INSERVICE INSPECTION SUMMARY REPORT

FOR

REFUELING OUTAGE RF94A June 21,1993 TO September 22, 1994

O	W	N	E.	R:
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Washington Public Power Supply System

3000 George Washington Way Richland, Washington 99352

PLANT:

WNP-2, located 11 miles north of Richland, Washington on the U.S.

Department of Energy Hanford Reservation

COMMERCIAL SERVICE DATE:

December 13, 1984

CAPACITY: 1145 MWe

REACTOR PRESSURE VESSEL: Manufacturer: CBIN

Serial Number:

T-45

State No.: 29936-84W

Nat'l Bd No.:

8

Prepared	By:	Doffame

ISI Engineer

10-3-94

Date

Repair/Replacement Engineer

Date

Reviewed &

Supervisor, NDE\ISI Services

Date

Concurred By:

Manager, Materials and Inspection

10-4-94

Date

Date

Manager, Engineering Programs

Manager, Quality Assessments

Date

Approved

By:

Plant Manager

Concurrence:

Authorized Nyclear Inservice Inspector

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SUMMARY

WNP-2 has completed the first ASME Section XI inservice inspection interval. The following augmented examinations were also completed at R9: core spray spargers, feedwater nozzle examination for Final Feedwater Temperature Reduction, Generic Letter 88-01, and the RPV shroud. WNP-2 is on schedule with its Generic Letter 88-01 commitments. No change was found in weld 20RRC(6)-8 indication (identified during R6). This report also lists those items that did not receive full ASME Section XI examination coverage during this first inspection interval and are not contained in a relief request.

EXAMINATION RESULTS

This report summarizes the results of inservice inspection (ISI) of ASME Section III, Class 1, 2 and 3 components and supports performed at Washington Public Power Supply System (Supply System) Nuclear Plant No. 2 (WNP-2) between June 21,1993 and September 22, 1994. Both General Electric (GE) and Supply System personnel performed the examinations. During this period, WNP-2 completed the ninth scheduled refueling outage, RF94A (R9). This report includes the NIS-1 Owner's Report of Inservice Inspection for this refueling outage. A copy can be found in Appendix A.

Full ASME Section XI examination coverage, during this first inspection interval, was not obtained on twenty-seven (27) items not covered by existing Nuclear Regulatory Commission approved relief requests. These items are summarized in Table I with the reason full examination coverage was not obtained.

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.

- o IGSCC (intergranular stress corrosion cracking) detection in stainless steel welds, based on Generic Letter 88-01.
- o Visual examination of core spray spargers and supply piping in the Reactor Pressure Vessel.
- o Feedwater nozzle examination for final feedwater temperature reduction (FFWTR or "coastdown")
- o Ultrasonic examination of the RPV shroud

The ASME Section XI examinations comply with the 1980 Edition, Winter 1980 Addenda upgraded as follows:

- o IWA-2300(a)(1), 1983 Edition, Winter 1983 Addenda
- o Code category B-M-2, 1989 Edition, no addenda

1 . _ • •

- o Code category C-F, 1983 Edition, Winter 1983 Addenda
- o IWF-3400, 1980 Edition Winter, 1981 Addenda
- o IWB-3600, 1986 Edition no Addenda (to comply with GL88-01)

Documentation supporting this summary report is located in the WNP-2 Operations File (DIC 1100). Table II lists the snubbers that were functionally tested during R9. Appendix A contains the NIS-1 Owner's Data Report for Inservice Inspection which lists all the examinations that were completed at R9 for ASME Section XI compliance. Appendix B contains a summary of all the examinations that were completed during the period covered by this report. The ISI drawings referenced are included in the ISI Program Plan previously submitted to the Commission.

The ASME Section XI examinations, tests, repairs and replacements were witnessed or verified by Authorized Nuclear Inservice Inspectors (ANII) D.E. Hoggarth and C.F. Jones. They are employed by Factory Mutual Engineering Association, a subsidiary of Arkwright Mutual Insurance Company, Norwood, Massachusetts.

PIPING EXAMINATIONS

- One hundred twenty one (121) ASME Section III, Class 1 and 2 examinations were completed by UT, PT or MT methods.
- o Forty-eight (48) ultrasonic examinations (UT) were performed for Generic Letter 88-01 compliance.

RPV EXAMINATIONS

- o Interior visual examinations were performed by General Electric and Supply System personnel. Various augmented items were examined. See augmented examination section below for further details. During visual examination of jet pump sensing lines a crack was found in one jet pump sensing line. Evaluation of the crack determined that the plant can operate to R11 without repair.
- o RPV welds were examined by GE using their GERIS examination system and manual scanning. The RPV weld ultrasonic examinations were performed in accordance with ASME Section XI 1980 Edition Winter, 1980 Addenda, NRC Regulatory Guide 1.150 Revision 1 alternate method. No unacceptable indications were detected.
- o Reactor vessel core shroud was ultrasonically examined. Weld H3 received approximately 35% coverage and weld H4 received about 19% coverage. No evidence of cracking was detected.

10-YEAR HYDROSTATIC TESTS

The Supply System completed the 10-year hydrostatic tests and associated VT-2 examinations on the following ASME Section III Code Class 1, 2, and 3 systems:

Control Rod Drive
High Pressure Core Spray
Low Pressure Core Spray
Main Steam
Reactor Closed Circulation
Reactor Core Injection Cooling
Reactor Feedwater
Reactor Residual Heat Removal
Reactor Recirculation Cooling
Reactor Pressure Vessel
Radioactive Waste Clean Up
Standby By Liquid Control
Standby Service Water

The tests and associated examinations for ASME Section III, Code Class 1 and 2 components were performed to the requirements of Code Case N-498.

AUGMENTED EXAMINATIONS

The Supply System performed augmented examinations per the ISI Program Plan section 5.3, "Mandatory Augmented Inservice Inspection".

o Weld thickness measurement (ISI Program Plan section 5.3.7)

Thickness measurement of weld 26MS(1)C-15 was completed. Results were compared to acceptable thickness after 10 years of operation and found to be above required minimum wall.

o Core spray sparger and supply piping (ISI Program Plan section 5.3.5)

A visual examination of the core spray spargers and their supply piping was performed per the requirements of IE Bulletin 80-13, "Cracking in Core Spray Sparger". The examination was performed using an underwater closed circuit TV system capable of resolving a 0.001 inch diameter wire in-situ. No relevant indications were observed.

o Feedwater nozzle examinations due to Final Feedwater Temperature Reduction (FFWTR or "coastdown") (ISI Program Plan section 5.3.8)

One feedwater nozzle inner radius, bore and associated safe-end were examined per commitments made in Supply System letter G02-90-024, dated February 14, 1990 and

NRC SER dated March 1, 1990. No recordable indications were found.

Generic Letter 88-01 (ISI Program Plan section 5.3.4)

Nineteen (19) Generic Letter 88-01 category A welds, three (3) category B welds, twenty-five (25) category "D" welds and one (1) category "F" weld were examined. No unacceptable indications were found in category "A", "B" and "D" welds. The category "F" weld, 20RRC(6)-8, had a reportable indication detected at R6. The results of the R9 examination of 20RRC(6)-8 weld determined that the flaw size had not changed significantly from R6. The analysis performed at R6 for continued operation is still valid. The results of this examination and analysis for continued operation were submitted to the Commission for review and approval for continued operation (ref. letter GO2-94-135, dated June 9, 1994). The Commission approved operation for one more cycle. (ref. letter dated July 15, 1994, James W. Clifford to J.V. Parrish, "Reactor Recirculation Piping Weld Flaw Reinspection Results Review at Washington Public Power Supply System Nuclear Project No. 2").

Mechanical stress improvement was performed on 44 welds in IGSCC categories "A" and "D". The 19 "A" welds, fabricated of Inconel 600 material, were treated as a precautionary measure and because they are next to the "D" welds that were scheduled to be treated. The remaining 25 "D" welds were treated to mitigate the onset of IGSCC. Following is a summary of Generic Letter 88-01 status.

Category (Total #) ¹ A (57) B (147)	Required within 6 yrs ¹ 7 37	Required within 10 yrs ¹ 14 74	WNP-2 Status thru R9 (After 5 yrs) ¹ 37 ² 55
(Total #) ³ D (25)	within 3 yrs ³ 25		(After 2 yr) 25 ⁴
(Total #) ¹ F (1) ⁵	within 1 yrs		(After 1 yr) 1

WNP-2 is on schedule with its GL 88-01 commitments.

WNP-2 commitment began at R4

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

³ WNP-2 commitment began at R7

⁴ Examination after MSIP performed on the welds.

⁵ This category "F" weld was reclassified from category "B" at R6.

o Snubber testing (ISI Program Plan section 6.5)

An initial sample of 37 snubbers was selected from the WNP-2 general population of 494 safety related snubbers. These snubbers were randomly selected by computer sub-routine. The selected snubbers were then reviewed to determine if the sample was representative as required by Technical Specification 4.7.4.e.

Testing of snubbers was performed using portable testing devices called "Validators". These devices were supplied by the snubber manufacturer. Testing results summary is found in Table II.

The next testing is required within 18 months.

PRESERVICE INSPECTIONS

New cap screws were installed in the CRD housings at core locations listed below, when they were disassembled for control rod drive replacement. The new cap screws are of an improved design. A preservice VT-1 examination was performed on all new cap screws.

Identification No.	Method
CRD HOUSING 02-27 BLT	VT 1
	VT-1
CRD HOUSING 02-31 BLT	VT-1
CRD HOUSING 10-31 BLT	VT-1
CRD HOUSING 18-19 BLT	VT-1
CRD HOUSING 18-43 BLT	VT-1
CRD HOUSING 18-47 BLT	VT-1
CRD HOUSING 18-59 BLT	VT-1
CRD HOUSING 22-07 BLT	VT-1
CRD HOUSING 22-11 BLT	VT-1
CRD HOUSING 22-19 BLT	VT-1
CRD HOUSING 22-23 BLT	VT-1
CRD HOUSING 22-43 BLT	VT-1
CRD HOUSING 22-59 BLT	VT-1
CRD HOUSING 26-07 BLT	VT-1
CRD HOUSING 26-15 BLT	VT-1
CRD HOUSING 26-27 BLT	VT-1
CRD HOUSING 30-23 BLT	VT-1
CRD HOUSING 38-23 BLT	VT-1
CRD HOUSING 30-31 BLT	VT-1
CRD HOUSING 30-43 BLT	VT-1
CRD HOUSING 30-47 BLT	VT-1
CRD HOUSING 34-15 BLT	VT-1

CRD HOUSING 38-27 BLT	VT-1
CRD HOUSING 42-31 BLT	VT-1
CRD HOUSING 42-35 BLT	VT-1
CRD HOUSING 42-43 BLT	. VT-1
CRD HOUSING 46-39 BLT	VT-1
CRD HOUSING 50-27 BLT	VT-1
CRD HOUSING 54-39 BLT	VT-1
CRD HOUSING 58-19 BLT	VT-1
CRD HOUSING 58-31 BLT	VT-1

LIMITED EXAMINATIONS

Full ASME Section XI required coverage of the examination volume or surface could not be accomplished on two (2) welds.

Weld Ident.	<u>Description</u>	Description of Limitations
AD	#3-#4 SC CIRC WD	Examination coverage restricted in 8 areas where RPV stabilizer lugs are attached to vessel. Scan coverage is 83.6%. This examination coverage exceeded NRC approved relief request ISI-2-001 coverage for this weld. (see ISI Program Plan page 4-8)
AE	#4 SC-FL CRC WD	Due to flange configuration, scan coverage limited to shell side of weld. Three thermocouples limited examination coverage to 98.8% from this side of the weld. The reported scan coverage is 49.4% (calculated for two sided examination) This differs from Relief Request ISI-2-001 (95% coverage) in that the relief request anticipated a two sided examination for this weld.

REPAIRS AND REPLACEMENTS

Seven (7) significant ASME Section XI repair or replacement activities were performed during the RF94A refueling outage: 1) modified vent/drain/test connections, 2) replaced Local Power Range Monitoring (LPRM), 3) replaced modules for electrical penetrations, 4) replaced main steam relief valves, 5) replaced CEP and CSP valves, 6) replaced Control Rod Drives (CRD's) and 7) continuation of the snubber optimization program. A listing and NIS-2 Owner's Reports for these and other ASME Section XI repair or replacement work accomplished and closed out between June 21, 1993 and July 30, 1994 are provided in Appendix C.

1) Vent/Drain/Test Connections

Modified three (3) vent/drain/test connections to reduce susceptibility to fatigue induced failures at socket welds.

2) Local Power Range Monitoring (LPRM)

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

3) Electrical Penetrations

Replaced modules for Electrical Penetration No X-101B - Position No's 1, 2 and 3, Electrical Penetration No X-104A - Position No 1, Electrical Penetration No X-101A - Position No 1, Electrical Penetration No X-105B - Position No 1, Electrical Penetration No X-105C - Position No's 1, 2 and 3, Electrical Penetration No X-105A - Position No 1, Electrical Penetration No X-101C - Position No 3 and Electrical Penetration No X-101D - Position No 3.

4) Main Steam (MS) System

WNP-2 Main Steam Relief Valves (MSRV's) were manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at WNP-2 plant. "Bailly" Main Steam Relief Valves (MSRV's) were also manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at Northern Indiana Public Service Co (NIPSCO), Bailly Generating Station Nuclear 1 Plant. Supply System procured six (6) new (unused) "Bailly" valves from NIPSCO as spares for use at WNP-2 plant. "Bailly" valves were modified (upgraded) by Crosby to make them equivalent in form, fit and function and interchangeable with WNP-2 valves. Refurbished four (4) main steam relief valves. Eight (8) of the modified/refurbished main steam relief valves were installed in place of the existing main steam relief valves in the plant.

5) Containment Exhaust Purge (CEP) System And Containment Supply Purge (CSP) System

Replaced two (2) 30" butterfly valves CEP-V-1A and CEP-V-2A in Containment Exhaust Purge (CEP) system. Replaced two (2) 24" butterfly valves CSP-V-3 and CSP-V-4 in Containment Supply Purge (CSP) system.

6) Control Rod Drive (CRD)

Overhauled fifteen (15) Control Rod Drives (CRD's) and replaced thirty one (31) Control Rod Drives (CRD's).

7) Snubber Optimization Program

As part of Supply System's effort to reduce the number of safety related snubbers at WNP-2, fifty four (54) snubbers were deleted.

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LIMITED EXAMINATIONS NOT COVERED BY RELIEF REQUESTS Table I

The components in this table did not receive full ASME Section XI examination coverage during the first inspection interval and are not included in a relief request.

Ident.	Code	Item	Exam	Drawing ⁴		
No.	<u>Cate.</u>	No.	<u>Hethod</u>	No.	<u>Description</u>	Remarks
FPC-64	IWF1	F-X	VT-3	FPC-301	Вох	See note 2
FPC-64(W)	D-C	D3.20	VT-1	FPC-301	Attmt Weld	See note 2
FPC-98	IWF	F-X	VT-3	FPC-304	Rigid	See note 2
FPC-114	IWF	F-X	VT-3	FPC-304	Rigid	See note 3
FPC-203	IWF	F-X	VT-3	FPC-304	Box	See note 2
LPCS-19	IWF	F-X	VT-3	LPCS-202	Anchor	See note 2
RHR-53	IWF	F-X	VT-3/4	RHR-207	Spring	* See note 4
RHR-77(W)	C-C	C3.40	SUR	RHR-205	Attmt Weld	See note 3
RHR-99	IWF	F-X	VT-3	RHR-210	Anchor	See note 2
RHR-174	IWF	F-X	VT-3	RHR-201	Box	See note 3
RHR-410(W)	C-C	C3.40	SUR	RHR-203	Attmt Weld	See note 3
RHR-605	IWF	F-X	VT-3	RHR-201	Strut	See note 3
RHR-606	IWF	F-X	VT-3	RHR-201	Strut	See note 3
SLC-4453-57	IWF	F-X	VT-3	SLC-101	Rigid	See note 2
SW-90	IWF	F-X	VT-3	SW-307	Rigid	See note 2
SW-90(W)	D-B	D2.20	VT-1	sw-307	Attmt Weld	See note 2
sw-123	IWF	F-X	VT-3	SW-301	Rigid	See note 2
SW-123(W)	D-B	D2.20	VT-1	SW-301	Attmt Weld	See note 2
sw-439	IWF	F-X	VT-3	sw-303	Rigid	See note 2
SW-439(W)	D-B	D2.20	VT-1	sw-303	Attmt Weld	See note 2
sw-946n	IWF	F-X	VT-3	SW-314	Rigid	See note 2
sw-946n(w)	D-B	D2.20	VT-1	SW-314	Attmt Weld	See note 2
sw-951N	IWF	F-X	VT-3	sw-315	Rigid	See note 2
SW-951N(W)	D-B	D2.20	VT-1	SW-315	Attmt Weld	See note 2
SW-950N	IWF	F-X	VT-3	SW-315	Rigid	See note 2
RRC-HA-1(W)	B-K-1	B10.10	SUR	RRC-101	Lugs	See note 5
RRC-HB-1(W)	8-K-1	B10.10	SUR	RRC-102	Lugs	See note 5

Notes

- IWF includes Code categories F-A, F-B and F-C. F-X includes items numbers F-1, F-2, F-3 and F-4 from Table IWF-2500-2 1
- Examination limited by fire barrier In enclosed cubicle or pipe chase
- 3
- Limited examination due to surrounding interferences High dose required to complete remaining 50% of weld.

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Table II SNUBBER FUNCTIONAL TESTS

Snubbei	r Hark Number	Position	Description	Serial	No. Test Date	
HPCS-47	7	N	PSA-3 SN(2)	470	— 4/30/94	
MD-129		ÜA	PSA-1/4 SNUBBER		5/05/94	
HS-SC-	_	UA	PSA-35 SNUBBER	4154	5/05/94	
HS-1368		UA	PSA-1/2 SNUBBER		5/03/94 1	
HS-1368		UA	PSA-1/2 SHUBBER		5/11/94	
HS-91	3-13	E	PSA-3 SN(2)	2583	5/05/94	
HS-162		TP	PSA-10 SN(2)	325	5/05/94	
MSRV-10	:-2	ÜA	PSA-35 SNUBBER	7.	5/04/94	
MSRV-3		UA	PSA-10 SNUBBER		5/02/94	
HSRV-30		UA	PSA-10 SNUBBER	4866	5/02/94	
MSRV-50		UA	PSA-10 SNUBBER	13058	5/03/94	
RCIC-38		W	PSA-1 SN(2)	599	5/04/94	
RCIC-26		ÜA	PSA-3 SNUBBER	4415	4/30/94	
RFW-915		UA	PSA-10 SNUBBER		5/02/94	
RFW-942		BM	PSA-10 SKODDER	338	5/02/94	
RHR-SB-		BH	PSA-10 SN(2)	9931	5/03/94	
RHR-235		UA	PSA-10 SNUBBER	1462	5/05/94	
RHR-260		UA	PSA-10 SNUBBER	716	5/04/94	
RHR-256		UA	PSA-10 SNUBBER	10730	5/06/94	
RHR-276		N	PSA-33 SN(2)	2575	5/05/94	
RHR-947		n TP	• •	3905		
			PSA-3 SN(2)	3900	4/30/94	
RHR-943 RHR-563		UA	PSA-3 SNUBBER	361	4/30/94 5/05/94	
		N	PSA-1 SN(2)			
RHR-496 RHR-913		UA	PSA-10 SHUBBER	13057 4430	5/02/94	
	on .	UA	PSA-3 SNUBBER		4/30/94	
RHR-20	1	UA	PSA-1/2 SHUBBER		4/30/94	
RHR-301		UA	PSA-3 SNUBBER	654	4/30/94	
RHR-460		UA	PSA-1/4 SNUBBER		4/30/94	
RHR-940		BM	PSA-3 SN(2)	2570	4/30/94	
RHR-449		N	PSA-1/2 SN(2)	2532	4/30/94	
RRC-SA-		UA	PSA-35 SNUBBER		5/06/94	
RRC-SB-		UA	PSA-35 SNUBBER		5/06/94	
RRC-SB-		UA	PSA-35 SHUBBER		5/05/94	
RRC-SA-		UA	PSA-100 SNUBBER		5/02/94	
RHR-SA-		UA	PSA-10 SNUBBER		5/02/94	
RWCU-10	:-16	UA	PSA-1 SNUBBER	22344	5/03/94	
SGT-23		TP	PSA-3 SN(2)	4487	5/05/94	
sw-29		SE	PSA-10 SN(4)	4861	4/30/94	
KEY						
вм	Bottom		s	E S	Southeast	
E	East		S	w s	Southwest	
N	North		T	P 1	Гор	
NE	Northeast		U	A L	Inassigned - consists of a sir	igle snubl
W	Northwest		¥.		lest	-
S	South					

Notes

All snubber functional tests were acceptable. None of the tested snubbers require testing at the next refueling outage.

Snubber MS-1368-13 s/n 2145 passed the functional test. To preclude further service life degradation it was replaced by new tested snubber s/n 2470.

APPENDIX A

NIS-1 Owner's Data Report for Inservice Inspection

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

As required by the Provisions of the ASME Code Rules

 Owner: Washington Public Power Supply System, 3000 George Washington Way, PO Box 968, Richland, Washington 99352

2. Plant: WNP-2, Hanford Reservation, Benton County, Washington

3. Plant Unit: WNP-2

Owner Certificate of Authorization: NA
 Commercial Service Date: 12/13/84
 National Board Number: NA

7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Pressure Vessel	CBIN Nuclear Co.	T-45	29936-84W	8
RHR-HX-1A	Delta Southern Co.	35009-74-1	29911-84W	3489
RCIC-P-1	Bingham-Willamette Pump Co.	B-2-1061	NA	161
Large Bore Pipe	Bechtel - the piping examined is listed on pages 3-12 of this data report.	NA .	NA	NA

FORM NIS-1 (back)

required for curre Pages 3-12 of this o	nations. Include a list	of 'examinations	and a statemen	val <u>12/13/84</u> to <u>12/12/9</u>
required for curre Pages 3-12 of this o	nt interval. This refue			t concerning status of work
				tervice inspection interval.
noted. Component s acceptance limits. C setting on RHR-461 on the shanks of Cl	supports MS-2619-43, - Component supports RC was found outside exam	44, 312 were fou C-909N and RHR mination procedur ASME Section II	nd aligned outas R-552 were found re acceptance lin I, Class 1 hydro	sized. No significant change waide examination procedure d with a loose jam nut. Spring nit. Minor corrosion was found test leaks were found at severa 8-V-67A.
evaluated and deter RCC-909N, RHR-5 the CRD cap screw	mined to be acceptable v 52, and RHR-461 were	without repair. The evaluated and fo the range of pre	ne component su und to be accept evious analysis.	on in weld 20RRC(6)-8 was pports MS-2619-43,-44,-312, able as found. The corrosion of the flange joint leaks of CRD.
conform to the rules of the	ASME Code, Section 2	XI.		and corrective measures taken
Date 10/10 19 94 Sig	ned <u>Washington Public</u> Own		stem By /	oc dmot
Certificate of Authorization			oiration Date	NA
	CERTIFICATE O	F INSERVICE	E INSPECTION	NO
Engineering Association) o	Washington and employ f Norwood, Massachuse iod 6/21/93 to 9/24/9 ninations and taken correspector nor his employed	yed by <u>Arkwright</u> etts have inspected 4, and state that the ective measures der shall be liable	Mutual Insurand the component to the best of my lescribed in this in any manner for	ce Company (Factory Mutual s described in this Owner's knowledge and belief, the Owner's Data Report.
Date 10/11 19 94				
Inspector's Signature		Commissions	9536 W National Bo	NBT pard, State and No.

