (PT) examination on the existing Cylinder Tube And Flange (CT&F) assembly Serial No 6088. Liquid penetrant (PT) examination results acceptable.

3) Performed VT-3 visual examination on the existing ring flange cap screws. VT-3 visual examination results acceptable.

4) Performed VT-3 visual examination on the existing piston tube nut. VT-3 visual examination results acceptable.

5) Reassembled parts and materials for Control Rod Drive (CRD).

### NOTES -

1) ASME Section III Code Cases are as listed on the N-2 Code Data Report for the Control Rod Drive (CRD) assembly Serial No 6088. 2) ASME pressure boundary (retaining) parts and materials were not replaced during CRD overhaul activities.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No 6088. The Control Rod

Drive (CRD) assembly Serial No 6088 is certified to compty with ASME Section III, Code Class 1, 1971 Edition with no Addenda.

WOT No 01044801 52 ENERGY NORTHWEST People - Vision - Bolutions
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Preumatic Nominal Operating Pressure 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       Image: Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       Image: Signed By         Image: Signed By       Image: Signed By
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period to

:

17-00-