WNP-2 Interval: 1

Washington Public Power Supply System NIS-1

(Grouped by: Category)

Owner: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
 Plant: WNP-2, HANFORD RESERVATION, BENTON COUNTY WA.
 Plant Unit: WNP-2
 Owner Certificate of Authorization: N/A
 Commercial Service Date: 12/13/1984
 National Board Number: N/A
 Abstract of Examinations. LIST OF EXAMINATIONS:

CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#	
B-A	AD	#3-#4 SC CRC WD	81.11	VOL	RPV-101	
B-A	AE	#4 SC-FL CRC WD	B1.30	VOL	RPV-101	
B-A	BN	#4 SC VRT W@330	B1.12	VOL	RPV-101	
B-A	вР	#4 SC VRT W@ 90	B1,12	VOL	RPV-101	
B-A	BR	#4 SC VRT W@210	B1.12	VOL	RPV-101	
B-A	AG	TOP HD-FLG WELD	B1.40	SUR	RPV-102	
B-A	AG	TOP HD-FLG WELD	B1.40	VOL	RPV-102	
B-E	N12	VESS INST PENT	B4.13	VT-2	RPV-101	
B-E	N14	VESS INST PENT	B4.13	VT-2	RPV-101	
B-E	CRD	CRD PEN (185EA)	B4.12	VT-2	RPV-102	
8-E	INCORE	INCOR PEN(55EA)	B4.11	VT-2	RPV-102	
B-F	12RHR(1)B-10	VLV TO SE	B5.50	SUR	RHR-106	
8-F	12RHR(1)B-10	VLV TO SE	B5.50	VOL	RHR-106	
B-G-1	RPV BUSHING	RPV BUSHING	B6,50	′ V T-1	RPV-101	
B-G-1		THREADS-RPV FLG	B6.40	VOL	RPV-101	
B-G-1		VALVE BOLTING	B6.210	VOL	RRC-101	
B-G-1		VALVE BOLTING	B6.210	VT-1	RRC-101	
8-G-1	RRC-V-60B-BLT	VALVE BOLTING	B6.210	VOL	RRC-102	
B-G-1	RRC-V-60B-BLT	VALVE BOLTING	B6.210	VT-1	RRC-102	
B-G-1	RRC-P-1A-BLT	PUMP BOLTING	B6.180	VOL	RRC-103	
B-G-1	RRC-P-1A-BLT	PUMP BOLTING	B6.180	VT-1	RRC-103	
B-G-1	RRC-P-1B-BLT	PUMP BOLTING	B6.180	VOL	RRC-103	
B-G-1	RRC-P-1B-BLT	PUMP BOLTING	B6,180	VT-1	RRC-103	
B-G-2	MS-V-22B-BLT	VALVE BOLTING	B7.70	VT-1	MS-102	
B-G-2	MS-V-288-BLT	VALVE BOLTING	B7.70	VT-1	MS-102	
B-G-2	MS-V-22C-BLT	VALVE BOLTING	B7.70	VT-1	MS-103	
B-G-2	MS-V-28C-BLT	VALVE BOLTING	B7.70 ·	VT-1	MS-103	
B-G-2	6RCIC(1)-44BD	FLANGE BOLTING	B7,50	VT-1	RCIC-102	
B-G-2	CRD HOUSING 18-59 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 22-59 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
8-G-2	CRD HOUSING 18-47 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 30-47 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 18-43 BLT	CRD HOUSING BLT	B7,80	VT-1 ,	RPV-102	
B-G-2	CRD HOUSING 22-43 BLT	CRD HOUSING BLT	B7,80	VT-1	RPV-102	
B-G-2	CRD HOUSING 30-43 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	

(Grouped by: Category)

- 10. Abstract of Examinations, LIST OF EXAMINATIONS:

 CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#	
B-G-2	CRD HOUSING 42-43 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 46-39 BLT 、	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 54-39 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 42-35 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 02-31 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 10-31 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 30-31 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 42-31 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 58-31 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 02-27 BLT	CRD HOUSING BLT	87.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 26-27 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 38-27 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 50-27 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 22-23 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 30-23 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 38-23 BLT	CRD HOUSING BLT	,B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 18-19 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 22-19 BLT	CRD HOUSING BLT	87.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 58-19 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 26-15 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 34-15 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 22-11 BLT	CRD HOUSING BLT	87.80	VT-1	RPV-102	(
B-G-2	CRD HOUSING 22-07 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
B-G-2	CRD HOUSING 26-07 BLT	CRD HOUSING BLT	B7.80	VT-1	RPV-102	
в-н	STAB-BRACKET-0	STAB LUG @ 0	B8.10	SUR	RPV-101	
в-н	STAB-BRACKET-45	STAB LUG @ 45	B8,10	SUR	RPV-101	
B-H	STAB-BRACKET-90	STAB LUG @ 90	B8.10	SUR	RPV-101	
в-н	STAB-BRACKET-135	STAB LUG @ 135	B8.10	SUR	RPV-101	
в-н	STAB-BRACKET-180	STAB LUG @ 180	B8.10	SUR	RPV-101	
в-н	STAB-BRACKET-225	STAB LUG @ 225	B8.10	SUR	RPV-101	
в-н	STAB-BRACKET-270	STAB LUG @ 270	B8.10	SUR	RPV-101	
в-н	STAB-BRACKET-315	STAB LUG @ 315	B8.10	SUR	RPV-101	
B-J	26MS(1)A-1	NZ/TRANSITION	B9.11	SUR	MS-101	
B-J	26MS(1)A-1	NZ/TRANSITION	B9.11	VOL	MS-101	
B~J	26MS(1)A-2	TRANSITION/PIPE	B9.11	SUR	MS-101	
8-J	26MS(1)A-2	TRANSITION/PIPE	B9.11	VOL	MS-101	
B√J	26MS(1)A-9	ELL TO PIPE	B9.11	sur."	MS-101	
B-J	26MS(1)A-9	ELL TO PIPE	B9.11	VOL	MS-101	

WNP-2 Interval: 1

Washington Public Power Supply System NIS-1

(Grouped by: Category)

1. Owner: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. Plant: WNP-2, HANFORD RESERVATION, BENTON COUNTY WA.
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: N/A
5. Commercial Service Date: 12/13/1984
6. National Board Number: N/A
10. Abstract of Examinations, LIST OF EXAMINATIONS:

 CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#	
8-J	26MS(1)B-1	NZ/TRANSITION	B9.11	SUR	MS-102	•
B⊸J	26MS(1)B-1	NZ/TRANSITION	B9.11	VOL	MS-102	
B-J	26MS(1)B-2	TRANSITION/PIPE	B9.11	SUR	MS-102	
8-J	26MS(1)B-2	TRANSITIONPIPE	B9.11	VOL	MS-102	
B√J	26MS(1)B-3	PIPE TO ELL	B9.11	SUR	MS-102	
8-√	26MS(1)B-3	PIPE TO ELL	B9.11	VOL	MS-102	
B√J	26MS(1)B-3LDO	ELL SEAM	B9.12	SUR	MS-102	
₽√	26MS(1)B-3LDO	ELL SEAM	B9.12	VOL	MS-102	
₽√	26MS(1)B-3LDI	ELL SEAM	B9.12	SUR	MS-102	
B√	26MS(1)B-3LDI	ELL SEAM	B9.12	VOL	MS-102	
B√J	26MS(1)B-16	PIPE TO VALVE	B9.11	SUR	MS-102	
B≺J	26MS(1)B-16	PIPE TO VALVE	B9.11	VOL	MS-102	
B√	MS-V-22B/2MS(9)-4	DRAIN CONN	B9.32	SUR	MS-102	
B√J	MS-V-28B/2MS(9)-4	DRAIN CONN	B9.32	SUR	MS-102	
B√J	26MS(1)C-1	NZ / TRANSITION	B9.11	SUR	MS-103	
B√J	26MS(1)C-1	NZ / TRANSITION	B9.11	VOL	MS-103	
8~/	26MS(1)C-2	TRANSITION/PIPE	B9.11	SUR	MS-103	
B√	26MS(1)C-2	TRANSITION/PIPE	B9.11	VOL	MS-103	
B√	26MS(1)C-6	PIPE TO ELL	B9.11	SUR	MS-103	
B√	26MS(1)C-6	PIPE TO ELL	B9.11	VOL	MS-103	
B√	26MS(1)C-6LDI	ELL SEAM	89.12	SUR	MS-103	
B-J	26MS(1)C-6LDI	ELL SEAM	B9.12	VOL	MS-103	
B-J	26MS(1)C-6LDO	ELL SEAM	B9.12	SUR	MS-103	
₿⊸Ј	26MS(1)C-6LDO	ELL SEAM	B9.12	VOL	MS-103	1
B-J	26MS(1)C-7LUI	ELL SEAM	B9.12	SUR	MS-103	
B-J	26MS(1)C-7LUI	ELL SEAM	B9.12	VOL	MS-103 .	
B-J	26MS(1)C-7LUO	ELL SEAM	B9.12	SUR	MS-103	
8~/	26MS(1)C-7LUO	ELL SEAM	B9.12	VOL	MS-103	
B-J	26MS(1)C-7	ELL TO PIPE	B9.11	SUR	MS-103	
B~J	26MS(1)C-7	ELL TO PIPE	89.11	VOL	MS-103	
B√J	MS-V-22C/2MS(9)-4	DRAIN CONN	B9.32	SUR	MS-103	
B-J	26MS(1)D-1	NZ / TRANSITION	89.11	SUR	MS-104	
B⊷J	26MS(1)D-1	NZ / TRANSITION	89.11	VOL	MS-104	
B√J	26MS(1)D-2	TRANSITION/PIPE	B9.11	SUR	MS-104	
B√J	26MS(1)D-2	TRANSITION/PIPE	89.11	VOL	MS-104	
B√J	10RCIC(12)-9	PIPE TO ELL	B9.11	SUR	RCIC-101	
B√	10RCIC(12)-9	PIPE TO ELL	B9.11	VOL	RCIC-101	
B√J	10RCIC(12)-10	ELL TO PIPE	B9.11	SUR	RCIC-101	
B-J	10RCIC(12)-10	ELL TO PIPE	B9.11	VOL	RCIC-101	
B√J	10RCIC(12)-10A	PIPE TO PIPE	B9.11	SŲR	RCIC-101	
В	10RCIC(12)-10A	PIPE TO PIPE	89.11	VOL	RCIC-101	
B√J	10RCIC(12)-13	PIPE TO ELL	B9.11	SUR	RCIC-101	

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(Grouped by: Category)

- 1. Owner: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
 2. Plant: WNP-2, HANFORD RESERVATION, BENTON COUNTY WA.
 3. Plant Unit: WNP-2
 4. Owner Certificate of Authorization: N/A
 5. Commercial Service Date: 12/13/1984
 6. National Board Number: N/A
 10. Abstract of Examinations. LIST OF EXAMINATIONS:

 CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#
B√J	10RCIC(12)-13	PIPE TO ELL	B9.11	VOL	RCIC-101
8-√	10RCIC(12)-14	ELL TO PIPE	B9.11	SUR	RCIC-101
₽	10RCIC(12)-14	ELL TO PIPE	B9.11	VOL	RCIC-101
B√J	10RCIC(12)-16	PEN TO ELL	B9,11	SUR	RCIC-101
B√J	10RCIC(12)-16	PEN TO ELL	B9,11	VOL	RCIC-101
₿~Ј	10RCIC(12)-17	ELL TO PIPE	B9.11	SUR	RCIC-101
B-J	10RCIC(12)-17	ELL TO PIPE	B9.11	VOL	RCIC-101
B√J	10RCIC(12)-18	ELL TO VALVE	B9.11	SUR	RCIC-101
₿~Ј	10RCIC(12)-18	ELL TO VALVE	B9.11	VOL	RCIC-101
B√J	24RFW(1)A-5	VALVE TO PIPE	B9,11	VOL	RFW-101
B√J	24RFW(1)B-5	VALVE TO PIPE .	B9.11	SUR	RFW-102
B-J	24RFW(1)8-5	VALVE TO PIPE	B9.11	VOL	RFW-102
B√J	14LPCI(1)B-1	VLV TO PIPE	B9.11	SUR	RHR-102
B√J	14LPCI(1)B-1	VLV TO PIPE	89.11	VOL	RHR-102
B√J	14LPCI(1)B-2	PIPE TO ELL	89.11	SUR	RHR-102
B√J	14LPCI(1)B-2	PIPE TO ELL	B9.11	VOL.	RHR-102
B√J	14LPCI(1)C-2	PIPE TO ELL	B9.11	SUR	RHR-103
B√J	14LPCI(1)C-2	PIPE TO ELL	B9.11	VOL	- RHR-103
8√	12RHR(1)A-1D	VALVE TO PIPE	B9.11	SUR	RHR-105
B√J	12RHR(1)A-1D	VALVE TO PIPE	B9.11	VOL	RHR-105
B√J	12RHR(1)A-2	PIPE TO ELL	B9.11	SUR	RHR-105
B√J	12RHR(1)A-2	PIPE TO ELL	B9.11	VOL	RHR-105
8-J	12RHR(1)A-3	ELL TO PIPE	B9.11	SUR	RHR-105
B√J	12RHR(1)A-3	ELL TO PIPE	B9.11	VOL	RHR-105
B√	12RHR(1)A-4	PIPE TO ELL	B9,11	SUR	RHR-105
B√J	12RHR(1)A-4	PIPE TO ELL	B9.11	VOL	RHR-105
8-J	12RHR(1)A-5	ELL TO PEN	B9.11	SUR	RHR-105
B-J	12RHR(1)A-5	ELL TO PEN	B9.11	VOL'	RHR-105
B√J	24RRC(1)A-13/8CAP	PIPE TO SWL	89.31	SUR	RRC-101
B√	24RRC(1)A-13/8CAP	PIPE TO SWL	B9.31	VOL	RRC-101
B-J	20RRC(6)-8	PIPE TO VALVE	B9.11	VOL	RRC-105
B√	12RRC(7)B-2ALU	PIPE SEAM	B9.12	SUR	RRC-107
B√J	12RRC(7)B-2ALU	PIPE SEAM	B9.12	VOL	RRC-107
в√	12RRC(7)B-2A	PIPE TO PIPE	B9.11	SUR	RRC-107
B√J	12RRC(7)B-2A	PIPE TO PIPE	B9.11	VOL	RRC-107
B√J	12RRC(7)B-2ALD	PIPE SEAM	B9.12	SUR	RRC-107
B√	12RRC(7)B-2ALD	PIPE SEAM	B9.12	VOL	RRC-107
B-J	12RRC(7)B-2LU	PIPE SEAM	B9.12	SUR	RRC-107
B√	12RRC(7)B-2LU	PIPE SEAM	B9.12	VOL	RRC-107
B√J	12RRC(7)8-2	PIPE TO ELL	B9.11	SUR.	RRC-107
B-J	12RRC(7)8-2	PIPE TO ELL	B9.11	VOL	RRC-107
				-	

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WNP-2 Interval: 1

Washington Public Power Supply System NIS-1

(Grouped by: Category)

1. Owner: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. Plant: WNP-2, HANFORD RESERVATION, BENTON COUNTY WA.
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: N/A
5. Commercial Service Date: 12/13/1984
6. National Board Number: N/A
10. Abstract of Examinations. LIST OF EXAMINATIONS:

	CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#	
	8~/	2RWCU(4)-1	VALVE TO PIPE	B9.21	SUR	RWCU-101	
	•						
	B-K-1	MS-HA-2(W)	4 WELDED LUGS	B10.10	SUR	MS-101	
	B-K-1	MS-HB-3(W)	4 WELDED LUGS	B10.10	SUR	MS-102	
	B-K-1	RRC-1C-1(W)	8 WELDED LUGS	B10.10	SUR	RRC-104	
	B-M-2	RHR-V-8-8DY	VALVE BODY	B12.40	VT-3	RHR-104	
-					•••		
	B-N-1	RPV INTERIOR	RPV INTERIOR	B13.10	VT-3	RPV-101	
		•		2.5,,,	0.1-0		
	B-N-2	RPV CORE SUPPORTS	CORE SUPPORTS	B13.21	VT-1	PM/ 101	
	B-N-2	RPV INTERIOR ATTACH				RPV-101	
	U-11-2	REV INTERIOR ATTACH	INTERIOR ATTACH	B13.20	VT-1	RPV-101	
}						•	
	8-P	HPCS-P8-101(H)	HYDRO PRES BNDR	B15.51	VT-2	HPCS-101	
	B-P	LPCS-PB-101(H)	HYDRO PRES BNDR	B15.51	VT-2	LPCS-101	
	B-P	MS-PB-101(H)	HYDRO PRES BNDR	B15.51	VT-2	MS-101	
	B-P	MS-P8-102(H)	HYDRO PRES BNDR	B15.51	VT-2	MS-102	
	B-P	MS-PB-103(H)	HYDRO PRES BNDR	B15.51	VT-2	MS-103	
	B-P	MS-PB-104(H)	HYDRO PRES BNDR	B15.51	VT-2	MS-104	
	B-P	MS-P8-105(H)	HYDRO PRES BNDR	B15.51	VT-2	MS-105	
	B-P	MS-PB-106(H)	HYDRO PRES BNDR	B15.51	VT-2	MS-106	
	B-P	RCIC-PB-101(H)	HYDRO PRES BNDR	815.51	VT-2	RCIC-101	
	в-Р	RCIC-PB-102(H)	HYDRO PRES BNDR	B15.51	VT-2	RCIC-102	
	B-P	RFW-PB-101(H)	HYDRO PRES BNDR	B15.51	VT-2	RFW-101	
	B-P	RFW-PB-102(H)	HYDRO PRES BNDR	B15.51	VT-2	RFW-102	
	8-P	RFW-PB-103(H)	HYDRO PRES BNDR	B15,51	VT-2	RFW-103	
	B-P	RHR-P8-101(H)	HYDRO PRES BNDR	B15.51	VT-2	RHR-101 -	
	в-Р	RHR-PB-102(H)	HYDRO PRES BNDR	815.51	VT-2	RHR-102	
	в-Р	RHR-PB-103(H)	HYDRO PRES BNDR	B15.51	V1-2	RHR-103	
	в-Р	RHR-PB-104(H)	HYDRO PRES BNDR	B15,51	VT-2	RHR-104	
	8-P	RHR-PB-105(H)	HYDRO PRES BNDR	B15.51	VT-2	RHR-105	
	B-P	RHR-P8-106(H)	HYDRO PRES BNDR	B15.51	VT-2	RHR-106	
	8-P	RPV-PB-101(H)	HYDRO PRES BNDR	B15.11	VT-2	RPV-101	
	в-Р	RPV-PB-102(H)	HYDRO PRES BNDR	B15.10	VT-2	RPV-102	
	в-Р	RRC-PB-101(H)	HYDRO PRES BNDR	815.51	VT-2	RRC-101	
	B-P	RRC-P8-102(H)	HYDRO PRES BNDR	B15.51	VT-2	RRC-102	
	в-Р	RRC-PB-103(H)	HYDRO PRES BNDR	B15.51	VT-2	RRC-103	
	В-Р	RRC-P8-104(H)	HYDRO PRES BNDR	B15.51	VT-2	RRC-104	

WNP-2 Interval: 1

Washington Public Power Supply System NIS-1

(Grouped by: Category)

1. Owner: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. Plant: WNP-2, HANFORD RESERVATION, BENTON COUNTY WA.
3. Plant Unit: WNP-2

Owner Certificate of Authorization: N/A
 Owner Certificate of Authorization: N/A
 Commercial Service Date: 12/13/1984
 National Board Number: N/A
 Abstract of Examinations, LIST OF EXAMINATIONS:

					_		
CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#		
B-P	RRC-P8-105(H)	HYDRO PRES BNDR	B15.51	VT-2	RRC-105		
3-P	RRC-PB-106(H)	HYDRO PRES BNDR	B15.51	VT-2	RRC-106		
3 - P	RRC-PB-107(H)	HYDRO PRES BNDR	B15.51	VT-2	RRC-107		
3-₽	RRC-PB-108(H) .	HYDRO PRES BNDR	B15.51	VT-2	RRC-108		
3-P	RRC-PB-109(H)	HYDRO PRES BNDR	B15.51	VT-2	RRC-109		
B-P	RRC-PB-110(H)	HYDRO PRES BNDR	B15,51	VT-2	RRC-110		
3-P	RRC-PB-111(H)	HYDRO PRES BNDR	B15.51	VT-2	RRC-111		
3-P	RWCU-PB-101(H)	HYDRO PRES BNDR	B15.51	VT-2	RWCU-101		
B-P	SLC-PB-101(H)	HYDRO PRES BNDR	B15.51	VT-2	SLC-101		
c-c	MS-180(W)	WELDED SADDLE	C3.40	SUR	MS-205		
c-c	RHR-555(W)	4 WELDED LUGS	C3.40	SUR	RHR-207		
5-C	RHR-945N(W)	8 WELDED LUGS	C3.40	SUR	RHR-207		
c-c	RHR-925N(W)	1 WELDED LUG	C3.40	SUR	RHR-207		
5-C	RHR-967N(W)	WELDED SADDLE	C3.40	SUR	RHR-207		
ċc.	RHR-557(W)	8 WELDED LUGS	C3.40	SUR	RHR-207		4
c-c	BS-1	HEATXCHG SUP WD	C3.10	SUR	, RHR-214		
C-F-2	24HPCS(2)-5	ELBOW TO PIPE	C5.51	SUR	HPCS-201		
C-F-2	24HPCS(2)-5	ELBOW TO PIPE	C5.51	VOL	HPCS-201		
C-F-2	24HPCS(2)-17	FLANGE TO PIPE	C5.51	SUR	HPCS-201		
C-F-2	24HPCS(2)-17	FLANGE TO PIPE	C5.51	VOL	HPCS-201		
C-F-2	16HPCS(1)-49/3(10)-4	BRANCH CONN	C5.81	SUR	HPCS-202		
C-F-2	16HPCS(1)-50	PIPE TO RED	C5.51	SUR	HPCS-202		
C-F-2	16HPCS(1)-50	PIPE TO RED	C5.51	VOL	HPCS-202		
C-F-2	16LPCS(1)-34	PIPE TO FLANGE	C5.51	SUR	LPCS-202		
C-F-2	16LPCS(1)-34	PIPE TO FLANGE	C5.51	VOL	LPCS-202		
C-F-2	12RHR(1)A-1C	FLANGE TO PIPE	C5.51	SUR	RHR-201		
C-F-2	12RHR(1)A-1C	FLANGE TO PIPE	C5.51	VOL	RHR-201		
C-F-2	16RHR(5)B-6	PIPE TO VALVE	C5.51	SUR	RHR-207		
C-F-2	16RHR(5)B-6	PIPE TO VALVE	C5.51	VOL	RHR-207		
C-G	RCIC-P-1S	PMP NOZZLE WELD	C6,10	SUR	RCIC-204	•	
C-G	RCIC-P-1D	PMP NOZZLE WELD	C6.10	SUR	RCIC-205		
							. 4
C-H	CRD-PB-201(H)	HYDRO PRES BNDR	C7.21	VT-2	CRD-201		· •
C-H	CRD-P8-202(H)	HYDRO PRES BNDR	C7.21	VT-2	CRD-202		
C-H	HPCS-PB-201(H)	HYDRO PRES BNDR	C7.21	VT-2	HPCS-201		
C-H	HPCS-PB-202(H)	HYDRO PRES BNDR	C7.21	VT-2	HPCS-202		

WNP-2 Interval: 1

Washington Public Power Supply System NIS-1

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(Grouped by: Category)

1. Owner: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. Plant: WNP-2, HANFORD RESERVATION, BENTON COUNTY WA.
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: N/A
5. Commercial Service Date: 12/13/1984
6. National Board Number: N/A
10. Abstract of Examinations. LIST OF EXAMINATIONS:

	CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#
	C-H	LPCS-PB-201(H)	HYDRO PRES BNDR	C7.21	VT-2	LPCS-201
	C-H	LPCS-PB-202(H)	HYDRO PRES BNDR	C7.21	VT-2	LPCS-202
	C-H	RCC-PB-201(H)	HYDRO PRES BNDR	C7.21	VT-2	RCC-201
	C-H	RCC-PB-202(H)	HYDRO PRES BNDR	C7.21	VT-2	RCC-202
	C-H	RCIC-PB-201(H)	HYDRO PRES BNDR	C7.21	VT-2	RCIC-201
	CH	RCIC-PB-203(H)	HYDRO PRES BNDR	C7.21	VT-2	RCIC-203
	C-H	RCIC-PB-204(H)	HYDRO PRES BNDR	C7.21	VT-2	RCIC-204
	C-H	RCIC-PB-205(H)	HYDRO PRES BNDR	C7.21	VT-2	RCIC-205
	C-H	RHR-PB-201(H)	HYDRO PRES BNDR	C7.21	VT-2	RHR-201
	CH	RHR-PB-202(H)	HYDRO PRES BNDR	C7.21	VT-2	RHR-202
	C-H	RHR-PB-203(H)	HYDRO PRES BNDR	C7.21	VT-2	RHR-203
	C-H	RHR-P8-205(H)	HYDRO PRES BNDR	C7.21	VT-2	RHR-205
	C-H	RHR-PB-206(H)	HYDRO PRES BNDR	C7.21	VT-2	RHR-206
	с-н	RHR-PB-207(H)	HYDRO PRES BNDR	C7.21	VT-2	RHR-207
	C-H	RHR-PB-209(H)	HYDRO PRES BNDR	C7.21	VT-2	RHR-209
	C-H	RHR-PB-210(H)	HYDRO PRES BNDR	C7.21	VT-2	RHR-210
	C-H	RHR-PB-211(H)	HYDRO PRES BNDR	C7.21	VT-2	RHR-211
					_	
	D-A	MS-P8-301(H)	HYDRO PRES BNDR	D4 40		110 204
	D-A	MS-PB-302(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-301
	D-A		HYDRO PRES BNDR	D1.10	VT-2	MS-302
	D-A	MS-PB-303(H) MS-PB-304(H)	HYDRO PRES BNDR	D1.10 D1.10	VT-2	MS-303 MS-304
	D-A	MS-PB-305(H)	HYDRO PRES BNDR	D1.10	VT-2 VT-2	MS-305
	D-A	MS-PB-306(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-306
	D-A	MS-PB-307(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-307
	D-A	MS-PB-308(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-308
	D-A	MS-PB-309(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-309
	D-A	MS-PB-310(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-310
	D-A	MS-PB-311(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-311
	D-A	MS-PB-312(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-312
	D-A	MS-PB-313(H)	HYDRO PRES BNDR	D1,10	VT-2	MS-313
	D-A	MS-PB-314(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-314
	D-A	MS-PB-315(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-315
	D-A	MS-PB-316(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-316
	D-A	MS-PB-317(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-317
	D-A	MS-PB-318(H)	HYDRO PRES BNDR	D1.10	VT-2	MS-318
	•	, · · · /				
	D-B	SW-PB-301(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-301
ı	D-8	SW-PB-302(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-302
	D-B	SW-PB-303(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-303

WF

RHR-552

STRUT

(Grouped by: Category)

- Owner: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
 Plant: WNP-2, HANFORD RESERVATION, BENTON COUNTY WA.
 Plant Unit: WNP-2
 Owner Certificate of Authorization: N/A
 Commercial Service Date: 12/13/1984
 National Board Number: N/A

- 10. Abstract of Examinations. LIST OF EXAMINATIONS:

 CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#
D-8	SW-PB-304(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-304
D-B	SW-PB-305(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-305
D-B	SW-PB-306(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-306
D-B	SW-PB-307(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-307
D-B	SW-P8-308(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-308
D-8	SW-PB-309(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-309
D-B	SW-PB-310(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-310
D-B	SW-PB-311(H)	HYDRO PRES BNDR	D2.10	VT-2	SW-311
		4			
D-C	FPC-PB-305(H)	HYDRO PRES BNDR	D3.10	VT-2	FPC-305
	This item was perfo	ormed 3/1/93, but wa	s not inclu	ded in the	e R8 NIS-1 report
WF	LPCS-32	RIGID	F-X	V Т3Н	LPCS-206
WF	LPCS-45	RIGID	F-X	VT3H	LPCS-206
WF	LPCS-33	RIGID	F-X	VT 3H	LPCS-206
WF	LPCS-35	SPRING	F-X	VT3 H	LPCS-206
WF	LPCS-34	RIGID	F-X	V Т3H	LPCS-206
WF	LPCS-36	ANCHOR	F•X	VT3 H	LPCS-206
WF	MS-2619-210	STRUT	F-X	VT3 H	MS-106
WF	MS-2619-26	STRUT	F-X	VT3 H	MS-106
WF	MS-2619-310	STRUT	F-X	V Т3Н	MS-106
WF	MS-2619-312	STRUT	F-X	V Т3Н	MS-106
WF	MS-2619-319	STRUT	F-X	V Т3Н	MS-106
WF	MS-2619-318	STRUT	F-X	V Т3Н	MS-106
WF	MS-2619-320	SPRING	F-X	V Т3Н	MS-106
WF	MS-2619-44	SPRING	F-X	VT3H	MS-106
WF	MS-2619-46	STRUT	F-X	V Т3Н	MS-106
WF	MS-2619-45	PSA-1/4 SNUBBER	F-X	V Т3Н	MS-106
WF	MS-2619-43	SPRING	F-X	V Т3Н	MS-106 '
WF	MS-2619-42A	STRUT	F-X	VТЗН	MS-106
WF	MS-2619-42C	PSA-1/2 SNUBBER	F•X	V Т3Н	MS-106
WF	MSRV-4A-10	STRUT	F-X	VT3 H	MS-304
WF	RCC-909N	STRUT	F•X	V Т3Н	RCC-301
WF	RHR-521	SPRING	F-X	V Т3Н	RHR-102
WF	RHR-597	STRUT	F-X	VT3 H	RHR-204
WF	RHR-968N	ANCHOR	F-X	VT3 H	RHR-207
WF	RHR-540	STRUT	F-X	V Т3Н	RHR-207
WF	RHR-539	STRUT	F-X	VT 3H	RHR-207
WF	RHR-551	PSA-3 SN(2)	F-X	VT 3H	RHR-207
WF	RHR-553	STRUT	F-X	V Т3Н	RHR-207
	DUD 550	070177			

F-X

VT3H

RHR-207

WNP-2 Interval: 1

Washington Public Power Supply System NIS-1

(Grouped by: Category)

1. Owner: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. Plant: WNP-2, HANFORD RESERVATION, BENTON COUNTY WA.
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: N/A
5. Commercial Service Date: 12/13/1984
6. National Board Number: N/A
10. Abstract of Examinations. LIST OF EXAMINATIONS:

	CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#
	WF	RHR-554	STRUT	F-X	VT3H	RHR-207
	WF	RHR-555	SPRING	F-X	VT3H	RHR-207
	WF	RHR-1002N	PSA-3 SN(2)	F•X	VT3H	RHR-207
,	WF	RHR-556	STRUT	F-X	VT3H	RHR-207
	WF	RHR-980N	PSA-10 SNUBBER	F•X	VT3H	RHR-207
	WF	RHR-928N	SPRING	F-X	VT3H	RHR-207
	WF	RHR-925N	SPRING	F-X	V Т3Н	RHR-207
	WF	RHR-1020N	STRUT	F-X	VT3 H	RHR-207
	WF	RHR-927N	SPRING	F-X	VT3H	RHR-207
	WF	RHR-967N	ANCHOR	F-X	VT3H	RHR-207
	₩F	RHR-558	PSA-3 SNUBBER	F-X	VT3 H	RHR-207
	WF	RHR-557	STRUT	F-X	VT3H	RHR-207
	WF	RHR-559	SPRING	F-X	VT3 H	RHR-207
	WF	RHR-562	PSA-3 SNUBBER	F-X	VT3H	RHR-207
	WF	RHR-561	STRUT	F-X	VТ 3Н	RHR-207
	WF	RHR-563	PSA-1 SN(2)	F-X	V Т3Н	RHR-207
	₩F	RHR-560	SPRING *	F-X	V Т3Н	RHR-207
	WF	RHR-461	SPRING	F-X	VT3 H	RHR-207
	₩F	RHR-565	STRUT	F-X	VT3H	RHR-207
-	₩F	RHR-564	STRUT	F•X	VT3H	RHR-207
	IWF	RHR-459	STRUT	F-X	VT3H	RHR-207
	₩F	RHR-52	PSA-3 SNUBBER	F-X	VT3H	RHR-207
	WF	RHR-998N	PSA-3 SNUBBER	F-X	VT3H	RHR-207
	WF	RHR-937N	RIGID	F-X	VT3H	RHR-207
	WF	RHR-962N	PSA-10 SNUBBER	F-X	VT3H	RHR-207
	WF	RHR-931N	SPRING	F-X	VT3H	RHR-207
	WF	RHR-906N	PSA-10 SN(2)	F-X	VT3H	RHR-207
	WF	RHR-914N	PSA-10 SNUBBER	F-X	VT3H	RHR-207
	WF	RHR-183	PSA-10 SN(2)	F-X	VT3H	RHR-207
	WF	RHR-932N	SPRING	F•X	VT3H	RHR-207
	WF	RHR-913N	PSA-3 SNUBBER	F-X	VT3H	RHR-207
	₩F	RHR-903N	PSA-3 SNUBBER	F-X	VT3H	RHR-207
	WF	RHR-219	SPRING	F-X	VT3H	RHR-207
	WF	RRC-12	SPRING	F-X	VT3H	RRC-104
	WF	RRC-1C-1	PSA-1 SN(2)	F-X	VT3H	RRC-104
	WF	RRC-1C-900N	PSA-1 SN(2)	F-X	VT3H	RRC-104
	WF	SLC-4453-68	STRUT	F-X	VT3H	SLC-101
)	WF	SLC-4475-25	STRUT	F-X	VT3H	SLC-101
7	WF	SLC-4475-24	STRUT	F-X	УТЗН	SLC-101
	WF	SLC-4475-21	PSA-1 SNUBBER	F-X	V Т3Н	SLC-101
	WF	SLC-4475-22	SPRING	F-X	VT3H	SLC-101
	WF	SLC-4475-121	SPRING	F-X	УТЗН	SLC-101

WNP-2 Interval: 1

Washington Public Power Supply System

NIS-1

(Grouped by: Category)

1. Owner: WASHINGTON PUBLIC POWER SUPPLY SYSTEM, 3000 GEORGE WASHINGTON WAY, P.O. BOX 968, RICHLAND, WASHINGTON 99352
2. Plant: WNP-2, HANFORD RESERVATION, BENTON COUNTY WA.
3. Plant Unit: WNP-2
4. Owner Certificate of Authorization: N/A
5. Commercial Service Date: 12/13/1984
6. National Board Number: N/A
10, Abstract of Examinations. LIST OF EXAMINATIONS:

CATA	IDENTIFICATION NO.	DESCRIPTION	ITEM#	METH	DRAWING#	-
₩F	SLC-4475-117	STRUT	F-X	VT3H	SLC-101	•

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APPENDIX B

This appendix summarizes the ISI results for refueling outage RF94A. This outage is identified as R9 in this summary.

Appendix B Washington Public Power Supply System - WNP-2 ISI Examination Results - R9

Identification No.			Item No.		Data Rpt. No.	Noind	Insig	Geom	Other	Remarks
				6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	> Da	ta report	No recor	Indicatio	n below . Record	Indication does not fit into the other three categories on caused by part geometry 100% DAC for UT is recordable per SS lable indication for SUR and VT
					-> Examinati	on method	l			
		ŭ 1 1 1 6 7	>	Secti	on XI item n	umber				
		>	Section	n XI C	ode category	identifi	cation			
> Item ISI Program	> Item desc									l

Appendix B Washington Public Power Supply System - WNP-2 ISI Examination Results - R9

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	Noind	Insig	Geom	Other	Remarks
Drawing # CRD-201			-							
6CRD(12)A-4	ELL TO PIPE	N/A	AUGHT	VOL	1CRU-004			45		50% AND 70% DAC 180 to 360 degree - ID geometry. 50% DAC beam redirect due to weld crown surface.
6CRD(12)A-7	PIPE TO TEE	N/A	AUGMT	VOL	1CRU-010		45	45		60% DAC 0-180 beam redirect and 00 crown. 110% DAC 0-180 degree beam redirect.
8CRD(12)A-3	ELL TO ELL	N/A	AUGHT	VOL	1CRU-006	45				No recordable indications
6CRD(12)A-12	PIPE TO ELL	N/A	AUGHT	VOL	1CRU-005	45				No recordable indications
8CRD(12)A-13	PIPE TO TEE	N/A	AUGMT	VOL	1CRU-007			45		50% DAC 0-180 degree, 63% DAC 180 - 360 degree ID Geometry
8CRD(12)A-15	ELL TO PIPE	N/A	AUGMT	VOL	1CRU-008	45				No Recordable indications
8CRD(12)A-19	ELL TO PIPE	H/A	AUGHT	VOL	1CRU-009	45				No Recordable indications
8CRD(12)A-22/2FLG	PIPET TO EL	N/A	N/A	SUR	1CRM-004	ACC				No recordable indications
12CRD(12)A-3	PIPE TO CAP	H/A	AUGHT	VOL	1CRU-011		45			ID root geometry.
CRD-PB-201(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	CL29	ACC				No unacceptable indications
Drawing # CRD-202							•			1
CRD-PB-202(H)	HYDRO PRES BNDR	C-H	c7.21	VT-2	CL29	ACC				No unacceptable indications
Drawing # CSP-202										
24CSP(1)-3	TEE TO FLANGE	N/A	N/A	VOL	1CSU-014	45				No recordable indications
Drawing # HPCS-101										
10HPCS(1)-3	SE EXT TO SE	B-F	B5.10	VOL	R-R9-035		45,60			Beam redirect and root geometry were recorded. Exam limited to a "W" of 1.3" due to nozzle configuration. Manual examination covered examination volume that was missed by Smart 2000. Post MSIP

Appendix B Washington Public Power Supply System - WNP-2 . ISI Examination Results - R9

Identification No.	Description	Code Cate.	Item No.	<u>Heth</u>	Data Rpt. No.	<u>Noind</u>	Insig	Geom	<u>Other</u>	Remarks
Drawing # HPCS-101	SE TO NOZZLE	B-F	B5.10	VOL	R-R9-033	45				No recordable indications. Exam limited to a "W" of 1.15" from weld
										CL due to nozzle transition. Post
HPCS-PB-101(H) HPCS-PB-101(H)	HYDRO PRES BNDR HYDRO PRES BNDR		B15.51 B15.51		FS9301 CL29	ACC ACC				No unacceptable indications No unacceptable indications
Drawing # HPCS-201										
24HPCS(2)-5 24HPCS(2)-5	ELBOW TO PIPE ELBOW TO PIPE		C5.51 C5.51	SUR Vol	1HPM-014 1HPU-023	ACC 44				No recordable indications No recordable indications
24HPCS(2)-17 24HPCS(2)-17	FLANGE TO PIPE FLANGE TO PIPE		C5.51 C5.51	SUR VOL	1HPM-015 1HPU-022	ACC 45			k.	No recordable indications No recordable indications
HPCS-PB-201(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.30	ACC				No recordable indications
Drawing # HPCS-202										•
16HPCS(1)-49/3(10)-4	BRANCH CONN	C-F-2	C5.81	SUR	1HPM-016	ACC				No recordable indications
16HPCS(1)-50 16HPCS(1)-50	PIPE TO RED PIPE TO RED		C5.51 C5.51	SUR VOL	1HPM-013 1HPU-021	ACC 44			=	No recordable indications No recordable indications
HPCS-P8-202(H)	HYDRO PRES BNDR	C-H	c7.21	VT-2	7.4.0.5.30	ACC				No recordable indications \
Drawing # LPCS-101					*					
10LPCS(1)-3	SE EXT TO SE	B-F	B5.10	VOL	R-R9-022		45,60			ID and root geometry recorded. Optimum search unit contact was not achieved on the downstream side of the weld from a "W" of 0.3 to 1.1" from weld centerline due to the safe end taper configuration. Pre MSIP examination,

Appendix B Washington Public Power Supply System - WNP-2 ISI Examination Results - R9

Identification No.	Description	Code Cate.	Item No.	<u> Heth</u>	Data Rpt. No.	<u>Noind</u>	<u>Insig</u>	Geom	<u>Other</u>	Remarks
Drawing # LPCS-101 10LPCS(1)-3	SE EXT TO SE	B-F	B5.10	VOL	R-R9-041		45,60			ID and root geometry recorded.
										Optimum search unit contact was not achieved on the downstream side of the weld from a "W" of 0.3" to 1.1" from weld centerline due to safe end taper configuration. Post MSIP
10LPCS(1)-4	SE TO NOZZLE	B-F	B5.10	VOL	R-R9-037		45			examination. Geometry recorded. Exam limited to a "W" of 1.0" form weld CL due to nozzle transition. Post MSIP exam
LPCS-PB-101(H) LPCS-PB-101(H)	HYDRO PRES BNDR HYDRO PRES BNDR		B15.51 B15.51		FS9401 CL29	ACC ACC				No unacceptable indications No unacceptable indications
Drawing # LPCS-201										
LPCS-PB-201(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.29	ACC				No recordable indications
Drawing # LPCS-202									9	•
16LPCS(1)-34 16LPCS(1)-34	PIPE TO FLANGE PIPE TO FLANGE		C5.51 C5.51	SUR Vol	1LPM-019 1LPU-032	ACC 44				No recordable indications No recordable indications
LPCS-PB-202(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.29	ACC				No recordable indications
Drawing # LPCS-206										1
LPCS-32	RIGID	IWF	F-X	VT3H	1HV-0276	ACC				No recordable indications
LPCS-45	RIGID	IWF	F-X	VT3H	1HV-0275	ACC				No recordable indications
LPCS-33	RIGID	IWF	F-X	VT3H	1HV-0272	ACC		•		No recordable indications
LPCS-35	SPRING	IWF	F-X	VT3H	1HV-0271	ACC				No recordable indications
LPCS-34	RIGID	IWF	F-X	VT3H	1HV-0273	ACC				No recordable indications
LPCS-36	ANCHOR	IWF	F-X	VT3H	1HV-0274	ACC				No recordable indications

Appendix B Washington Public Power Supply System - WNP-2 ISI Examination Results - R9

Identification No.	Description	Code Cate.	Item No.	<u>Meth</u>	Data Rpt. No.	<u>Noind</u>	Insig	Geom	Other	Remarks
Drawing # HS-101										
26HS(1)A-1 26HS(1)A-1	NZ/TRANSITION NZ/TRANSITION	B-J B-J	B9.11 B9.11	SUR VOL	1MSM-067 1MSU-115	ACC 44	•			No recordable indications No recordable indications
26HS(1)A-2 26HS(1)A-2	TRANSITION/PIPE TRANSITION/PIPE	B-J B-J	B9.11 B9.11	SUR Vol	1HSM-067 1HSU-110	ACC 44				No recordable indications No recordable indications
26HS(1)A-9 26HS(1)A-9	ELL TO PIPE ELL TO PIPE	B-J B-J	B9.11 B9.11	SUR Vol	1MSH-063 1MSU-105	ACC 44				No recordable indications No recordable indications
MS-HA-2(W)	4 WELDED LUGS	B-K-1	B10.10	SUR	1HSH-070	ACC				No Recordable Indications
MS-PB-101(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # MS-102										
26HS(1)B-1 26HS(1)B-1	NZ/TRANSITION NZ/TRANSITION	B-J	B9.11 B9.11	SUR Vol	1HSM-066 1HSU-116	ACC 44				No recordable indications No recordable indications
26HS(1)B-2 26HS(1)B-2	TRANSITION/PIPE TRANSITION/PIPE	B-J	B9.11 B9.11	SUR Vol	1MSM-066 1MSU-111	ACC 44			-	No recordable indications No recordable indications
26MS(1)B-3 26MS(1)B-3	PIPE TO ELL PIPE TO ELL	B-J B-J	B9.11 B9.11	SUR Vol	1MSM-066 1MSU-112	ACC 44				No recordable indications No recordable indications
26HS(1)B-3LD0 26MS(1)B-3LD0	ELL SEAM ELL SEAM	B-J	B9.12 B9.12	SUR VOL	1MSM-066 1MSU-113	ACC 44				No recordable indications No recordable indications
26MS(1)B-3LDI 26MS(1)B-3LDI	ELL SEAM ELL SEAM	B-J	89.12 89.12	SUR VOL	1MSM-066 1MSU-114	ACC 44				No recordable indications No recordable indications
MS-HB-3(W)	4 WELDED LUGS	B-K-1	B10.10	SUR	1MSM-069	ACC				No Recordable Indications
26MS(1)B-16 26MS(1)B-16	PIPE TO VALVE	B-J B-J	89.11 89.11	SUR Vol	1MSM-062 1MSU-104	ACC 44				No recordable indications No recordable indications
MS-V-22B/2MS(9)-4	DRAIN CONN	B-J	B9.32	SUR	1MSM-062	ACC				No recordable indications
MS-V-22B-BLT	VALVE BOLTING	B-G-2	B7.70	VT-1	1MSV-154	ACC				No recordable indications
26HS(1)B-17	VALVE TO PENE	B-J	89.11	VOL	1MSU-099	45				No recordable indications

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	Noind	Insig	Geom	<u>Other</u>	Remarks
Drawing # MS-102										
26HS(1)B-18	PENE TO VALVE	B-J	B9.11	VOL	1MSU-097	45				No recordable indications
MS-V-28B/2MS(9)-4	DRAIN CONN	B-J	B9.32	SUR	1HSH-062	ACC				No recordable indications
MS-V-28B-BLT	VALVE BOLTING	B-G-2	B7.70	VT-1	1MSV-155	ACC				No recordable indications
MS-PB-102(H)	HYDRO PRES BNDR	в-Р	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # HS-103										
26MS(1)C-1 26MS(1)C-1	NZ / TRANSITION NZ / TRANSITION		89.11 89.11	SUR Vol	1HSM-065 1HSU-108	ACC 44				No recordable indications No recordable indications
26MS(1)C-2 26MS(1)C-2	TRANSITION/PIPE TRANSITION/PIPE		B9.11 B9.11	SUR Vol	1MSM-065 1MSU-107	ACC 44				No recordable indications No recordable indications
26MS(1)C-6 26MS(1)C-6	PIPE TO ELL PIPE TO ELL	8-J B-J	B9.11 B9.11	SUR VOL	1HSM-060 1HSU-102	ACC 45				No recordable indications No recordable indications
26HS(1)C-6LDI 26HS(1)C-6LDI	ELL SEAM ELL SEAM	B-J B-J	B9.12 B9.12	SUR VOL	1MSM-060 1MSU-102	ACC 45				No recordable indications No recordable indications
26HS(1)C-6LDO 26HS(1)C-6LDO	ELL SEAM ELL SEAM	B-J B-J	B9.12 B9.12	SUR VOL	1MSM-060 1MSU-102	ACC 45				No recordable indications No recordable indications
26HS(1)C-7LUI 26HS(1)C-7LUI	ELL SEAM ELL SEAM ,	B-J B-J	B9.12 B9.12	SUR Vol	1MSM-059 1MSU-103	ACC 45				No recordable indications \
26MS(1)C-7LUO 26MS(1)C-7LUO	ELL SEAM ELL SEAM	8-J B-J	B9.12 B9.12	SUR VOL	1HSM-059 1HSU-103	ACC 45				No recordable indications No recordable indications
26HS(1)C-7 26HS(1)C-7	ELL TO PIPE ELL TO PIPE	B-J B-J	89.11 89.11	SUR Vol	1MSM-059 1MSU-103	ACC 45				No recordable indications No recordable indications
26MS(1)C-12	PIPE TO PIPE	B-J	в9.11	THK	1MSU-100	NA				Min. reading was 1.0". per FDDR # KK1-299, rev 1, the min acceptable reading after 10 years is 0.9708".

Identification No.	Description	Code Cate.	Item No.	<u>Meth</u>	Data Rpt. No.	<u>Noind</u>	Insig	Geom	<u>Other</u>	Remarks
Drawing # MS-103										,
26HS(1)C-15	ELL TO PIPE	B-J	89.11	THK	1MSU-101	NA				Hin. reading was 1.0" FDDR # KK1- 299, REV 1 Requires a 0.9708" wall after 10 years.
26HS(1)C-16	PIPE TO VALVE	B-J	B9.11	VOL	1MSU-098	45				No recordable indications
MS-V-22C/2MS(9)-4	DRAIN CONN	B-J	B9.32	SUR	1MSM-061	ACC				No recordable indications
MS-V-22C-BLT	VALVE BOLTING	B-G-2	в7.70	VT-1	1MSV-153	ACC				No recordable indications
MS-V-28C-BLT	VALVE BOLTING	B-G-2	87.70	VT-1	1MSV-152	ACC				No recordable indications
MS-PB-103(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # MS-104										
26MS(1)D-1 26MS(1)D-1	NZ / TRANSITION NZ / TRANSITION		B9.11 B9.11	SUR Vol	1HSH-064 1HSU-109	ACC 44				No recordable indications No recordable indications
26MS(1)D-2 26MS(1)D-2	TRANSITION/PIPE TRANSITION/PIPE		B9.11 B9.11	SUR Vol	1MSM-064 1MSU-106	ACC 44			D.	No recordable indications No recordable indications
MS-PB-104(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications .
Drawing # MS-105										-
MS-PB-105(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # HS-106										
MS-2619-210	STRUT	IWF	F-X	VT3H	1HV-0281	ACC				No recordable indications
MS-2619-26	STRUT	IWF	F-X	VT3H	1HV-0280	ACC				No recordable indications
MS-2619-310	STRUT	IWF	F-X	VT3H	1HV-0296			-	ACC	VI-3 examination identified as misaligned. Engineering evaluation determined it was acceptable.
MS-2619-312	STRUT	IWF	F-X	VT3H	1HV-0279	ACC				No recordable indications

Identification No.	Description	Code Cate.	Item No.	<u>Heth</u>	Data Rpt. No.	<u>Noind</u>	Insig	Geom	<u>Other</u>	Remarks
Drawing # MS-106								5		
HS-2619-319	STRUT	IWF	F-X	VT3H	1HV-0277	ACC				No recordable indications
HS-2619-318	STRUT	IWF -	F-X	VT3H	1HV-0278	ACC				No recordable indications
HS-2619-320	SPRING	IWF	F-X	VT3H	1HV-0294	ACC				No recordable indications
MS-2619-44	SPRING	IWF	F-X	VT3H	1HV-0298				ACC	VI-3 examination identified as misaligned. Engineering evaluation determined it was acceptable per pipe calc.
HS-2619-46	STRUT	IWF	F-X	VT3H	1HV-0283	ACC				No recordable indications
HS-2619-45	PSA-1/4 SNUBBER	IWF	F-X	VT3H	1HV-0286	ACC				No recordable indications
MS-2619-43	SPRING	IWF	F-X	VT3H	1HV-0297				ACC	VI-3 identified as misaligned. Engineering evaluation determined- that it was acceptable based on he pipe calc.
MS-2619-42A	STRUT	IWF	F-X	VT3H	1HV-0282	ACC				No recordable indications
MS-2619-42C	PSA-1/2 SNUBBER	IWF	F-X	VT3H	1KV-0285	ACC				No recordable indications '.
MS-PB-106(H)	HYDRO PRES BNDR	в-Р	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # MS-202						-				, \
26HS(1)B-19	VALVE TO PIPE	C-F-2	C5.51	VOL	1HSU-117	44				No recordable indications
26HS(1)B-19A	PIPE TO PIPE	C-F-2	C5.51	VOL	1MSU-118	44 .				No recordable indications
Drawing # MS-203										
26HS(1)C-19	VALVE TO PIPE	C-F-2	C5.51	VOL	1HSU-119	44				No recordable indications.
26MS(1)C-20	PIPE TO PIPE	C-F-2	C5.51	VOL	-1MSU-120	44				No recordable indications

Identification No.	Description	Code Cate.	Item No.	Meth	Data Rpt. No.	<u>Noind</u>	Insig	Geom	Other	Remarks
Drawing # MS-204										
26HS(1)D-18	VALVE TO PIPE	C-F-2	C5.51	VOL	1MSU-121	44				No recordable indications
26HS(1)D-19	PIPE TO PIPE	C-F-2	C5.51	VOL	1HSU-122	44				No recordable indications
Drawing # MS-205								,		٠
MS-180(W)	WELDED SADDLE	c-c	c3.40	SUR	1HSH-068	ACC				No recordable indications
Drawing # MS-301										•
MS-PB-301(H)	HYDRO PRES BNDR	D-A	D1.10	VT-2	GR3201	ACC				No unacceptable indications
Drawing # MS-302										•
MS-PB-302(H)	HYDRO PRES BNDR	D-A	D1.10	V1-5	CJ2403	ACC				No unacceptable indications
Drawing # MS-303										
MS-PB-303(H)	HYDRO PRES BNDR	R D-A	D1.10	VT-2	GR3201	ACC				No unacceptable indications
Drawing # MS-304										
MSRV-4A-10	STRUT	IWF	F-X	VT3H	1HV-0293	ACC				No recordable indications
MS-PB-304(H)	HYDRO PRES BNDF	R D-A	D1.10	VT-2	C15303	ACC				No unacceptable indications
Drawing # MS-305										
MS-PB-305(H)	HYDRO PRES BNDF	R D-A	D1.10	VT-2	GR3201	ACC				No unacceptable indications
Drawing # HS-306										•
MS-PB-306(H)	HYDRO PRES BND	R D-A	D1.10	VT-2	CJ2103	ACC				No unacceptable indications
Drawing # MS-307										
MS-PB-307(H)	HYDRO PRES BND	R D-A	D1.10	VT-2	GR3201	ACC				No unacceptable indications
Drawing # MS-308										•
MS-PB-308(H)	HYDRO PRES BND	R D-A	D1.10	VT-2	CJ2603	ACC				No unacceptable indications

Identification No.	Description	Code Cate.	Item No.	<u> Heth</u>	Data Rpt. No.	<u>Noind</u>	Insig	Geom	<u>Other</u>	Remarks
Drawing # MS-309			•							
MS-PB-309(H)	HYDRO PRES BNDR	D-A	D1.10	VT-2	CH1003	ACC				No unacceptable indications
Drawing # MS-310										
MS-PB-310(H)	HYDRO PRES BNDR	D-A	D1.10	VT-2	GR3201	ACC		•		No unacceptable indications
Drawing # MS-311										
MS-PB-311(H)	HYDRO PRES BNDR	D-A	D1.10	VT-2	CJ2203	ACC				No unacceptable indications
Drawing # HS-312										
MS-PB-312(H)	HYDRO PRES BNDR	D-A	D1.10	VT-2	GR3201	ACC				No unacceptable indications
Drawing # MS-313										_
MS-PB-313(H)	HYDRO PRES BNDR	D-A	D1.10	VT-2	CH8003	ACC				No unacceptable indications
Drawing # MS-314	-									
HS-PB-314(H)	HYDRO PRES BHDR	D-A	D1.10	VT-2	GR3201	ACC				No unacceptable indications
Drawing # MS-315										
MS-PB-315(H)	HYDRO PRES BNDR		D1.10	VT-2	CJ2003	ACC				No unacceptable indications
Drawing # MS-316		•								\
MS-PB-316(H)	HYDRO PRES BNDR	D-A	D1.10	VT-2	CJ2703	ACC				No unacceptable indications
Drawing # MS-317										
MS-PB-317(H)	HYDRO PRES BNDF	D-A	D1.10	VT-2	GR3201	ACC				No unacceptable indications
Drawing # MS-318										
MS-PB-318(H)	HYDRO PRES BNDF	R D-A	D1.10	VT-2	GR3201	ACC				No unacceptable indications

Identification No.	<u>Description</u>	Code Cate.	Item No.	Meth	Data Rpt. No.	<u>Noind</u>	Insig	Geom	<u>Other</u>	Remarks
Drawing # RCC-201						-				
RCC-PB-201(H)	HYDRO PRES BNDR	C-H	c7.21	VT-2	1RCV-019	ACC				No recordable indications
Drawing # RCC-202										
RCC-PB-202(H)	HYDRO PRES BNDR	C-H	c7.21	VT-2	1RCV-019	ACC				No recordable indications
Drawing # RCC-301										
RCC-909N	STRUT	IWF	F-X	VT3H	1HV-0299		ACC			Jam nut loose. Engineering evaluation determined strut was operable . Nut was tightened and staked.
Drawing # RCIC-101										
10RCIC(12)-8	PIPE TO PIPE	B-J	B9.11	VOL	1RIU-072		45			270-0 degree 60% and 90% DAC-ID geometry
10RCIC(12)-9 10RCIC(12)-9	PIPE TO ELL PIPE TO ELL	B-J B-J	B9.11 B9.11	SUR Vol	1RIM-035 1RIU-064	ACC 43				No recordable indications , No recordable indications
10RCIC(12)-10 10RCIC(12)-10	ELL TO PIPE ELL TO PIPE	B-J B-J	B9.11 B9.11	SUR VOL	1RIM-035 1RIU-065	ACC 43				No recordable indications 0-90 degree 96% DAC ID geometry
10RCIC(12)-10A 10RCIC(12)-10A	PIPE TO PIPE PIPE TO PIPE	8-J	89.11 89.11	SUR VOL	1RIM-035 1RIU-066	ACC	43	ę		No recordable indications 0-90 degree 65% DAC ID geometry
10RCIC(12)-11	PIPE TO TEE	B-J	B9.11	VOL	1RIU-067	43				No recordable indications
10RCIC(12)-12	TEE TO PIPE	B-J	B9.11	VOL	1RIU-068	43				No recordable indications
10RCIC(12)-13 10RCIC(12)-13	PIPE TO ELL PIPE TO ELL	B-J	89.11 89.11	SUR VOL	1RIM-035 1RIU-069	ACC	43	٩	•	No recordable indications 90-180 degree 95% DAC ID geometry
10RCIC(12)-14 10RCIC(12)-14	ELL TO PIPE ELL TO PIPE	B-J B-J	89.11 89.11	SUR VOL	1RIH-035 1RIU-070	ACC	43			No recordable indications 270-0 degree 60% DAC ID geometry
10RCIC(12)-15	PIPE TO PEN	B-J	B9.11	VOL	1R1U-071		43			0-90 degree 55% DAC ID geometry

Identification No.	Description	Code Cate.	Item No.	<u>Meth</u>	Data Rpt. No.	Noind	Insig	Geom	Other	Remarks
Drawing # RCIC-101										
10RCIC(12)-16 10RCIC(12)-16	PEN TO ELL PEN TO ELL	B-J B-J	B9.11 B9.11	SUR Vol	1RIH-036 1RIU-073	ACC	45			No recordable indications 0-90 degree 60% DAC ID geometry.
10RCIC(12)-17 10RCIC(12)-17	ELL TO PIPE -	B-J	B9.11 B9.11	SUR Vol	1RIM-036 1RIU-074	ACC	44			No recordable indications 270-0 degree 96% DAC ID Geometry
10RCIC(12)-18	ELL TO VALVE	B-J	B9.11	VOL	1RIU-075	45				No recordable indications
RCIC-PB-101(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RCIC-102										
6RCIC(1)-44BD	FLANGE BOLTING	B-G-2	87.50	VT-1	1RIV-017	ACC				No recordable indications. PSI of new bolting material
RCIC-PB-102(H) RCIC-PB-102(H)	HYDRO PRES BNDR HYDRO PRES BNDR		B15.51 B15.51			ACC ACC				No unacceptable indications No unacceptable indications
Drawing # RCIC-201										•
RCIC-PB-201(H)	HYDRO PRES BNDR	C-H	c7.21	VT-2	7.4.0.5.31	ACC				Packing leaks only
Drawing # RCIC-203										
RCIC-PB-203(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.31	ACC				Packing leaks only
Drawing # RCIC-204										1
RCIC-P-1S	PMP NOZZLE WELD	C-G	C6.10	SUR	1RIH-037	ACC				No recordable indications
RCIC-PB-204(H)	HYDRO PRES BNDR	C-H	c7.21	VT-2	7.4.0.5.31	ACC				Packing leaks only
Drawing # RCIC-205					•					
RCIC-P-1D	PMP NOZZLE WELD	C-G	C6.10	SUR	1RIM-038	ACC				No recordable indications
RCIC-PB-205(H)	HYDRO PRES BNDR	C-H	c7.21	VT-2	7.4.0.5.31	ACC				Packing leaks only

Identification No.	Description	Code Cate.	Item No	Meth	Data Rpt. No. Noin	d Insig Geom_	Other	Remarks
								•
Drawing # RFW-101								
24RFW(1)A-5	VALVE TO PIPE	B-J	89.11	VOL	1FWU-137	45,60		Intermittent 0-360 degrees at varying lower amplitudes
12RFW(1)AC-11	SE/EX-SE/STUB	8-F	B5.10	VOL	R-R9-026	45,60		ID and root geometry recorded. Post MSIP examination.
12RFW(1)AC-12	SE/STUB TO SE	B-F	B5.10	VOL	R-R9-025	45,60		ID and root geometry recorded. Post MSIP examination.
12RFW(1)AC-13	SE TO N4	B-F	B5.10	VOL	R-R9-029	45,60		Beam redirect, ID and root geometry recorded. Downstream examination limited to a "W" of 1.6" from weld centerline due to not 1.6"
						•		configuration. Post MSIP examination.
12RFW(1)AB-9	SE EXT-SE STUB	B-F	B5.10	VOL	R-R9-021	45,60		Beam redirect, ID and root geometry recorded. Pre MSIP examination
12RFW(1)AB-9	SE EXT-SE STUB	B-F	B5.10	VOL	R-R9-042	45,60		Beam redirect, ID and root geometry recorded. Post MSIP examination.
12RFW(1)AB-10	SE STUB TO SE	B-F	B5.10	VOL	R-R9-023	45,60		Beam redirect, ID and root geometry recorded. Pre MSIP examination.
12RFW(1)AB-10	SE STUB TO SE	B-F	B5.10	VOL	R-R9-047	45,60		Beam redirect. ID and root geometry recorded. Post MSIP examination.
12RFW(1)AB-11	SE TO N4	B-F	B5.10	VOL	R-R9-051	45		Beam redirect and root geometry recorded. Exam limited to a "W" of 1.10" from weld CL due to nozzle transition. Post HSIP exam.
12RFW(1)AA-9	SE EXT-SE STUB	B-F	B5.10	VOL	R-R9-020	45,60		Beam redirect, ID and root geometry recorded. Pre MSIP examination.
12RFW(1)AA-9	SE EXT-SE STUB	B-F	B5.10	VOL	R-R9-038	45,60		Beam redirect, ID and root geometry recorded. Post MSIP examination.

Identification No.	Description	Code Cate.	Item No.	<u> Heth</u>	Data Rpt. No.	<u>Noind</u>	Insig	Geom	<u>Other</u>	Remarks •
Drawing # RFW-101										
12RFW(1)AA-10	SE STUB-SE	B-F	B5.10	VOL	R-R9-028		45,60			Beam redirect, ID and root geometry
12RFW(1)AA-10	SE STUB-SE	B-F	85.10	VOL	R-R9-050		45,60			recorded. Pre MSIP examination. Beam redirect, ID and root geometry recorded. Post MSIP examination.
12RFW(1)AA-11	SE TO N4	B-F	B5.10	VOL	R-R9-049		45,60			ID and root geometry recorded. Downstream examination limited to a "W" of 1.8" from weld centerline due to nozzle configuration. Post MSIP examination.
RFW-PB-101(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RFW-102										
24RFW(1)B-5	VALVE TO PIPE	B-J	89.11	VOL	1FWU-138		45,60			Intermittent 0-360 degree at varying lower amplitudes
24RFW(1)B-5	VALVE TO PIPE	B-J	B9.11	SUR	1FWH-037	- ACC				No recordable indications
12RFW(1)BF-12	SE EXT-SE STUB	B-F	B5.10	VOL	R-R9-046		45			Beam redirect and root geometry were recorded. Post MSIP exam.
12RFW(1)BF-13	SE STUB TO SE	B-F	B5.10	VOL	R-R9-030	•	45			Beam redirect and root geometry from the upstream side of the weld were recorded. Post MSIP exam.
12RFW(1)BF-14	SE TO N4	B-F	B5.10	VOL	'R-R9-034		45,60			ID and root geometry recorded. Downstream examination limited to a "W" of 1.5" from weld centerline due to nozzle configuration. Post MSIP examination.
12RFW(1)BE-9	SE EXT-SE STUB	B-F	B5.10	VOL	R-R9-039		45			Beam redirect and root geometry recorded. Post HSIP exam.
12RFW(1)BE-10	SE STUB TO SE	B-F	B5.10	VOL	R-R9-040		÷45			Beam redirect and root geometry recorded. Post MSIP exam.

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	Noind	Insig	Geom	<u>Other</u>	Remarks
Drawing # RFW-102										•
12RFW(1)BE-11	SE TO N4	B-F	B5.10	VOL	R-R9-032	£	45		·	Surface geometry from the upstream side of weld was recorded. Exam limited to a "W" of 1.10" from Weld CL due to nozzle transition. Post MSIP exam.
12RFW(1)BD-9	SE EXT-SE STUB	B-F	85.10	VOL	R-R9-024		45,60			Beam redirect, ID and root geometry recorded. Post HSIP examination.
12RFW(1)BD-10	SE STUB TO SE	B-F	B5.10	VOL	R-R9-027		45			Beam redirect recorded. Post MSIP examination
12RFW(1)BD-11	SE TO N4	B-F	B5.10	VOL	R-R9-031		45,60			ID and root geometry recorded. Downstream examination limited to a "W" of 1.6" from weld centerline due to nozzle configuration. Post MSIP examination.
RFW-PB-102(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RFW-103										
6RFW(11)-3	ELL TO PIPE	B-J	в9.11	VOL	1FWU-136	45	60			45 Degree no recordable indications. 60 degree 90% DAC scan surface 2 beam direction A.
RFW-PB-103(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RHR-101	4)									
12LPCI(1)A-5	SE EXT TO SE	B-F	B5.50	VOL	R-R9-036		45,60			Beam redirect, ID and root geometry recorded. Pre MSIP examination
12LPCI(1)A-5	SE EXT TO SE	B-F	B5.50	AOF	R-R9-048		45,60			Beam redirect, ID and root geometry recorded. Post HSIP examination.

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	Noind	Insig	Geom	<u>Other</u>	Remarks
Drawing # RHR-101										
12LPC1(1)A-6	SE TO NOZZLE	B-F	85.10	VOL	R-R9-044		45,60			ID geometry recorded. Downstream weld limited to a "W" of 0.90" from centerline due to nozzle configuration. Post MSIP examination.
RHR-PB-101(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RHR-102 >										
14LPCI(1)B-1 14LPCI(1)B-1	VLV TO PIPE VLV TO PIPE	B-J	B9.11 B9.11	SUR Vol	1RHM-088 1RHU-134	ACC 45				No recordable indications No recordable indications
14LPCI(1)B-2 14LPCI(1)B-2	PIPE TO ELL PIPE TO ELL	B-1 B-1	B9.11 B9.11	SUR VOL	1RHM-088 1RHU-134	ACC 45				No recordable indications No recordable indications
RHR-521	SPRING	IWF	F-X	VT3H	1HV-0290	ACC				No recordable indications
12LPCI(1)B-5	SE EXT TO SE	B-F	B5.50	VOL	R-R9-018		45,60			Beam redirect, ID and root geometry recorded. Upstream examination limited to a "W" of 1.7" from weld centerline due to safe end taper configuration. Post MSIP examination
12LPC1(1)B-6	SE TO NOZZLE	B-F	B5.10	VOL	R-R9-019		45,60			ID geometry recorded. Downstream examination limited to a "W" of 1.3" from centerline due to nozzle configuration. Post MSIP examination.
RHR-PB-102(H)	HYDRO PRES BNDR	8-P	B15.51	VT-2	CL29	ACC				No recordable indications

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	Noind	Insig	Geom	Other	Remarks
Drawing # RHR-103										
14LPCI(1)C-2 14LPCI(1)C-2	PIPE TO ELL PIPE TO ELL	B-J	B9.11 B9.11	SUR VOL	1RHM-085 1RHU-133	ACC 45				No recordable indications No recordable indications
12LPCI(1)C-5	SE EXT TO SE	B-F	B5.50	VOL	R-R9-045		45,60			Beam redirect, ID and root geometry recorded. Post MSIP examination.
12LPCI(1)C-6 ¸	SE TO NOZZLE	B-F	B5.10	VOL	R-R9-043		45,60			ID geometry recorded. Downstream examination limited to a "W" of 1.6" from weld centerline due to nozzle configuration. Post MSIP examination.
RHR-PB-103(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29 -	ACC				No unacceptable indications
Drawing # RHR-104								•		_
RHR-V-8-BDY	VALVE BODY	в-н-2	B12.40	vr-3	1RHV-035	ACC				Minor linear indication on valve body seat at 5 o'clock looking east. Not part of pressure ' boundary.
RHR-PB-104(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	LG1201	ACC				No unacceptable indications
Drawing # RHR-105										•
12RHR(1)A-1D 12RHR(1)A-1D	VALVE TO PIPE VALVE TO PIPE	B-J	B9.11 B9.11	SUR VOL	1RHM-083 1RHU-127	ACC 43				No recordable indications (
12RHR(1)A-2 12RHR(1)A-2	PIPE TO ELL PIPE TO ELL	B-J	89.11 89.11	SUR Vol	1RHM-083 1RHU-128	ACC 43		-		No recordable indications No recordable indications
12RHR(1)A-3 12RHR(1)A-3	ELL TO PIPE ELL TO PIPE	B-J B-J	B9.11 B9.11	SUR Vol	1RHM-083 1RHU-129	ACC 43				No recordable indications No recordable indications
12RHR(1)A-4 12RHR(1)A-4	PIPE TO ELL PIPE TO ELL	B-J B-J	B9.11 B9.11	SUR Vol	1RHM-083 1RHU-130	ACC 43				No recordable indications No recordable indications
12RHR(1)A-5 12RHR(1)A-5	ELL TO PEN ELL TO PEN	B-J B-J	B9.11 B9.11	SUR Vol	1RHM-083 1RHU-131	ACC 43				No recordable indications No recordable indications
RHR-P8-105(H)	HYDRO PRES BNDR	в-Р	B15.51	VT-2	CL29	ACC				No unacceptable indications

Identification No.	Description	Code Cate.	Item No.	<u> Heth</u>	Data Rpt. No.	Noind	Insig	Geom	Other	Remarks
Drawing # RHR-106										
12RHR(1)B-10 12RHR(1)B-10	VLV TO SE VLV TO SE	B-F B-F	B5.50 B5.50	SUR VOL	1RHP-070 R-R9-060	ACC		45,60		No recordable indications 45 shear recorded counterbore geometry 360 degree at varying amplitudes. 60 RL recorded root geometry 360 degree at varying amplitudes.
RHR-PB-106(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC		•		No unacceptable indications
Drawing # RHR-201									•	
12RHR(1)A-1C 12RHR(1)A-1C	FLANGE TO PIPE FLANGE TO PIPE	C-F-2 C-F-2		SUR VOL	1RHM-082 1RHU-126	ACC	43			No recordable indications 270-360 degree 80% DAC ID geometry
RHR-PB-201(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.26	ACC				No recordable indications
Drawing # RHR-202										
RHR-PB-202(H)	HYDRO PRES BNDR	C-H	c7.21	VT-2	7.4.0.5.26	ACC				No recordable indications .
Drawing # RHR-203										
RHR-PB-203(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.26	ACC	1			No recordable indications
Drawing # RHR-204										<u>.</u>
RHR-597	STRUT	IWF	F-X	VT3H	1HV-0295	ACC				No recordable indications \
Drawing # RHR-205										
RHR-PB-205(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.26	ACC				No recordable indications
Drawing # RHR-206					-					
RHR-PB-206(H)	HYDRO PRES BNDR	C-H	c7.21	VT-2	7.4.0.5.26	ACC				No recordable indications
Drawing # RHR-207										
RHR-968N	ANCHOR	IWF	F-X	VT3H	1HV-0308	ACC		-		No recordable indications

Identification No.	Description	Code Cate.	Item No.	Meth	Data Rpt. No.	Noind	Insig	Geom	Other_	Remarks
Drawing # RHR-207										
RHR-540	STRUT	IWF	F-X	VT3H	1HV-0310	ACC				N o recordable indications
RHR-539	STRUT	IWF	F-X	VT3H	1HV-0309	ACC				No recordable indications
RHR-551	PSA-3 SN(2)	IWF	F-X	VT3H	1HV-0314	ACC				No recordable indications
RHR-553	STRUT	IWF	F-X	VT3H	1HV-0302	ACC				No recordable indications
RHR-552	STRUT	IWF	F-X	VT3H	1HV-0303				ACC	Lower jam nut loose. Strut operable. Nut tightened and staked.
RHR-554	STRUT	IWF	F-X	VT3H	1HV-0305	ACC				No recordable indications
RHR-555	SPRING	IWF	F-X	VT3H	1HV-0304	ACC				No recordable indications
RHR-555(W)	4 WELDED LUGS	C-C	c3.40	SUR	1RHM-093	ACC				No Recordable Indications 🕆
RHR-1002N	PSA-3 SN(2)	IWF	F-X	VT3H	1HV-0306	ACC				No recordable indications
RHR-556	STRUT	IWF	F-X	VT3H	1HV-0301	ACC				No recordable indications
RHR-980N	PSA-10 SNUBBER	IWF	F-X	VT3H	1HV-0307	ACC				No recordable indications
RHR-928N	SPRING	IWF	F-X	VT3H	1HV-0270	ACC				No recordable indications
RHR-945N(W)	8 WELDED LUGS	C-C	C3.40	SUR	1RHM-091	ACC				No recordable indications
RHR-925N(W)	1 WELDED LUG	c-c	c3.40	SUR	1RHM-090	ACC				No recordable indications
RHR-925N	SPRING	IWF	F-X	VT3H	1HV-0284	ACC				No recordable indications
RHR-1020N	STRUT	IWF	F-X	VT3H	1HV-0259	ACC				No recordable indications
RHR-927N	SPRING	IWF	F-X	VT3H	1HV-0260	ACC				No recordable indications
RHR-967N	ANCHOR	IWF	F-X	VT3H	1HV-0264	ACC				No recordable indications
RHR-967N(W)	WELDED SADDLE	c-c	c3.40	SUR	1RHM-089	ACC				No recordable indications

Identification No.		Code Cate.	Item No.	<u> Heth</u>	Data Rpt. No.	Noind	<u>Insig</u>	Geom	<u>Other</u>	Remarks
Drawing # RHR-207										
RHR-558	PSA-3 SNUBBER	IWF	F-X	VT3H	1HV-0320	ACC	•			No recordable indications
RHR-557(W)	8 WELDED LUGS	c-c	C3.40	SUR	1RHM-092	ACC				No recordable indications
RHR-557	STRUT	IWF	F-X	VT3H	1HV-0322	ACC				No_recordable indications
RHR-559	SPRING	IWF	F-X	VT3H	1HV-0319	ACC				No recordable indications
RHR-562	PSA-3 SNUBBER	IWF	F-X	VT3H	1HV-0317	ACC				No recordable indications
RHR-561	STRUT	IWF	F-X	VT3H	1HV-0323	ACC				No recordable indications
RHR-563	PSA-1 SN(2)	IWF	F-X	VT3H	1HV-0316	ACC				No recordable indications
RHR-560	SPRING	IWF	F-X	VT3H	1HV-0327	ACC				No recordable indications
RHR-461	SPRING	IWF	F-X	VT3H	1HV-0328				ACC	Spring setting not within 10% of PSI value. Engineering evaluation determined spring is operable.
RHR-565	STRUT	IWF	F-X	VT3H	1HV-0315	ACC				No recordable indications
RHR-564	STRUT	IWF	F-X	VT3 H	1HV-0326	ACC				No recordable indications
RHR-459	STRUT	IWF	F-X	VT3 H	1HV-0324	ACC				No recordable indications
RHR-52	PSA-3 SNUBBER	IWF	F-X	VT3 H	1HV-0318	ACC			t.	No recordable indications \
RHR-998N	PSA-3 SNUBBER	IWF	F-X	VT3H	1HV-0321	ACC	÷			No recordable indications
16RHR(5)B-6 16RHR(5)B-6	PIPE TO VALVE	C-F-2 C-F-2		SUR Vol	1RHM-084 1RHU-132	ACC 45				No recordable indications No recordable indications
RHR-937N	RIGID	IWF	F-X	VT3H	1HV-0263	ACC				No recordable indications
RHR-962N	PSA-10 SNUBBER	IWF	F-X	KETV	1HV-0269	ACC				No recordable indications

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	<u>Noind</u>	Insig	Geom	Other	Remarks
Drawing # RHR-207				-						
RHR-931N	SPRING	IWF	F-X	VT3H	1HV-0262	ACC				'No recordable indications
RHR-906N	PSA-10 SN(2)	IWF	F-X	VT3H	1HV-0268	ACC				No recordable indications
RHR-914N	PSA-10 SNUBBER	IWF	F-X	VT3H	1HV-0266	ACC				No recordable indications
RHR-183	PSA-10 SN(2)	IWF	F-X	VT3H	1HV-0267	ACC				No recordable indications
RHR-932N	SPRING	IWF	F-X	VT3H	1HV-0265	ACC				No recordable indications
RHR-913N	PSA-3 SNUBBER	IWF	F-X	VT3H	1HV-0261	ACC				No recordable indications
RHR-903N	PSA-3 SNUBBER	IWF	F-X	VT3H	1HV-0258	ACC				No recordable indications
RHR-219	SPRING	IWF	F-X	VT3H	1HV-0257	ACC				No recordable indications
RHR-PB-207(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.27	ACC				No recordable indications
Drawing # RHR-209										,
RHR-PB-209(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.27	ACC				No recordable indications
Drawing # RHR-210										•
RHR-PB-210(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.28	ACC				No recordable indications
Drawing # RHR-211										l
RHR-PB-211(H)	HYDRO PRES BNDR	C-H	C7.21	VT-2	7.4.0.5.28	ACC				No recordable indications
* Drawing # RHR-214										
BS-1	HEATXCHG SUP WO	c-c	C3.10	SUR	1RHM-086	ACC				No recordable indications. Limited examination due to bottom of lugs
BS-1	HEATXCHG SUP WD	C-C	c3.10	SUR	1RHH-087	•	ACC			being inaccessible. Lugs at 0, 90 and 270 degree. Lug at 180 degree. Linear 3/16"

Identification No.	Description	Code Cate.	Item No.	Meth	Data Rpt. No.	Noind	Insig	Geom_	Other	Remarks
Drawing # RPV-101										
, AD .	#3-#4 SC CRC WD	B-A	B1.11	VOL	R-R9-G06	0.45.60				Examination coverage restricted in 8 areas were RPV stabilizer lugs are attached to vessel. Scan coverage = 83.6%. No recordable indications.
AE	#4 SC-FL CRC WD	В-А	B1.30	VOL	R-R9-G05	0,45,60				No recordable indications. Due to flange configuration examination limited to shell side of weld. Scan coverage = 49.4%.
ВИ	#4 SC VRT Wa330	B-A	B1.12	VOL	R-R9-G02	0,45,60				No recordable indications. This examination covered 41.2% of scan volume. Remaining volume examination reported in R-R8-024.
ВР	#4 SC VRT Wa 90	B-A	B1.12	VOL	R-R9-G04	0,45,60				No recordable indications. This scan covered 46.2% of volume. Remaining volume examined in report R-R9-027.
BR	#4 SC VRT W2210	B-A	B1.12	VOL	R-R9-G03	0,45,60				No recordable indications. This scan covered 50.2% of weld. "Remaining weld scanned in report R-R8-026.
N4-90-IR	FW NZ-IR @ 90	B-D	в3.100	VOL	1RPU-124	70,25				No recordable indications
N4-90-NB	FW NZ BORE @ 90	B-D	в3.100	VOL	1RPU-124	25,75				No recordable indications
4JP(NZ)A-1	N-9 NZ-SE @ 105	B-F	B5.10	VOL	R-R9-013	45,60				No recordable indications. Upstream examination limited to a "W" of 2.05" due to nozzle configuration. Post MSIP examination.
4JP(NZ)A-2	N9 SE-PN SL@105	B-F	B5.50	VOL	R-R9-014	45,60				No recordable indications. Post MSIP examination.

Identification No.	Description	Code Cate.	Item No.	<u> Heth</u>	Data Rpt. No.	Noind	<u>Insig</u>	Geom	Other	Remarks
Drawing # RPV-101										
4JP(NZ)B-1	N9 HZ-SE & 285	B-F	B5.10	VOL	R-R9-015	45,60				No recordable indications. Upstream examination limited to a "W" of 2.05" from weld centerline due t nozzle configuration. Post MSIP examinations
4JP(NZ)B-2	N9 SE PN SLƏ285	B-F	85.50	VOL	R-R9-016	45,60				No recordable indications. Post MSIP examination.
STAB-BRACKET-0	STAB LUG @ 0	в-н	B8.10	SUR	1RPP-010	ACC				No recordable indications
STAB-BRACKET-45	STAB LUG @ 45	в-н	B8.10	SUR	1RPP-011	ACC				No recordable indications
STAB-BRACKET-90	STAB LUG a 90	в-н	B8.10	SUR	1RPP-011	ACC				No recordable indications
STAB-BRACKET-135	STAB LUG @ 135	B-H	B8.10	SUR	1RPP-009		ACC			Rounded indications 1/16" to 3/32"
STAB-BRACKET-180	STAB LUG @ 180	B-H	88.10	SUR	1RPP-011	ACC				No recordable indications
STAB-BRACKET-225	STAB LUG @ 225	` в-н	B8.10	SUR	1RPP-010	ACC				No recordable indications
STAB-BRACKET-270	STAB LUG a 270	B-H	B8.10	SUR	1RPP-010	ACC				No recordable indications
STAB-BRACKET-315	STAB LUG @ 315	B-H	B8.10	SUR	1RPP-010	ACC				No recordable indications
N12	VESS INST PENT	B-E	84.13	VT-2	CL29	ACC			•	VT-2 of N12B
N14	VESS INST PENT	8-E	B4.13	VT-2	CL29	ACC				VT-2 of N14B and N14C
RPV BUSHING	RPV BUSHING	B-G-1	B6.50	VT-1	1RPV-168		ACC			Very light minor corrosion
RPV THREADS	-RPV FLG B-G-1	B6.40	VOL 1	IRPU-12	23 0	•			Exam c	overs area between stud holes 1 thru 37. No recordable indications
JET PUMP BEAMS	JP HLD DWN BHS	N/A	N/A	VOL	NA	ACC				Beams replaced at R9. This is PS1 exam of replacement beams performed before installation.

Identification No.	Description	Code Cate.	Item No.	Meth	Data Rpt. No.	Noind	Insig	Geom	Other	Remarks
Drawing # RPV-101										
JET PUMP BEAMS	JP HLD DWN BMS	N/A	N/A	VT-1	1RPV-204	ACC				No abnormal indications noted.
JET PUMP SENSING LINES	JP SENSING LINE	N/A	SPEC	VT-1	1RPV-204				ACC	A linear indication was found in sensing line #18 near the upper standoff. Further investigation determined that the indication was a crack. The indication and resolution are documented in PER 294-0574. GE determined that the crack had likely occurred early in plant life and at this time was not growing. Analysis supported not crack at this time.
INCORE DRY TUBES	INCORE DRY TUBE	N/A	SPEC	VT-1	1RPV-204				CC	Erosion of tubes noted. Evaluation by GE condition was acceptable.
CORE SPRAY SPARGERS	CORE SPRAY SPG	N/A	N/A	VT-1	1RPV-204	ACC				No recordable indications
FEEDWATER SPARGERS	FW SPARGERS	N/A	N/A	VT-1	1RPV-204	ACC				No recordable indications
SHROUD	NA	1	/OL R-F	R9-053	ACC R-R9-059	ACC			No recor	dable indications No recordable indications
RPV INTERIOR	RPV INTERIOR	B-N-1	813.10	VT-3	1RPV-204	ACC				No abnormal indications
RPV CORE SUPPORTS	CORE SUPPORTS	B-N-2	B13.21	VT-1	1RPV-204	ACC				No abnormal indications $igl l$
RPV INTERIOR ATTACH	INTERIOR ATTACH	B-N-2	B13.20	VT-1	1RPV-204	ACC				No abnormal indications
RPV-PB-101(H)	HYDRO PRES BNDR	B-P	B15.11	VT-2	CL29	ACC				No recordable indications
Drawing # RPV-102										
AG AG	TOP HD-FLG WELD TOP HD-FLG WELD		B1.40 B1.40	SUR VOL	1RPM-042 R-R9-G01	ACC 0,45,60	l			No recordable indications No recordable indications. Scan from O degree CW to 180 degrees. Scan coverage = 95.1%.
CRD	PEN (185EA) B-	Е В4	.12 VT	-2 CL	29 A1	CC			No	pzzle to Vessel welds in quadrant 270 to O. No unacceptable indications

Identification No.	Description	Code It	em . <u>Meth</u>	Data Rpt. No.	Noind	Insig Geom	Other	Remarks
Drawing # RPV-102								
CRD HOUSING 18-59 BLT CRD HOUSING 18-59 BLT	CRD HOUSING BLT			1RPV-183 1RPV-207	ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined cross sectional area reduced less than 5%.
CRD HOUSING 22-59 BLT CRD HOUSING 22-59 BLT	CRD HOUSING BLT			1RPV-183 1RPV-207	ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined cross sectional area reduced less than 5%.
CRD HOUSING 18-47 BLT CRD HOUSING 18-47 BLT	CRD HOUSING BLT		•••	1RPV-183 1RPV-207	ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 30-47 BLT CRD HOUSING 30-47 BLT	CRD HOUSING BLT			1RPV-184 1RPV-207	ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined cross sectional area reduced less than 5%
CRD HOUSING 18-43 BLT CRD HOUSING 18-43 BLT	CRD HOUSING BLT				ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined cross sectional area reduced less than 5%.
CRD HOUSING 22-43 BLT CRD HOUSING 22-43 BLT	CRD HOUSING BLT			1RPV-171 1RPV-207	ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 30-43 BLT CRD HOUSING 30-43 BLT	CRD HOUSING BLT		7.80 VT-1 7.80 VT-1	1RPV-170 1RPV-207		ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	Noind	Insig Ge	eom Other	Remarks
Drawing # RPV-102					<i>હ</i> "				
CRD HOUSING 42-43 BLT CRD HOUSING 42-43 BLT	CRD HOUSING BLT CRD HOUSING BLT				1RPV-181 1RPV-207	ACC	ACC	÷	PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%
CRD HOUSING 46-39 BLT CRD HOUSING 46-39 BLT	CRD HOUSING BLT CRD HOUSING BLT			VT-1 VT-1	1RPV-183 1RPV-207	ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%
CRD HOUSING 54-39 BLT CRD HOUSING 54-39 BLT	CRD HOUSING BLT			VT-1 VT-1		ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 42-35 BLT CRD HOUSING 42-35 BLT	CRD HOUSING BLT				1RPV-183 1RPV-207	ACC	ACC		PSI of new cap screws for new drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 02-31 BLT CRD HOUSING 02-31 BLT	CRD HOUSING BLT				1RPV-183 1RPV-207	ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 10-31 BLT CRD HOUSING 10-31 BLT	CRD HOUSING BLT		B7.80 B7.80		1RPV-185 1RPV-207	ACC	ACC		PSI on new cap screws Pitting corrosion on shank. Engineering evaluation determined cross sectional reduced less than 5%.
CRD HOUSING 30-31 BLT CRD HOUSING 30-31 BLT	CRD HOUSING BLT		B7.80 B7.80		1RPV-183 1RPV-207	ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%

Identification No.	Description	Code Cate.	Item No.	<u> Heth</u>	Data Rpt. No.	<u>Noind</u>	Insig	Geom	Other_	Remarks
Drawing # RPV-102										
CRD HOUSING 42-31 BLT CRD HOUSING 42-31 BLT	CRD HOUSING BLT	B-G-2 B-G-2			1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined cross sectional area reduced less than 5%
CRD HOUSING 58-31 BLT CRD HOUSING 58-31 BLT	CRD HOUSING BLT		87.80 87.80	VT-1 VT-1	1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 02-27 BLT CRD HOUSING 02-27 BLT	CRD HOUSING BLT		B7.80 B7.80		1RPV-183 1RPV-207	ACC	ACC		2	PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 26-27 BLT CRD HOUSING 26-27 BLT	CRD HOUSING BLT				1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive. Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 38-27 BLT CRD HOUSING 38-27 BLT	CRD HOUSING BLT				1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive Pitting corrosion on shank, Engineering evaluation determined cross sectional area reduced less than 5%.
CRD HOUSING 50-27 BLT CRD HOUSING 50-27 BLT	CRD HOUSING BLT	B-G-2 B-G-2	B7.80 B7.80		1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 22-23 BLT CRD HOUSING 22-23 BLT	CRD HOUSING BLT		B7.80 B7.80		1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined cross sectional area reduced less than 5%.

Identification No.	Description	Code Cate.	Item No.	<u>Meth</u>	Data Rpt. No.	<u>Noind</u>	Insig G	Geom O	ther	Remarks
Drawing # RPV-102										
CRD HOUSING 30-23 BLT CRD HOUSING 30-23 BLT	CRD HOUSING BLT				1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive. Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 38-23 BLT CRD HOUSING 38-23 BLT	CRD HOUSING BLT				1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive. Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 18-19 BLT CRD HOUSING 18-19 BLT	CRD HOUSING BLT				1RPV-185 1RPV-207	ACC	ACC			PSI on new cap screws Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 22-19 BLT CRD HOUSING 22-19 BLT	CRD HOUSING BLT				1RPV-185 1RPV-207	ACC	ACC			PSI on new cap screws Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 58-19 BLT CRD HOUSING 58-19 BLT	CRD HOUSING BLT			VT-1 VT-1	1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 26-15 BLT CRD HOUSING 26-15 BLT	CRD HOUSING BLT			•••	1RPV-183 1RPV-207	ACC	ACC			PSI of new cap screws for drive Pitting corrosion on shanks. Engineering evaluation determined cross sectional area reduced less than 5%.
CRD HOUSING 34-15 BLT CRD HOUSING 34-15 BLT	CRD HOUSING BLT				1RPV-182 1RPV-207	ACC	ACC			PSI of new cap screws for drive. Pitting corrosion on shank. Engineering evaluation determined cross sectional area reduced less than 5%

Identification No.	Description		Item No Men	Data th Rpt. No.	<u>Noind</u>	Insig Geom	Other	Remarks
Drawing # RPV-102								
CRD HOUSING 22-11 BLT CRD HOUSING 22-11 BLT	CRD HOUSING BLT CRD HOUSING BLT	B-G-2 B B-G-2 B	37.80 VT- 37.80 VT-		ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shank. Engineering evaluation determined cross sectional area reduced less than 5%.
CRD HOUSING 22-07 BLT CRD HOUSING 22-07 BLT	CRD HOUSING BLT CRD HOUSING BLT	8-G-2 B B-G-2 B			ACC	ACC		PSI of new cap screws for drive Pitting corrosion on shanks. Engineering evaluation determined that cross sectional area reduced less than 5%.
CRD HOUSING 26-07 BLT CRD HOUSING 26-07 BLT	CRD HOUSING BLT	8-G-2 B B-G-2 B			ACC	ACC		PSI of new cap screws for drive. Pitting corrosion on shank. Engineering evaluation determined that cross sectional area reduced less than 5%.
INCORE	INCOR PEN(55EA)	B-E B	B4.11 VT	-2 CL29	ACC			Nozzle to vessel welds in quadrant 270 to 0. No unacceptable indications
RPV-PB-102(H)	HYDRO PRES BNDR	B-P E	B15.10 VT	-2 CL29	REJ			Several CRD flanges leaking. Repaired retested under work order MH33
RPV-PB-102(H)	HYDRO PRES BNDR	B-P E	B15.10 VT	-2 MH33	ACC			VI-2 of leaking CRD flanges found under CL29. No unacceptable indications

Identification No.	Description	Code Cate.	Item No.	<u>Meth</u>	Data Rpt. No.	Noind	Insig	Geom	<u>Other</u>	Remarks
Drawing # RRC-101	•						-			
24RRC(2)A-1	NOZ TO SE	B-F	B5.10	VOL	R-R9-017		45,60			Beam redirect and root geometry recorded. Upstream examination limited to a "W" of 1.8" from weld centerline due to nozzle configuration. Post MSIP
24RRC(1)A-13/8CAP	PIPE TO SWL	B-J	B9.31	SUR	1RRP-133	ACC				No recordable indications. This exam completes that portion of the weld covered by RRC-SA-66. See report 1RRP-070 180-360 covered.
24RRC(1)A-13/8CAP	PIPE TO SWL	8-J	B9.31	SUR	1RRP-134	ACC				No recordable indications. Covers 0 -180. See report 1RRP-133.
24RRC(1)A-13/8CAP	PIPE TO SWL	B-J	B9.31	VOL	R-R9-052	45,60				No recordable indications. See report 1RRU-134. No examination from the downstream side due to sweep-o-let configuration.
RRC-V-60A-BLT RRC-V-60A-BLT	VALVE BOLTING VALVE BOLTING	B-G-1 B-G-1			1RRU-167 1RRV-029	O ACC				No recordable indications No recordable indications. Bolting examined in installed condition under tension
12RRC(1)-N2A-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-004		45,60			Beam redirect and root geometry recorded. Downstream examination limited to a "W" of 1.1" from weld centerline due to nozzle configuration. Post MSIP \ examination.
12RRC(1)-N2B-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-006		45,60			Beam redirect and ID geometry recorded. Downstream examination limited to a "W" of 0.9" from weld centerline due to nozzle configuration. Post MSIP examination.

Identification No.	Description	Code Cate.	Item No	<u>Meth</u>	Data Rpt. No.	Noind	Insig	Geom	<u>Other</u>	Remarks
Drawing # RRC-101										
12RRC(1)-H2C-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-007		45,60			ID and root geometry recorded. Downstream examination limited to a "W" of 1.35" from weld centerline due to nozzle configuration. Post MSIP examination.
12RRC(1)-N2D-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-009		45,60			ID and root geometry recorded. Downstream examination limited to a "W" of 1.25" from weld centerline due to nozzle configuration. Post MSIP examination.
12RRC(1)-N2E-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-010		45,60			ID and root geometry recorded. Downstream examination limited to "W" of 1.1" due to nozzle configuration. Post MSIP examination.
RRC-PB-101(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	REJ				RRC-V-67A body to bonnet leak. Repaired retested per work order MJ89
RRC-PB-101(H)	HYDRO PRES BNDR	8-P	B15.51	VT-2	HJ89	ACC				No unacceptable indications. Retest of RRC-V-67A
Drawing # RRC-102										
24RRC(2)B-1	NOZ TO SE	B-F	B5.10	VOL	R-R9-012		45,60			ID geometry recorded. Upstleam examination was limited to a "W" dimension of 2.10" from weld centerline due to nozzle configuration. Post MSIP examination.
RRC-V-60B-BLT	VALVE BOLTING	B-G-1	B6.210	VOL	1RRU-169	0				No recordable indications. Examined in the installed condition
RRC-V-60B-BLT	VALVE BOLTING	B-G-1	B6.210	VT-1	1RRV-031	ACC				No recordable indications. Bolting examined in installed condition under tension

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	Noind	Insig	Geom_	Other	Remarks
Drawing # RRC-102										
12RRC(1)-N2F-6	SE TO NOZ	B-F	B5.10	SUR	1RRP-131		ACC			270-360 degree 1/8" round, 270-360 degree 1/8" rounded, 270 -360 degree 1/8" x 1/32" linear, 0-180 degree 1/8" round. Pre MSIP
12RRC(1)-N2F-6	SE TO NOZ	B-F	85.10	SUR	1RRP-132		ACC	-		examination 270-360 degree 1/8" round, 270-360 degree 1/8" round, 270-360 degree 1/8" x 1/32" linear, 0-180 degree 1/8" round. Post HSIP examination.
12RRC(1)-N2F-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-011		45.60			ID and root geometry recorded. Downstream examination limited to a "W" of 1.15" from weld centerline due to nozzle configuration. Post MSIP examination.
12RRC(1)-N2G-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-008	•	45,60			ID and root geometry recorded. Downstream examination was limited to a "W" of 0.85" from weld centerline due to nozzle configuration. Post MSIP examination.
12RRC(1)-N2H-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-005		45,60			Beam redirect and root geometry recorded. Downstream examination limited to a "W" of 1.2" from weld centerline due to nozzle configuration. Post MSIP (examination.
12RRC(1)-N2J-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-002		45,60			ID geometry recorded. Downstream examination was limited to a "W" of 1.3" from weld centerline due to nozzle configuration. Post MSIP examination

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	Noind	Insig	Geom	Other	Remarks
Drawing # RRC-102										
12RRC(1)-N2K-6	SE TO NOZ	B-F	B5.10	VOL	R-R9-003		45,60			ID geometry and weld root geometry recorded. Downstream examination was limited to a "W" of dimension 1.05" from weld centerline due to nozzle configuration. Post MSIP examination.
RRC-PB-102(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RRC-103										
RRC-P-1A-BLT	PUMP BOLTING	B-G-1	B6.180	VOL	1RRU-170	0				No recordable indications. Examined in the installed condition
RRC-P-1A-BLT	PUMP BOLTING	B-G-1	B6.180	VT-1	1RRV-032	ACC				No recordable indications. Examined in the installed condition under tension
RRC-P-1B-BLT	PUMP BOLTING	B-G-1	B6.180	VOL	1RRU-168	0				No recordable indications. Examined
RRC-P-1B-BLT	PUMP BOLTING	B-G-1	B6.180	VT-1	1RRV-030	ACC				in installed condition No recordable indications. Examined installed condition under tension.
RRC-PB-103(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RRC-104										
RRC-12	SPRING	IVF	F-X	VT3H	1HV-0312	ACC				Hinor uniform corrosion on\embed plate to I-beam weld. Spring setting at cold mark.
RRC-1C-1(W)	8 WELDED LUGS	B-K-1	B10.10	SUR	1RRM-001	ACC				No recordable indications
RRC-1C-1	PSA-1 SN(2)	IWF	F-X	VT3H	1HV-0300	ACC				No recordable indications
RRC-1C-900N	PSA-1 SN(2)	IWF	F-X	VT3H	1HV-0311	ACC				No recordable indications
RRC-PB-104(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications

Identification No.	Description	Code Cate.	Item No.	<u>Meth</u>	Data Rpt. No.	Noind	Insig	Geom	<u>Other</u>	Remarks
Drawing # RRC-105										
20RRC(6)-8	PIPE TO VALVE	B-J	B9.11	VOL	R-R9-001				45,60	Resizing of indication found in R6. Length 3.6" through wall dimension 18.4%.
RRC-PB-105(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RRC-106										
RRC-PB-106(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RRC-107			•							
12RRC(7)B-2ALU 12RRC(7)B-2ALU	PIPE SEAM PIPE SEAM	B-J	B9.12 B9.12	SUR VOL	1RRP-136 R-R9-058	ACC 45	-			No recordable indications. No recordable indications.
12RRC(7)B-2A	PIPE TO PIPE	8-J	B9.11	SUR	1RRP-136	ACC				No recordable indications. This weld is stamped as 12RRC(7)B-2. Use identification = 12RRC(7)B-2A to link with PSI data.
12RRC(7)B-2A	PIPE TO PIPE	B-J	B9.11	VOL	R-R9-054	45		-		No recordable indications
12RRC(7)B-2ALD 12RRC(7)B-2ALD	PIPE SEAM PIPE SEAM	B-J B-J	B9.12 B9.12	SUR VOL	1RRP-136 R-R9-057	ACC 45				No recordable indications No recordable indications
12RRC(7)B-2LU 12RRC(7)B-2LU	PIPE SEAM PIPE SEAM	8-J B-J	B9.12 B9.12	SUR VOL	1RRP-135 R-R9-056	ACC 45				No recordable indications. No recordable indications
12RRC(7)B-2	PIPE TO ELL	B-J	89.11	SUR	1RRP-135	ACC				No recordable indications. This weld is stamped as 12RRC(7)B-2A. Use identification = 12RRC(7)B-2 to maintain link with PSI.
12RRC(7)B-2	PIPE TO ELL	B-J	B9.11	VOL	R-R9-055	45				No recordable indications
RRC-PB-107(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RRC-108										1
RRC-PB-108(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications

Identification No.	Description	Code Cate.	Item No.	<u>Meth</u>	Data Rpt. No.	Noind	Insig	Geom	<u>Other</u>	Remarks
Drawing # RRC-109										
RRC-PB-109(H)	HYDRO PRES BNDR	В-Р	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RRC-110							*			
RRC-PB-110(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RRC-111										
RRC-PB-111(H)	HYDRO PRES BNDR	в-Р	B15.51	VT-2	CL29	ACC				No unacceptable indications
Drawing # RWCU-101										-
4RWCU(4)-1/2RWCU(4)-4	PIPE TO WOL	B-J	B9.32	SUR	1RTM-005	ACC				No recordable indications
2RWCU(4)-1	VALVE TO PIPE	B-J	B9.21	SUR	1RTM-006	ACC				No recordable indications
RWCU-PB-101(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC			•	No unacceptable indications
Drawing # SLC-101										
SLC-PB-101(H)	HYDRO PRES BNDR	B-P	B15.51	VT-2	CL29	ACC				No unacceptable indications
SLC-4453-68	STRUT	IWF	F-X	VT3H	1HV-0292	ACC				No recordable indications .
SLC-4475-25	STRUT	IWF	F-X	VT3H	1HV-0289	ACC				No recordable indications
SLC-4475-24	STRUT	IWF	F-X	VT3H	1HV-0288	ACC				No recordable indications \
SLC-4475-21	PSA-1 SNUBBER	IWF	F-X	VT3H	1HV-0291	ACC				No recordable indications
SLC-4475-22	SPRING	IWF	F-X	VT3H	1HV-0287	ACC				No recordable indications
SLC-4475-121	SPRING	IWF	F-X	HETV	1HV-0313	ACC				Hinor uniform corrosion on wall plate. Spring setting at cold mark.
SLC-4475-117	STRUT	IWF	F-X	VT3H	1HV-0325	ACC				No recordable indications

Identification No.	Description	Code Cate.	Item No.	<u> Meth</u>	Data Rpt. No.	Noind	Insig	Geom	<u>Other</u>	Remarks	•
Drawing # SW-301											
SW-P8-301(H)	HYDRO PRES BNDR	D-B .	D2.10	VT-2	CK8901	ACC				No recordable	indications
Drawing # SW-302											
SW-PB-302(H)	HYDRO PRES BNDR	D-B	D2.10	VT-2	CK8901	ACC				No recordable	indications
Drawing # SW-303											
SW-PB-303(H) SW-PB-303(H)	HYDRO PRES BNDR Hydro Pres BNDR		D2.10 D2.10		CK8901 1SW-155	ACC ACC				No recordable No recordable	
Drawing # SW-304											
SW-PB-304(H)	HYDRO PRES BNDR	D-B	D2.10	VT-2	CK8901	ACC				No recordable	indications
Drawing # SW-305											•
SW-PB-305(H)	HYDRO PRES BNDR	D-B	D2.10	VT-2	CL2401	ACC				No recordabl€	e indications
Drawing # SW-306									•		
SW-PB-306(H)	HYDRO PRES BNDR	D-B	D2.10	VT-2	CL2401	ACC				No recordable	e indications
Drawing # SW-307											-
SW-PB-307(H) SW-PB-307(H)	HYDRO PRES BNDR HYDRO PRES BNDR		D2.10 D2.10		CL2401 1SWV-155	ACC ACC				No recordable	indications indications \
Drawing # SW-308											
SW-PB-308(H)	HYDRO PRES BNDR	D-B	D2.10	VT-2	CL2401				ACC	Leaks at flemacceptable.	x 1B1 and 1B2. Evaluated as
Drawing # SW-309											
SW-PB-309(H) SW-PB-309(H)	HYDRO PRES BNDR HYDRO PRES BNDR		D2.10 D2.10		CL2601 1SWV-155	ACC ACC					e indications e indications
Drawing # SW-310											
SW-PB-310(H)	HYDRO PRES BNDR	D-B	D2.10	VT-2	CL2601	ACC				No recordabl	e indications

Identification No.	Description	Code Cate.	Item No.	Meth	Data Rpt. No.	Noind	Insig	Geom	Other	Remarks
Drawing # SW-311										
SU-DR-311(H)	HYDRO PRES BNDR	D-B	02.10	VT-2	CL2601	ACC				No recordable indications

APPENDIX C

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

This appendix summarizes ASME Section XI repair or replacement work performed between June 21, 1993 and July 30, 1994. The status of the NIS-2 Owner's Report is stated for each repair and replacement work performed.

PLAN NO	D MWR.NO	COMPONENT NUMBER / WORK DESCRIPTION	DESC OF COMP	R&R REPORTED IN
			Distant	RF94A Summary Report *
2-0471		Repaired drain line with valves MS-V-239 and MS-V-238B	Piping	
2-0475		Capped drain line with valves MS-V-119C and MS-V-238C	Piping	RF94A Summary Report *
2-0475	AT 7842	Capped drain line with valves MS-V-238B and MS-V-239	Piping	RF94A Summary Report * RF94A Summary Report *
2-0498		Reinstalled drain line with valves MS-V-1/9C and MS-V-238C	Piping	
2-0498	AT 9479	Reinstalled drain line with valves MS-V-238B and MS-V-239	Piping	RF94A Summary Report *
2-0664	AR 2252	Modified FPC drain line	Piping	RF94A Summary Report
2-0745		Installed header lines for tanks DO-TK-1A, DO-TK-1B and DO-TK-2	Piping	RF94A Summary Report
2-0775		Replaced body to bonnet bolting material for valve RHR-V-50A	Valvo	RF94A Summary Report
2-0867	EY 0301	Installed pipe cap for connection RWCU-V-622	Piping	RF94A Summary Report
2-0868	DM 3601	Replaced nuts for decon flange joint, RRC loop A pump suction	Piping	RF94A Summary Report
2-0879	CE 3601	Replaced piping and relief valve CAC-RV-65A	Piping	RF94A Summary Report
2-0880	CE 3701	Replaced piping and relief valve CAC-RV-65B	Piping	RF94A Summary Report
2-0881	AP 0429	Modified connection for valves SLC-V-42 and SLC-V-43	Piping	RF94A Summary Report
2-0884	AP 0422	Modified connection for valves PSR-V-001/3 and PSR-V-001/4	Piping	RF94A Summary Report
2-0885	AP 0423	Modified connection for valves PSR-V-002/3 and PSR-V-002/4	Piping	RF94A Summary Report
2-0888	AR 9737	Machined seating surfaces for spare nozzles for main steam relief valves	Relief Valves	RF94A Summary Report
2-0899	DN 2701	Modified restriction orifice HPCS-RO-8 and HPCS-RO-9	Piping	RF94A Summary Report
2-0902	CG 3601	Replaced Local Power Range Monitoring (LPRM) Incore assemblies	RPV	RF94A Summary Report
2-0907	AP 0996	Installed UT sensor for tank DO-TK-1A	Tank	RF94A Summary Report
2-0908	AP 0997	installed UT sensor for tank DO-TK-1B	Tank	RF94A Summary Report
2-0909	AP 0998	Installed UT sensor for tank DO-TK-2	Tank	RF94A Summary Report
2-0911	AP 2245	Removed drain line with valves MS-V-238B and MS-V-239	Piping	RF94A Summary Report *
2-0916	DM 0101	Made body to bonnet seal weld for valve SW-V-44	Valv o	RF94A Summary Report
2-0921	DL 3801	Made body to bonnet seal weld for valve PSR-V-003/A	Valve	RF94A Summary Report
2-0922	DL 3801	Made body to bonnet seal weld for valve PSR-V-003/B	Valve	RF94A Summary Report
2-0944	AP 2762	Installed bushing retainer for valve EDR-V-40	Valv o	RF94A Summary Report
2-0963	AP 3929	Replaced disc insert and/or nozzle for relief valve S/N 63790-00-0045	Relief Valve	RF94A Summary Report
2-0964	AP 3930	Replaced disc insert and/or nozzle for relief valve S/N 63790-00-0055	Relief Valve	RF94A Summary Report
2-0972	AP 3931	Replaced disc insert and/or nozzle for relief valve S/N 63790-00-0051	Relief Valve	RF94A Summary Report
2-0973	DU 3001	Replaced disc insert and/or nozzle for relief valve S/N 63790-00-0047	Relief Valve	RF94A Summary Report
2-0974	FL 9801	Replaced mechanical seal for pump FPC-P-1A	Pump	RF94A Summary Report
2-0975	AP 4900	Removed failed weld in instrument line PI(1)-4S-X75d	Piping	See Note 1
2-0976	AP 5046	Repaired inlet and outlet condenser heads for CCH-CR-1B	Heat exchanger	RF94A Summary Report
2-0978	CE 0501	Modified connection for valve PI-V-902	Piping	See Note 1
2-0982	CE 0101	Modified connection for valve FPC-V-187B	Piping	See Note 1
2-0983	CC 0601	Cut and rewelded welds shown on Dwg RRC-4300-3	Piping	RF94A Summary Report
2-0985	GW 1504,6	Replaced modules for Position No's 1, 2, 3 for electrical penetration X-101B	Penetration	RF94A Summary Report
2-0986		Installed bypass around valve RHR-V-6A	Piping	See Note 1
2-0989	ED 9601	Replaced bolting material for a flanged joint shown on Dwg RWCU-4794-1	Piping	See Note 1
2-0990	DN 8001	Replaced front snubber for valve CVB-V-1ST	Valve	RF94A Summary Report
2-0991	CM 3801	Made body to bonnet seal weld for valve DO-V-41B	Valv o	RF94A Summary Report
2-0992	FY 2101	Replaced disc and made body to bonnet seal weld for valve RHR-V-209	Valve	RF94A Summary Report
2-0993	GC 9901	Replaced disc (plug) valve RWCU-FCV-33	Valv o	RF94A Summary Report
2-0996	CM 2301,4	Replaced level switch CRD-LS-13E	Piping	See Note 1
2-0997	FG 7802,3	Replaced stem disc assembly and bonnet for valve RWCU-V-103	Valve	RF94A Summary Report
2-0998	DL 6501	Replaced disc and bonnet for valve MS-V-20	Valve	RF94A Summary Report
2-0999	CL 5003	Replaced bolting material for relief valve FPC-RV-117A outlet flanged joint	Piping	See Note 1
2-1000	CL 4901	Replaced base for relief valve RCC-RV-34A	Relief Valve	See Note 1
2-1001	DL 5603	Replaced valves CEP-V-1A and CEP-V-2A	Piping	RF94A Summary Report
2-1002	DL 5703	Replaced valves CSP-V-3 and CSP-V-4	Piping	RF94A Summary Report
2-1003	C 30786	Modified "Bailly" MSRV S/N N 56000-01-0037 to S/N N 63790-00-0134	Relief Valve	RF94A Summary Report
2-1004	C 30786	Modified "Bailly" MSRV S/N N 56000-01-0099 to S/N N 63790-00-0135	Relief Valve	RF94A Summary Report
2-1005	C 30786	Modified "Bailly" MSRV S/N N 56000-02-0043 to S/N N 63790-00-0136	Relief Valve	RF94A Summary Report
2-1006	C 30786	Modified "Bailly" MSRV S/N N 56000-01-0042 to S/N N 63790-00-0137	Relief Valve	RF94A Summary Report
2-1007	C 30786	Modified "Bailly" MSRV S/N N 56000-01-0038 to S/N N 63790-00-0138	Relief Valve	RF94A Summary Report
2-1008	C 30786	Modified "Bailly" MSRV S/N N 56000-01-0100 to S/N N 63790-00-0139	Relief Valve	RF94A Summary Report
2-1009	CL 4601	Replaced relief valve SLC-RV-29A	Relief Valve	RF94A Summary Report
2-1010	CL 4701	Replaced relief valve SLC-RV-29B	Relief Valve	RF94A Summary Report
2-1011	CJ 2001	Replaced existing relief valve MS-RV-1D with spare S/N N63790-00-0047	Relief Valve	RF94A Summary Report
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PLAN NO	MWR.NO	COMI CITERT ITEMS 2117 ITEMS 2117		R&R REPORTED IN
2-1012	CH 1001	Heplaced existing tollor varo incentives managers extra	Relief Valve	RF94A Summary Report
2-1013	CJ 2101	Hopiacou chasting tolici varo monte ab mar opera of	Relief Valve	RF94A Summary Report
2-1014	CH 8001	Hobiacod exeating felicit that the first open a street and	Relief Valve	RF94A Summary Report
	CJ 2301	Replaced existing relief valve MS-RV-4A with spare S/N N63790-00-0135	Relief Valve	RF94A Summary Report
2-1016	CJ 2401	Replaced existing relief valve MS-RV-2A with spare S/N N63790-00-0051	Relief Valve	RF94A Summary Report
2-1017	CJ 2601	Replaced existing relief valve MS-RV-4B with spare S/N N63790-00-0137	Rollef Valvo	RF94A Summary Report
2-1018	CJ 2701	Replaced existing relief valve MS-RV-2D with spare S/N N63790-00-0138	Relief Valve	RF94A Summary Report
2-1019	CJ 2201	Refurbished and reinstalled MS-RV-2C, S/N N63790-00-0122	Relief Valve	RF94A Summary Report
2-1020	CW 8101	Replaced valves RCIC-V-26, 39, 54, 207 and associated piping	Piping	See Note 1
2-1022	CG 2501	Removed internals for valve RHR-V-46A	Valvo	RF94A Summary Report
2-1023	KC 1302	Replaced valve RCIC-V-28	Valv o	RF94A Summary Report
2-1024	HL 6101	Replaced parts for valve SLC-V-4B	Valve	RF94A Summary Report
2-1025	CL 3201	Modified supports for instrument lines PI(1)-4S-X-40d and PI(1)-4S-X-70a	Piping	See Note 1
2-1026	GV 9801	Installed packing leak off plug for valve FPC-V-114	Valvo	See Note 1
2-1029	KK 2101	Replaced module for Position No 1 for electrical penetration X-104A	Penetration	RF94A Summary Report
2-1038	FD 2204	Modified wedge for valve RHR-V-8	Valve	RF94A Summary Report
2-1039	FF 8303	Installed external bypass for pressure locking for valve RHR-V-9	Valve	See Note 1
2-1040	JL 6601	Installed external bypass for pressure locking for valve LPCS-V-5	Valve	See Note 1
2-1044	JX 3001	Installed new valve PI-V-X72F1 in line PI(1)-4S-X72F	Piping	See Note 1
-1045	JX 3201	Installed new valve PI-V-X773E1 in line PI(1)-4S-X73E	Piping	See Note 1
2-1045 2-1046	DK 7704	Repaired pits in line SW(1)-2G down stream of valve SW-V-2A	Piping	RF94A Summary Report
2-1047	DK 7705	Weld overlay in line SW(1)-2G down stream of valve SW-V-2A	Piping	RF94A Summary Report
-1047 -1048	DL 6101	Replaced bolting material for seal cooler RHR-HX-2A	Heat Exchanger	RF94A Summary Report
	KG 9401	Made body to bonnet seal weld for valve RHR-V-73A	Valve	RF94A Summary Repor
2-1049 2-1050	CJ 2101	Machined (removed) gouges in piping flange for MS-RV-2B	Piping	RF94A Summary Repor
	CJ 2701	•	Piping	RF94A Summary Repor
2-1051		Machined (removed) gouges in piping flange for MS-RV-2D Replaced module for Position No 1 for electrical penetration X-101A	Penetration	RF94A Summary Repor
-1052	GW 1509	Replaced module for Position No 1 for electrical penetration X-105B	Penetration	RF94A Summary Repor
-1053	KS 0903		Piping	RF94A Summary Repor
-1054	DL 5703	Modified tubing for instrument line PI(1)-ST-(IR-64)-9, valve CSP-V-701	Piping	RF94A Summary Repor
1055	DL 5703	Modified tubing for instrument line PI(1)-4S-X82B, valve PI-V-X82B2	Piping	RF94A Summary Repor
2-1056	DL 5703	Modified tubing for instrument line PI(1)-4S-X82D, valve PSR-V-X82-2	Flex Hose	RF94A Summary Repor
-1057	KL 6601	Repaired weld for flex hose SW-FLX-1A2 Replaced bolting material for flange joint N-7 on Dwg RCIC-659-27.28	Piping	RF94A Summary Repor
2-1058	CZ 1602	-	Valve	RF94A Summary Report
2-1059	CG 2701	Removed internals for valve RHR-V-46B	Valvo	RF94A Summary Repor
2-1060	CG 2901	Removed internals for valve RHR-V-46C	Flex Hose	RF94A Summary Repor
2-1061	KM 0202	Repaired weld for flex hose SW-FLX-1A1	Flex Hose	RF94A Summary Repor
2-1062	KM 0203	Repaired weld for flex hose SW-FLX-2A1	Flex Hose	RF94A Summary Repor
2-1063	KM 0204	Repaired weld for flex hose SW-FLX-2A2	Valve	RF94A Summary Repor
-1065	KM 5801	Replaced front and rear snubbers for valve CVB-V-1CD		RF94A Summary Repor
2-1069	KM 3803	Replaced module for Position No 3 for electrical penetration X-105C	Penetration	
2-1070	KR 4803	Replaced module for Position No 1 for electrical penetration X-105A	Penetration	RF94A Summary Repor
2-1071	DJ 8904	Repaired pits In line SW(1)-2G down stream of valve SW-V-2B	Piping	• •
2-1072	DJ 8903	Replaced valve SW-V-2B	Piping	RF94A Summary Repor
-1073	KN 1803	Repaired weld for flex hose SW-FLX-1B1	Flex Hose	RF94A Summary Repor
2-1074	KN 2002	Repaired weld for flex hose SW-FLX-1B2	Flex Hose	RF94A Summary Repor
2-1075	CH 8002	Replaced bolting material for flange joint shown on Dwg CIA-4133-1	Piping	RF94A Summary Repor
2-1076	KR 6901	Fillet welded disc to disc nut for valve HPCS-V-23	Valve	RF94A Summary Repor
2-1077	CW 8102	Replaced valve RCIC-V-25	Piping	See Note 1
2-1079	DM 8002	Fabricated and installed end cover plate for valve SW-V-165B	Valve	RF94A Summary Repor
2-1080	CL 1302	Replaced pipe nipple between DCW-HX-1B2 and valve SW-V-197	Piping	See Note 1
2-1081	DM 8001	Replaced nuts for piping to valve SW-V-165B flanged joint	Piping	RF94A Summary Repor
2-1082	CL 7301	Replaced disc assembly for valves RRC-V-21 and RRC-V-22	Valv o	See Note 1
2-1084	KN 2003	Repaired weld for flex hose SW-FLX-1B2	Flex Hose	RF94A Summary Repor
2-1085	KY 2602	Replaced Local Power Range Monitoring (LPRM) Incore assembly	RPV	RF94A Summary Repor
2-1086	KX 8102	Replaced module for Position No's 1 and 2 for electrical penetration X-105C	Penetration	RF94A Summary Repo
2-1087	LC 8602	Replaced module for Position No 3 for electrical penetration X-101C	Penetration	RF94A Summary Repo
2-1088	LC 8702	Replaced module for Position No 3 for electrical penetration X-101D	Penetration	RF94A Summary Repo
	LB 0301	Replaced valve CRD-V-101A/1427, Serial No DL 10211	Piping	See Note 1
2-1009				
2-1089 2-1090	CK 8908	Replaced bolting material for flex hoses SW-FLX-2A1 and SW-FLX-2A2	Piping	RF94A Summary Report

PLAN NO	MWR NO	COMPONENT NUMBER / WORK DESCRIPTION	DESC OF COMP	R&R REPORTED IN
2-1093	FB 1101	Machined surface defects on disc seating surface for valve SLC-V-14	Valvo	RF94A Summary Report
2-1094	LD 8602	Made body to bonnet seal weld for valve CIA-V-30A	Valvo	RF94A Summary Report
2-1095	LK 6301	Repaired pin hole in socket weld for CAC-HR-1B piping	Piping	RF94A Summary Report
2-1097	ME 2402	Replaced disc and made body to bonnet seal weld for valve PSR-V-X77A/1	Valv o	RF94A Summary Report
2-1099	FN 0101	Replaced disc and nozzle for relief valve RHR-RV-5	Relief Valve	RF94A Summary Report
2-1100	MH 26	Cut and rewelded socket weld for drain connection with valve HPCS-V-58	Piping	RF94A Summary Report
2-1101	ME 24	Replaced valve PSR-V-X77A/1 - First Replacement	Valve	See Note 1
2-1103	ME 2408	Replaced valve PSR-V-X77A/1 - Second Replacement	Valvo	RF94A Summary Report
N/A	CG 2401	Replaced thirty (30) Control Rod Drives (CRD's)	CRD	RF94A Summary Report
N/A	KT 8901	Replaced one (1) Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	KT 8902	Replaced one (1) Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6304	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6305	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6307	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6308	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6309	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6311	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6312	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6315	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6320	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6321	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6322	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6323	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6326	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6327	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	EU 6331	Overhauled and replaced part(s) for Control Rod Drive (CRD)	CRD	RF94A Summary Report
N/A	CL 3201	Replaced snubber for support MS-1368-13	Support	RF94A Summary Report
N/A	CL 3201	Deleted snubbers for supports RRC-SA-1, 2, 8, 9,11 -> 20, 25 and 66	Supports	RF94A Summary Report
N/A	CL 3201	Deleted snubbers for supports RHR-SA-30 and RHR-SA-31	Supports	RF94A Summary Report
N/A	CL 3201	Deleted snubber for support RHR-2264-21	Support	RF94A Summary Report
N/A	CL 3201	Deleted snubbers for supports RHR-SA-35, 36, 37, 39 and 40	Supports	RF94A Summary Report
N/A	CL 3201	Deleted snubbers for supports RHR-SA-54, 55, 57, 58 and 59	Supports	RF94A Summary Report
N/A	CL 3201	Deleted snubbers for supports RRC-SB-1, 2,11 -> 18, 25 and 66	Supports	RF94A Summary Report
N/A	CL 3201	Deleted snubbers for supports RHR-SB-30 and 31	Supports	RF94A Summary Report
N/A	CL 3201	Deleted snubbers for supports RHR-SB-32, 34, 35, 36 and 39	Supports	RF94A Summary Report
N/A	CL 3201	Removed U bolt for support 8-220-656-41	Support	See Note 1
N/A	CL 3201	Removed U bolts for support B-220-1155-40	Support	See Note 1
N/A	CL 3201	Removed U bolt for support B-220-1172-40	Support	See Note 1
N/A	CL 3201	Removed U bolt for support B-220-1176-20	Support	See Note 1
N/A	CL 3201	Removed U bolt for support B-220-687-21	Support	See Note 1





1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 3/10/94 Sheet: 1 of 1

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

Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
- (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308 And N-416
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

	ne Of Manufacturar Serial N		1	Year	Repaired,	ASME Code
Component Manut		No	I.D.	Built	Replaced Or Replacement	Stamped (Yes Or No) Code Class
MS(1)-4B WP	PSS MS(1)-4B-	-P3 N/A	N/A	1983	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Replaced pipe piece between the sockolet and valve MS-V-239. The pipe was replaced due to failed (cracked) wold. The replacement work was performed as follows:
 - 1) Cut and removed existing pipe piece
 - 2) Installed new replacement pipe piece
 - 3) Made required socket welds
 - 4) Performed PT examination on the final socket welds. PT-examination results acceptable. This NDE examination satisfied both ASME Section III, Code Class 2 and Code Case N-416 requirements
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test

Revision - Revised Item 9 "Remarks" (Underlined portion only):



9 E Z	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back) Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other North Test Pressure: 1005 Psig Test Temperature: 535° F Component Design Pressure: 1250 Psig Temperature: 575° F Remarks: Visual examination (VT-2) for leakage at nominal operating pressure and temperature was performed in lieu of the required decoration to the performed based on ASME Section XI. Article VA-5214(d). See attached IOM from RA Moon/TL Mead to HE Kook, Subject - Justification for not performing hydrostatic test of repairs to lain Steam (MS) drip leg, dated February 22, 1994	i
	CERTIFICATE OF COMPLIANCE We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules 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 Signed By Manager, Materials And Inspection Date 3/10/94 Date 3-11-94	
description of the second of t	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 10-20-88 to 8-20-90 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 Description	

INTEROFFICE MEMORANDUM

PLAN NO. 2-0471 Pular Emps 3/10/94

DATE: February 22, 1994

TO: HE Kook, Manager WNP-2 Licensing (PE20)

FROM: IL Meade, Manager Technical Programs (PE27)

RA Moen, Manager Materials and Inspection (PE22)

Subject:

JUSTIFICATION FOR NOT PERFORMING HYDROSTATIC TEST OF REPAIRS TO

MS LINE DRIP LEG

REFERENCE:

From October 1988 through January 1993, several ASME Section XI work plans were implemented to perform repair/replacement work on the two-inch NPS drain connection attached to ASME Section III, Code Class 2 Main Steam system, Line "B" drip leg. ASME Section XI, Article IWA-4400 requires such repair/replacements to be hydrostatically tested. At the time the repair/replacements were performed, the hydrostatic tests were deferred using ASME Code Case N-416 which allows deferral of hydrostatic tests of piping that cannot be isolated by existing valves to the next scheduled system hydrostatic test. The next scheduled system hydrostatic test was anticipated to be the test required at a ten year interval.

During preparation for the ten year hydrostatic tests using Code Case N-498, it was noticed that ISI Program Plan, Note 4 of page 4-3 states that Class 2 portion of Main Steam line (downstream of outboard MS isolation valves) does not perform any safety function and is capable of automatic isolation, therefore no pressure test will be performed on these lines. This position was further confirmed with NRC during our request to use Code Case N-498 (Ref. letter G02-92-017, dated January 23, 1992). Use of Code Case N-498 for Class 1 and 2 piping systems allows leakage test at nominal operating pressure in lieu of the hydrostatic tests.

Independent review by a member of Plant Technical staff concluded that provisions of IWA-5214(d) can be used to justify waving hydrostatic test requirements for affected repairs. IWA-5214(d) states that when a system hydrostatic test imposes system conditions which conflict with limitations included in the plant Technical Specifications, a system inservice test at nominal operating temperature shall be acceptable in lieu of the system hydrostatic test. Justification for the application of this Article is as follows:

- The configuration of the affected piping requires that the Reactor Pressure Vessel (RPV) be included in the hydrostatic pressure boundary.
- The required hydrostatic test pressure for the affected piping is 1563 PSIG. To reach that pressure in the RPV would necessitate gagging the Safety Relief Valves (SRV's) because their set points are all less than the required test pressure.

- Technical Specification 2.1.3, Reactor Coolant System Pressure, limits reactor pressure to LE 1325 psig steam dome pressure (equivalent to 1375 psig at the lowest elevation of the reactor coolant system).
- •The Pressure/Temperature curves for the RPV in Technical Specifications Figure 3.4.6.1 indicate the required temperature of the RPV to pressurize to 1563 PSIG is > 250 degrees F.
- •With Reactor Coolant temperature >200 degrees F, Technical Specifications require that the Mode Switch be in operational condition 3 (Hot Shutdown).
- Technical Specification 3.4.2b) requires 4 SRV's to be operable while in Mode 3 which would not be the case with all SRV's gagged.

This conflict with limitations of WNP-2 Technical Specifications allows application of Article IWA-5214(d). The inservice test required in lieu of the hydrostatic test was performed each time the repair/replacements were made and is documented on the Section XI work plans. NIS-2 form will be updated to reflect this position.

DISTRIBUTION:

LC Mauws/lb LCM	PE27
R Rana/lb RRana	PE27
PJ Inserra	PE27
CM King	PE22
K Singh	PE22
DP Ramey	901B
DE Hoggarth	901B
MG Eades	PE20
RL Webring	PE27
TLM/lb	



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 3/10/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None

(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1990 Edition with Winter 1990 Addenda, Code Case: N-308 And N-416

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4B	WPPSS	MS(1)-4B-P3	N/A	N/A	1983	Replacement	Yes, Code Class 2
MS(1)-4C	WPPSS	MS(1)-4C-P3	N/A	N/A	1983	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Removed 3/4" drain line with valves MS-V-119C/MS-V-238C and 2" drain line with valves MS-V-239/MS-V-238B. Installed pipe caps in place of the drain lines. The replacement work for both the drain lines was performed as follows:
 - 1) Cut and removed both the drain lines -
 - 2) Installed new replacement pipe for 3/4° drain line and new replacement pipe caps for both the drain lines
 - 3) Made required socket welds
 - 4) Performed MT or PT examination on the final socket wolds. MT/PT examination results acceptable. This NDE examination satisfied both ASME Section III, Code Class 2 and Code Case N-416 requirements
 - 5). Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test

Note: Capped drain lines were considered as interim design configuration. Both the drain lines were reinstalled under ASME Section XI. Plan No 2-0498

Revision - Revised Item 9 "Remarks" (Underlined portion only)



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

	Total No. 2 of National Control of the Control of t
8 Te	rests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Nominal Operating Pressure: 535° F Test Pressure: 1005 Psig Temperature: 575° F Component Design Pressure: 1250 Psig Temperature: 575° F
hydro IWA-	emarks: Visual examination (VT-2) for leakage at nominal operating pressure and temperature was performed in lieu of the required static test as permitted by Code Case N-416. The required hydrostatic test will not be performed based on ASME Section XI, Article 5214(d). See attached IOM from RA Moen/TL Mead to HE Kook, Subject - Justification for not performing hydrostatic test of repairs to Steam (MS) drip log, dated February 22, 1994
_	
	CERTIFICATE OF COMPLIANCE
77	Ve certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable
 F	repared By Rulaup Sureb Signed By RAMou
	Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
E	ate3 10 94
V (F	CERTIFICATE OF INSERVICE INSPECTION the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure lessel inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
5	escribed in this Owner's Report during the period 12-2-85 to 8-22-90 and taken tate to the best of my knowledge and belief, the Owner has performed examinations and taken performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the SME Code, Section XI
B ir F	y signing this certificate neither the inspector nor his employer makes any warranty, expressed or inplied, concerning the examinations and corrective measures described in this Owner's Report. Surthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
	Commissions 9556 W NST National Board, State, and Endorsements ate 3/14/94
1	

INTEROFFICE MEMORANDUM

PLAN No. 2-0475 Pudip Lups 3/10/84

DATE: February 22, 1994

TO: HE Kook, Manager WNP-2 Licensing (PE20)

ROM: 1L Meade, Manager Technical Programs (PE27)

RA Moen, Manager Materials and Inspection (PE22)

SUBJECT:

JUSTIFICATION FOR NOT PERFORMING HYDROSTATIC TEST OF REPAIRS TO

MS LINE DRIP LEG

REFERENCE:

From October 1988 through January 1993, several ASME Section XI work plans were implemented to perform repair/replacement work on the two-inch NPS drain connection attached to ASME Section III, Code Class 2 Main Steam system, Line "B" drip leg. ASME Section XI, Article IWA-4400 requires such repair/replacements to be hydrostatically tested. At the time the repair/replacements were performed, the hydrostatic tests were deferred using ASME Code Case N-416 which allows deferral of hydrostatic tests of piping that cannot be isolated by existing valves to the next scheduled system hydrostatic test. The next scheduled system hydrostatic test was anticipated to be the test required at a ten year interval.

During preparation for the ten year hydrostatic tests using Code Case N-498, it was noticed that ISI Program Plan, Note 4 of page 4-3 states that Class 2 portion of Main Steam line (downstream of outboard MS isolation valves) does not perform any safety function and is capable of automatic isolation, therefore no pressure test will be performed on these lines. This position was further confirmed with NRC during our request to use Code Case N-498 (Ref. letter G02-92-017, dated January 23, 1992). Use of Code Case N-498 for Class 1 and 2 piping systems allows leakage test at nominal operating pressure in lieu of the hydrostatic tests.

Independent review by a member of Plant Technical staff concluded that provisions of IWA-5214(d) can be used to justify waving hydrostatic test requirements for affected repairs. IWA-5214(d) states that when a system hydrostatic test imposes system conditions which conflict with limitations included in the plant Technical Specifications, a system inservice test at nominal operating temperature shall be acceptable in lieu of the system hydrostatic test. Justification for the application of this Article is as follows:

- The configuration of the affected piping requires that the Reactor Pressure Vessel (RPV) be included in the hydrostatic pressure boundary.
- •The required hydrostatic test pressure for the affected piping is 1563 PSIG. To reach that pressure in the RPV would necessitate gagging the Safety Relief Valves (SRV's) because their set points are all less than the required test pressure.

- Technical Specification 2.1.3, Reactor Coolant System Pressure, limits reactor pressure to LE 1325 psig steam dome pressure (equivalent to 1375 psig at the lowest elevation of the reactor coolant system).
- •The Pressure/Temperature curves for the RPV in Technical Specifications Figure 3.4.6.1 indicate the required temperature of the RPV to pressurize to 1563 PSIG is > 250 degrees F.
- •With Reactor Coolant temperature >200 degrees F, Technical Specifications require that the Mode Switch be in operational condition 3 (Hot Shutdown).
- Technical Specification 3.4.2b) requires 4 SRV's to be operable while in Mode 3 which would not be the case with all SRV's gagged.

This conflict with limitations of WNP-2 Technical Specifications allows application of Article IWA-5214(d). The inservice test required in lieu of the hydrostatic test was performed each time the repair/replacements were made and is documented on the Section XI work plans. NIS-2 form will be updated to reflect this position.

DISTRIBUTION:

LC Mauws/lb LCM	PE27
R Rana/lb Alana	PE27
PJ Inserra	PE27
CM King	PE22
	PE22
K Singh	
DP Ramey	901B
DE Hoggarth	901B
MG Eades	PE20
RL Webring	PE27
TLM/lb	



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 3/10/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
 - (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308 And N-416
- 8. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) · Code Class
MS(1)-4B	WPPSS	MS(1)-4B-P3	N/A	NVA	1983	Replacement	Yes, Code Class 2
MS(1)-4C	WPPSS	MS(1)-4C-P3	N/A	NVA	1983	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: The 3/4" drain line with valves MS-V-119C/MS-V-238C and 2" drain line with valves MS-V-239/MS-V-238B removed under ASME Section XI Plan No 2-0475 were reinstalled under this plan. The reinstallation work for both the drain lines was performed as follows:
 - 1) Cut and removed the existing pipe pieces with the pipe caps from the sockolets for both the drain lines
 - 2) Cut and removed the existing pipe pieces between the valves for both the drain lines
 - 3) Installed new replacement pipe pieces and the existing valves previously removed for both the drain lines
 - 4) Made required socket welds
 - 5) Performed MT or PT examination on the final socket welds. MT/PT examination results acceptable. This NDE examination satisfied both ASME Section III, Code Class 2 and Code Case N-416 requirements
 - 6) Fabricate and installed new pipe supports for both the drain lines.
 - 7) Made required welds for the new supports
 - 8) Performed MT or PT examination on the final welds. MT/PT examination results acceptable
 - 9) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during pressure test

Revision - Revised Item 9 "Remarks" (Underlined portion only)



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

	static Pneumation essure: 950 Psignent Design Pressure:	τ.	perating Pressure X est Temperature: 530° F emperature: 575° F	Other Non
. Remarks: Visual examination of the state o	n (VT-2) for leakage at nomin ode Case N-416. <u>The require</u> om RA Moon/TL Mead to HE	nal operating pressure of hydrostatic test will n	und temperature was performed of be performed based on ASMI	Section XI, Article
	CERTIFICA	ATE OF COMPLI	ANCE	·
We certify that the state to the rules of the ASM Type Code Symbol Stat Certificate Of Authoriza Expiration Date: Not Appl	E Code, Section XI mp: Not applicable tion No.: Not applicable	wner's Report are	correct and this replaceme	ent conforms
Prepared By Dulo	h - Materials And Inspection	Signed By	RAMOE_ Manager, Materials And Ins	pection
Date 3	(0[94	_ Dato	3-11-94	
	CERTIFICATE Q	DE INSERVICE IN	SPECTION	
Vessel Inspectors and to (Factory Mutual Engineering described in this Owner state to the best of my k corrective measures de	he State of Washington ng Association) of Norwo r's Report during the p mowledge and bellef; t	and employed by od, Massachusetts erlod <u>5-4-8</u> the Owner has pe	ational Board of Boller at Arkwright Mutual Insurance have inspected the comp 39 to 8-22-9 formed examinations an dance with the requireme	company conents and d taken
Implied, concerning the Furthermore, neither the	examinations and cor Inspector nor his em	rrective measures ployer shall be lia d arising from or	er makes any warranty, e. described in this Owner ble in any manner for an connected with this inspe	's Report. y personal
Inspector's Sig	nature L	Commissions	9556 W National Board, State, and E	NBT ndorsements ·

INTEROFFICE MEMORANDUM

DATE: February 22, 1994

HE Kook, Manager WNP-2 Licensing (PE20)

V. NO. 2-07.0 Partolop Burgs 3/10/94

1L Meade, Manager Technical Programs (PE27)

RA Joen, Manager Materials and Inspection (PE22)

SURJECT: JUSTIFICATION FOR NOT PERFORMING HYDROSTATIC TEST OF REPAIRS TO

MS LINE DRIP LEG

REFERENCE:

From October 1988 through January 1993, several ASME Section XI work plans were implemented to perform repair/replacement work on the two-inch NPS drain connection attached to ASME Section III, Code Class 2 Main Steam system, Line "B" drip leg. ASME Section XI, Article IWA-4400 requires such repair/replacements to be hydrostatically tested. At the time the repair/replacements were performed, the hydrostatic tests were deferred using ASME Code Case N-416 which allows deferral of hydrostatic tests of piping that cannot be isolated by existing valves to the next scheduled system hydrostatic test. The next scheduled system hydrostatic test was anticipated to be the test required at a ten year interval.

During preparation for the ten year hydrostatic tests using Code Case N-498, it was noticed that ISI Program Plan, Note 4 of page 4-3 states that Class 2 portion of Main Steam line (downstream of outboard MS isolation valves) does not perform any safety function and is capable of automatic isolation, therefore no pressure test will be performed on these lines. This position was further confirmed with NRC during our request to use Code Case N-498 (Ref. letter G02-92-017, dated January 23, 1992). Use of Code Case N-498 for Class 1 and 2 piping systems allows leakage test at nominal operating pressure in lieu of the hydrostatic tests.

Independent review by a member of Plant Technical staff concluded that provisions of IWA-5214(d) can be used to justify waving hydrostatic test requirements for affected repairs. IWA-5214(d) states that when a system hydrostatic test imposes system conditions which conflict with limitations included in the plant Technical Specifications, a system inservice test at nominal operating temperature shall be acceptable in lieu of the system hydrostatic test. Justification for the application of this Article is as follows:

- The configuration of the affected piping requires that the Reactor Pressure Vessel (RPV) be included in the hydrostatic pressure boundary.
- The required hydrostatic test pressure for the affected piping is 1563 PSIG. To reach that pressure in the RPV would necessitate gagging the Safety Relief Valves (SRV's) because their set points are all less than the required test pressure.

WP-102 R6 (5-90)

- Technical Specification 2.1.3, Reactor Coolant System Pressure, limits reactor pressure to LE 1325 psig steam dome pressure (equivalent to 1375 psig at the lowest elevation of the reactor coolant system).
- •The Pressure/Temperature curves for the RPV in Technical Specifications Figure 3.4.6.1 indicate the required temperature of the RPV to pressurize to 1563 PSIG is > 250 degrees F.
- •With Reactor Coolant temperature > 200 degrees F, Technical Specifications require that the Mode Switch be in operational condition 3 (Hot Shutdown).
- Technical Specification 3.4.2b) requires 4 SRV's to be operable while in Mode 3 which would not be the case with all SRV's gagged.

This conflict with limitations of WNP-2 Technical Specifications allows application of Article IWA-5214(d). The inservice test required in lieu of the hydrostatic test was performed each time the repair/replacements were made and is documented on the Section XI work plans. NIS-2 form will be updated to reflect this position.

DISTRIBUTION:

LC Mauws/lb LCM	PE27
R Rana/lb RRana	PE27
PJ Inserra	PE27
CM King	PE22
K Singh	PE22
DP Ramey	901B
DE Hoggarth	901B
MG Eades	PE20
RL Webring	PE27
TT M/lb	



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 6/21/94 Sheet: 1 of 1 Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	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(12)-1	WPPSS	FPC(12)-1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3

- 7. Description Of Work Performed: Modified drain line to valve FPC-V-104. The work was performed as follows
 - 1) Installed new piping material
 - 2) Made required welds
 - 3) Installed new support material
 - 4) Made required welds
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



sts Conducted: Hydrostatic 🚁 Pneum Test Pressure:* Psig Component Design Press		i Operating Press Test Temperatur Temperature: 175	e:75.6° F
emarks: * The welds were visually examined durin	ig refueling when the rea	ctor well was flooded (Static head)
		,	
	*		•
••		•	
	,	•	· de
CERTI	FICATE OF COMP	PLIANCE '	
2			
Ve certify that the statements made in the		are correct and th	is replacement conforms
o the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable	I		
Sertificate Of Authorization No.: Not applicable	ble		
xpiration Date: Not Applicable	2.0		
7.00 0 4	1	DA.	
repared By Lulas Emp	ン Signed By _		
Kuldip Singh - Materials And Inspe	con	•	terials And Inspection
late 6 21 94	Date	6-22	-94
			
CERTIFICAT	TE OF INSERVICE	INSPECTION	•
the understanced believe a well-decomp	laatan taassad bookb	- M-M1 D1	
the undersigned, holding a valid commi essel inspectors and the State of Washin			
actory Mutual Engineering Association) of N			
escribed in this Owner's Report during t			
tate to the best of my knowledge and be	_		
orrective measures described in this Ow	vner's Report in acc	cordance with the	requirements of the
SME Code, Section XI			
ly signing this certificate neither the insp nplied, concerning the examinations and			
urthermore, neither the inspector nor his			
njury or property damage or a loss of an			
		nee!	سراه ۱۸
	Commissio		W NBI



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 8/10/94 Sheet: 1 of 1 Unit: WNP-2

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

 Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Bechtel Construction Company, PO Box 600, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: C30236
- 4. Identification Of System: Diesel Oil (DO) System
- (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980
 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
DO(1)-HPCS	WPPSS	DO(1)-HPCS-P1	N/A	N/A	1982	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Installed fill header lines associated with storage tanks DO-TK-1A, DO-TK-1B and DO-TK-2. The replacement work was performed as follows

- 1) Installed new pipe and fitting material
- 2) Made required circumferential butt welds
- 3) Installed new valve
- 4) Installed new bolting material for the flanged joints
- 5) Performed pressure test to confirm pressure boundary integrity of the welded joints. No evidence of leakage during the pressure test
- 6) Performed pressure test to confirm pressure boundary integrity of the flanged joints. There was evidence of leakage during the pressure test for the flanged joints. The leakage was evaluated to be acceptable



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

		ssure: 113 Psig/A ent Design Pre	tmospheric Te	perating Pressure X Other No est Temperature: 64.6/41° F emperature: 120° F
Remarks:	See attached NPV	-1 Code Data Repor	rts for the following new valves	
EPN No	Serial No	EPN No	Serial No	
DO-V-57	59387-1A	DO-V-85	V-1943-001	1
DO-V-58	59387-4B	DO-V-86	V-1943-002	
DO-V-59 DO-V-60	59387-4A 59387-4B	DO-V-87	V-1943-003	
		and test temperatu	re of 64.6° F. Nominal operation	ng pressure test of atmospheric and test temperature
	· · · · · · · · · · · · · · · · · · ·	CER	TIFICATE OF COMPLIA	ANCE

				correct and this replacement conforms
		Code, Section	XI	
* *	e Symbol Stam	•		
Certificate	Of Authorizat	ion No.: Not appli	cable	
	Date: Not Applic			1
•				Ann.
Prepared	By Vuld	th Sauce	Signed By	KXIMOEL
		- Materials And Ins	spection	Manager, Materials And Inspection
	الهالة والمسا		·	
Date		10194	Date	<i>8-11-94</i>
			·	
			477.07.1107.1107.111	
		CERTIFICA	ATE OF INSERVICE IN	SPECTION
I, the unde	ersigned, holdi	'ng a valid comi	mission issued by the N	lational Board of Boller and Pressure
Vessel Ins	pectors and th	ne State of Wash	nington and employed by	Arkwright Mutual Insurance Company
				have inspected the components
				2to8-15 · 94and
				rformed examinations and taken
		scribed in this C	wher a neport in accor-	dance with the requirements of the
	de, Section XI			
				er makes any warranty, expressed or
implied, c	onceming the	examinations a	nd corrective measures	described in this Owner's Report.
				able in any manner for any personal
injury or p	roperty damaç	ge or a loss of a	ny kind arising from or	connected with this inspection
	1/ 5/1/			
\rightarrow \wedge	wygaith		Commissions	9556W NBI
Dan ()				National Board, State, and Endorsements
Dan ()	Unspector's Sign	nature		National Board, State, and Endorsements
Dar Q	Unkpector's Sign	nature		National Board, State, and Endorsements
Dav ()	Unkpector's Sign 8-15-94	nature		National Board, State, and Endorsements

PLAN NO. 2-0745 Fredit Burg 5 8710/94

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

	71 -b C	, 	mal Too Dec //O	t. US OS N Stanington CT
1. Manufactured and	certified by Fisher Con	Ineme and address	mal, Inc., RES 49 (& US 95, N. Stonington, CI
6 M 1 1 1 1 1 1 1 1 1 1	Washington Public Power	-		
2. Manutactured for	HADILITECH LOUIS TONG	(name and address of Pu	rchaser or Owner)	
2 Location of installs	ation WPPSS Plant No	. 2 Richl	and WA	•
3. EDCation of Histain	audii	(name and		
4. Model No., Series	No., or Type A31A	Drawing59387_	O1 Rev. C	CRN_N/A
	,	•	1	
5. ASME Code Section	on III: 1971	Winter 1973	3	N/A
	• Edition	Addenda date	Class	Code Case no.
6. Pump or valve	Valve Nominal in	nlet size3 (in.)	Outlet size	3 (in.)
7. Material: Body _	SA351 GRCF8M Bonnet _		SA351 CRCF8M	N/A
/. Material: body _	bonnet _	UISK		iorung
(a)	(b)	(c)	(d)	(e)
Cert.	Nat'l	Body	Bonnet	Disk
Holder's	Board	Serial	Serial	Serial
Serial No.	No.	No.	No.	No
59387-1A	DO-V-57	AN577 /		AN584 ~
50005 ()	- /			
59387-4A	Do-r- 59	AN578 /		AN581
59387 <u>-</u> 48	DO-Y- 58	AN579		AN582
59387-4C	DO-Y-60	AN580 /	• •	AN583
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This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

WPP=S 6/24/72

Item 1

(6/85)

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

FORM NPV-1 (back)

Mfr. Serial No
8. Remarks
o. nonidas
,
9. Design conditions 100 psi 120 °F or valve pressure class 150 (1)
(pressure) (temperature)
10. Cold working pressure275 psi at 100°F
11. Hydrostatic test 425 psi Temp. 40-125 of Disk differential test pressure 305 psi
· · · · · · · · · · · · · · · · · · ·
· .
•
CERTIFICATION OF DESIGN
Design Specification certified by Charles Douglas Scott Prof. Eng. state WA Reg. No. 21556
Design Report certified byN/AProf. Eng. state Reg. No
CERTIFICATE OF SHOP COMPLIANCE
We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction
of the ASME Code. Section III.
N Certificate of Authorization No
Date 6/30/92 Name Fisher Controls Int'l, Inc. Signed Halet D. Baue
(N Certificate Holder) (representative)
· · · CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and
the State or Province of
of have inspected the pump, or valve, described in this Data Report on
20. 50. 19 92., and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.
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.
Dato 30 50 19 92.

(Nat'l Bd., (incl. endorsements) State, Prov. and No.)

(1) For manually operated valves only.

. 4 2 .

(12/86)

INFORMATION UNLT

Page 2 of 6

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES - Swy 5

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

Pg. 1 of 1 8/10/54

V-1943				•	
		(name and ad	dress of N Cartificate Holder)	JLTON ST., LACONIA, N	3 240
2. Manufactured for	_	C POWER SYSTEM,	P.O.BOX 968, RIC	CHLAND, WA 99352-096	8
J. Location of installs	NORTH POWER P	LANT LOOP, RICHL		*	
4. Model No., Senez	No., or Type 2498-03-	100 Drawing 2498-0	and address) 3–100 Rev	CRNN/A	
5. ASME Code, Secti	1	971 WINTER	1973 ' 3	· N/A	
	VALVE	Indonés 3 ⁿ	date) (class)	(Code Case no.)	
6. Pump or valve	Nominal Nominal	inlet size	Outlet size	INJ HEX NUT: SA194-	2H
7. Material: Body	SA240,T316 Bonnet	N/A DI	SA479,T316	Botting STUD: SA193 B7	
(a)	(D)	(c)	(d)	(e)	
Cert.	Nac'l	Body	Bonnet	Disk	
Holder's	Soard	Secial	Serial	Serial	
Serial No.	No.	No.	No.	No.	
V-1943-001 /	(TAG #00-V-85)	V-42A -	N/A	U-718	
V-1943-002 ,	(TAG #00-V-86)	V-42A /	N/A	U-718	
V-1943-003 ·	(TAG #CO-V-87)	V-42A /	N/A	<u>u-718</u>	
			<u>.,</u>		

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This form (ED0037) may be optained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

1-2-22

ntal information at form of Sets, electrics, of 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.

8. Remarks 3" 150# WAFER TYPE BUTTERFLY VALVE

FORM NPV-1 (back)

	100 pressure) 275	temperature)	*F or valve	pressure	dass150	
10. Cold working pressure	. /	pei at 100°F isk differential test pre	25U/¥	310	·	psi
		CERTIFICATION OF	DESIGN ,			-
Design Specification cartified Design Report cartified by	JACK R. C EDGAR J.		P.E. State W/	<u> </u>	Reg. no. 20653 Reg. no. 32600	
	CER	TIFICATE OF SHOP C	OMPLIANCE			
We cartify that the statements of the ASME Code, Section III. Contribute of Authorization $A = (0.923)$	Olvision 1.	rt are correct and that 1-2865 ING ENTEPRISES	E	conforms to	7-3-95	nois
ate 9-0-25 Name	ON Caro	ficess Holders	Signed Signed	lauthonze	ed representative)	
		TIFICATE OF SHOP IN			*	
State or Province of HARTFORD, CT	W HAMRSH	NE have inspect	d employed by $\frac{HA}{C}$	RTFORD Me, descri	ore Vessel Inspectors a STEAM BOILER bed in this Data Report the Cartificate Holder h	on
restructed this pump, or valve resigning this cartificate, neith imponent described in this Da ry personal injury or property (her the inepector its Report, Furthe	nor his employer mak more, neither the inst	es any warranty, e ector nor his emplo	xpressed o	e 'aolo in any manner f	
eta 4/6/53 Stoned A	(Auchorizing In	Comm	issions <u>NH NA</u> (Nec'l Bd. (In	GCSI cl. encoreen	nental state or prov. and n	0.1

(1) For manually operated valves only.

4-6-93



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/15/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Residual Heat Removal (RHR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-V-50A	Velan	0415	N/A	N/A	1977	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced body to bonnet bolting material for valve RHR-V-50A. The replacement work was performed as follows
 - 1) Installed new studs for the valve body to bonnet flanged joint
 - 2) Installed new nuts for the valve body to bonnet flanged joint
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FOR	M NIS-2 OWNER'S REPO	ORT FOR REPAIR	s Of	R REPLACEMENTS (Back)
	l: Hydrostatic Pneum Test Pressure: 1021 Psig Component Design Pressu		Tes	erating Pressure X Other None et Temperature: 200.7° F experature: 575° F
D. Remarks: None				
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	ξ			
	····			
	CERTIF	FICATE OF COMP	LIAI	NCE
14/	ilos sistemania mada la ilu	o Ourrania Banant		and this at the same
	ine statements made in this he ASME Code, Section XI		are ¢	correct and this replacement conforms
	bol Stamp: Not applicable			ĺ
Certificate Of At	uthorization No.: Not applicab : Not Applicable	io		
Ť	17 1.01 0 - 1		Ñ	34n, -
Prepared By	wildip Singh - Materials And Inspec	Signed By _	1	Manager, Materials And Inspection
Date	7115194	Date	7	-15-94
		Date		
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	APPTICION			-50-01/
	CERTIFICAT	E OF INSERVICE	INS	PECTION
				tional Board of Boiler and Pressure
				Arkwright Mutual Insurance Company ave Inspected the components
	ingineening Association) of No is Owner's Report during th			
state to the best	t of my knowledge and bell	lef, the Owner has	perf	ormed examinations and taken
		ner's Report in acc	cord	ance with the requirements of the
ASME Code, See		ector nor his empl	lover	r makes any warranty, expressed or
implied, concert	ning the examinations and	corrective measu	res c	described in this Owner's Report.
				ole in any manner for any personal onnected with this inspection
		-		•
- Dan X beg		Commissio	ns_	
	octor's Signature			National Board, State, and Endorsements
J				



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 6/21/94

Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington
2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

on County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Reactor Water Clean Up (RWCU) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Bulit	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RWCU(1)-4	WPPSS	RWCU(1)-4-P1	N/A	N/A	1983	Replacement	Yes, Code Class 3
	,				•		

7. Description Of Work Performed: Replaced pipe cap for connection with valve RWCU-V-622



Tests Conducte	ed: Hydrostatic Pneumatic Test Pressure: Psig Component Design Pressure: Psig	Test Te	ing Pressure mperature: ° Frature: ° F	Other X Nor
Remarks: None		•		•
	CERTIFICATE	E COMPLIANCE		
to the rules of Type Code Sy	CERTIFICATE Of the statements made in this Owner's the ASME Code, Section XI mbol Stamp: Not applicable Authorization No.: Not applicable te: Not Applicable			ement <i>conforms</i>
Prepared By _	Kuldip Singh - Materials And Inspection 6)21/94 Date	N.	Amoen Anager, Materials And G-ZZ-94	I Inspection
	CERTIFICATE OF INS	ERVICE INSPE	CTION	
Vessel Inspective Mutual described In the state to the becorrective me ASME Code, Say signing the implied, concertivermore,	ned, holding a valid commission issues tors and the State of Washington and elements and the State of Washington and elements are stated in the period assures described in this Owner's Report of the Commission of Norwood, Mathematical in the Commission of the Comm	mployed by Ark ssachusetts have 8·21· 92 vner has perform ort in accordance his employer made e measures des r shall be liable	vright Mutual Insura inspected the co to <u>6-73</u> ned examinations ie with the require akes any warrant cribed in this Ow in any manner fo	ance Company omponents 5-94_and s and taken ements of the y, expressed or ner's Report. r any personal
	gar/h Col	mmissionsN	9556W ational Board, State, a	NBZ nd Endorsements



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/15/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Reactor Recirculation Cooling (RRC) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
- (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B35-G001A	WPPSS .`	B35-G001A-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced nuts for RRC Loop A pump suction side decon flanged joint. The replacement work was performed as follows
 - 1) Removed existing nuts for the flanged joint
 - 2) Installed new nuts for the flanged joint
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	Hydrostatic Pne est Pressure: 1021 Psig omponent Design Pre	, <u> </u>	perating Pressure Construction of the Pressure Construction of the Pressure: 575° F	Other None
Remarks: None				
				•
7-				ı
				
	CEF	RTIFICATE OF COMPLI	ANCE	
We certify that the	e etotamante moda in	this Owner's Report are	a correct and this series	amani conforme
	ASME Code, Section		torrect and this topiac	enem comorms
	of Stamp: Not applicable		,	•
Certificate Of Auti Expiration Date: N	<i>horization No.:</i> Not app	licable		
Expiration Date: N	ot Applicable		24.	
Prepared By	warb Eu	Signed By	KNNoen	
Kuk	lip Singh - Materials And Ir	nspection	Managor, Materials And	d Inspection
Date	7 15 194	Date	.7-15-94	·
1	•			
ı				٠.
	OCDTICI/	DATE OF MCERMOR IN	ioneotion	
	CEHTIFIC	CATE OF INSERVICE IN	SPECTION	
I, the undersigned	l, holding a valid con	nmission issued by the N	iational Board of Boile	er and Pressure
		shington and employed by		
		of Norwood, Massachusetts of the period 4-13-		
		belief, the Owner has pe		
		Owner's Report in accor		
ASME Code, Secti	ion XI	·	•	
		nspector nor his employ		
		and corrective measures his employer shall be il		
		any kind arising from or		
The die			7 m	
Dan Alongo	tor's Signature	Commissions	9550 W National Board, State, as	NBI
inspeci	DF 5 ろり		ivemonia doerd, state, el	iki Engorsements
Date	7-15-94			



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/8/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

. Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

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

4. Identification Of System: 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: 1980 Edition with Winter 1980 Addenda, Code Case; N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced relief valve CAC-RV-65A and associated piping. The replacement work was performed as follows
 - 1) Removed existing piping material and the relief valve
 - 2) Installed new piping material
 - 3) Installed new valve CAC-V-29A
 - 4) Made required socket welds
 - 5) Performed PT examination on the final socket welds, PT examination results acceptable
 - 6) Installed new relief valve CAC-RV-65A
 - 7) Installed new bolting material for the relief valve flanged joint
 - B) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



			VTS (Back)
Tests Conducted: Hydrostatic Pne Test Pressure: 38.5/63.5 (Component Design Pre	Psig To	perating Pressure est Temperature:7 emperature:350° F	
P. Remarks: See attached NPV-1 and NV-1 Code I EPN No Serial No CAC-V-29A GT 1418 CAC-RV-65A 137317 1 1	Data Reports for the following I	new valves	,
Nominal operating pressure test on the flanged joints Pneumatic test on the welded joints - test pressure o			3° F
CER	TIFICATE OF COMPLI	ANCE	
We certify that the statements made in		correct and this	eplacement <i>conforms</i>
to the rules of the ASME Code, Section	XI .		
Type Code Symbol Stamp: Not applicable			
Certificate Of Authorization No.: Not appli Expiration Date: Not Applicable	Cable		
Expiration Date. Not Applicable		α	
Prepared By Vulain Sunt	Signed By	KXMoc	
Kuldip Singh - Materials And In		Manager, Material	s And Inspection
Date7 8 94	Date	7-11-94	
CERTIFICA	ATE OF INSERVICE IN	SPECTION	
I, the undersigned, holding a valid come Vessel inspectors and the State of Wash (Factory Mutual Engineering Association) of	mission issued by the N nington and employed by Norwood, Massachusetts	lational Board of E Arkwright Mutual In have Inspected th	surance Company e components
I, the undersigned, holding a valid coming Vessel inspectors and the State of Wash (Factory Mutual Engineering Association) of described in this Owner's Report during state to the best of my knowledge and it corrective measures described in this CASME Code, Section XI	mission issued by the Maington and employed by Norwood, Massachusetts of the period/-2/6-9 belief, the Owner has performer's Report in accordance.	lational Board of B Ankwright Mutual In have Inspected th Ato7 Informed examination	surance Company e components -//- 94 and lons and taken suirements of the
I, the undersigned, holding a valid come Vessel Inspectors and the State of Wash (Factory Mutual Engineering Association) of described in this Owner's Report during state to the best of my knowledge and it corrective measures described in this CASME Code, Section XI By signing this certificate neither the in implied, concerning the examinations a Furthermore, neither the Inspector nor the state of Washington and Castellia and Castel	mission issued by the Maington and employed by Norwood, Massachusetts of the period/_2/	iational Board of E Arkwright Mutual In have inspected th A to 7 Informed examinated dance with the request of makes any warr a described in this able in any manner	surance Company e components -//-94 and ions and taken fulrements of the santy, expressed or Owner's Report. In for any personal
I, the undersigned, holding a valid come Vessel Inspectors and the State of Wash (Factory Mutual Engineering Association) of described in this Owner's Report during state to the best of my knowledge and it corrective measures described in this CASME Code, Section XI By signing this certificate neither the in implied, concerning the examinations a	mission issued by the Maington and employed by Norwood, Massachusetts of the period/_2/ Collet, the Owner has period in accordance of the period in accordance of the period in accordance of the period corrective measures this employer shall be like any kind arising from or	iational Board of E Arkwright Mutual In have inspected th A to 7 Informed examinate dance with the req er makes any warr described in this able in any manned connected with th	surance Company e components -//-94 and ions and taken fulrements of the santy, expressed or Owner's Report. In for any personal
I, the undersigned, holding a valid come Vessel Inspectors and the State of Wash (Factory Mutual Engineering Association) of described in this Owner's Report during state to the best of my knowledge and it corrective measures described in this OASME Code, Section XI By signing this certificate neither the inimplied, concerning the examinations a Furthermore, neither the Inspector nor injury or property damage or a loss of a Day Wasaach	mission issued by the Maington and employed by Norwood, Massachusetts of the period/_2/	iational Board of By Arkwright Mutual In have inspected the 14 to 7 to 7 trormed examinated ance with the request makes any warres described in this able in any manned connected with the 19550 W	surance Company e components -//- 94 and fons and taken suirements of the eanty, expressed or Owner's Report. or for any personal is inspection NBZ
I, the undersigned, holding a valid come Vessel Inspectors and the State of Wash (Factory Mutual Engineering Association) of described in this Owner's Report during state to the best of my knowledge and it corrective measures described in this CASME Code, Section XI By signing this certificate neither the in implied, concerning the examinations a Furthermore, neither the Inspector nor the state of Washington and Caster Code.	mission issued by the Maington and employed by Norwood, Massachusetts of the period/_2/ Collet, the Owner has period in accordance of the period in accordance of the period in accordance of the period corrective measures this employer shall be like any kind arising from or	iational Board of By Arkwright Mutual In have inspected the 14 to 7 to 7 trormed examinated ance with the request makes any warres described in this able in any manned connected with the 19550 W	surance Company e components -//- 94 and ions and taken fulrements of the santy, expressed or Owner's Report. In for any personal

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES. As Required by the Provisions of the ASME Code, Section III, Div. 1 PUAN: NO: 2-08 1. Manufactured by Dragon Valves, Inc., 13457 Excelsior Dr., Norwalk, CA 90650 (Name and Address of N Certificate Holder) Box 1040, Richland, WA 99352 WSH/Roecon/GERI. P. O. 2. Manufactured for (Name and Address of Purchaser or Owner) 3. Location of Installation WPPSS, Hanford Jobsite #2, Richiand, WA 99352 (Name and Address) . Nominal Inlet Size __3/4_SW. 3/4 SW _ Outlet Size _ 4. Pump or Valve _ Valve (inch) (inch) (a) Model No.; (b) N Certificate Holder's (c) Canadian (g) Year Registration Series No. Serial (d) Drawing (f) Natl. Built No. No. (e) Class Bd. No. or Type 1981 GT1418 13753 502FN0511SWD2 N/A ... (1) . . 13 ب المانيس thru" . . il: (2) · WRG B .. (1) GT1427 un . An. _ (4) _..(5) .: (6) (8) . (9) ,(10) •.. जेलीके शुरु रहा^न्हें (10 Pcs.) Instrument Shut-off Valves (Brief description of service for which equipment was designed) า มู่ และอสินาสท * *** **** 6. Design Conditions 2500 ······ (1) *F or Valve Pressure Class irressures (i emperature) 7. Cold Working Pressure _ 6000 psi at 100°F. 8. Pressure Retaining Pieces Mark No. Material Spec. No. Manufacturer Remarks (a) Castings None 3-0-1982 نوانندس الدووا (b) Forgings HT 30990 ASME SA182 Gr. F316 Jessop Steel 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 items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

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FORM NPV-1 (Back)

FORM NV-1 CE	RTIFICATE HOLDERS' DAT As Required by the Provisi	TA REPORT FOR ons of the ASME	PRESSURE OF Code, Section	R VACUUM RELI	EF VALVES* Pg. 1 of2_	
1. Manufactured and cer	Kunkle Industries, nified by Lonergan Valve Divi	Inc. sion, 8222 Bluff Iname and	ton Road Fort	Wayne IN 46809	PLAN NO. 2	19730
	shington Public Power Supp	- (name and ad-	dress of Purchaser)			
	n Washington Public Power S	upply System, WN	P-2 OPS WHS Com	plex, WHSE 1, No. Richland, V	Power Plant Loop IA 99352	,
4. Valve ND10HS021-D3 (model no., serie	0045 Orifice size 1.052	Nom. inlet	size <u>1.5"</u>	Outlet size _	3"	
5. ASME Code, Section	III, Division 1: 1989	1990 ' (addenda d	2 [*]	(class)	N/A (Code Case no.)	
6. Type Spring	r operated) (sat pressure, psig)	N/A (blowdown, psi)	450° F	68 at	•F	
7. Identification 137317	-l-i through	A930277		N/A (Next, 8d. no.)	1994 tyear build	:
8. Control ring settings_	N/A	r- 65A, SIN	1 127217-	1-1 .		•
9. Pressure retaining item	•	r - 05r, 5/r		Ludip &	2 b .	
_	Serial No. or Identification		Mat'l. Spec Including Type o		Tensile Strength	
Body _	T3736-1 / T3732-	-2SA-	-216 WCB		70 ksi	
Bonnet XXXXXXX	T3169-1 / T3169	-6SA-	-216 WCB		70 ksi .	
SOM Stem	94918-12 / 9491	3-16SA-	-479 TY 316		75 ksi	
Nozzle _	23016	SA-	479 TY 316	· · · · · · · · · · · · · · · · · · ·	75 ksi	
' Disk _	702395	SA-	-479_TY_316		75. ksi	
. SSCOMMONIAGE Cap_	H7069-11 / H7069	27SA-	-216 WCB	·	70 ksi	
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	8° Plug 73028	SA-	-479_TY_316		75 ksi	
STORK Spring Ste	870890	SA-	-479 TY 316		75 ksi	
pring	A7471H		M A-313 TY 316		*	
XXXXXHeavy Hex N	ut 8079541/N4C		-194 Gr. 2H		N/A	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			-479_TY_316		<u>75 ksi</u>	
** Ring Pin Screw 10. Relieving capacity	30091 31,500 lb./br. (163 GPM)		-479 TY 316 . overpressure as cei	rtified by the National	75 ksi. Board_01/25/85	
11. Remarks: *Spring	exempt from material requi	(ber)			(G.SCO)	•
** Stud	8866612	SA-	193 Gr. B7		125 ksi	
Compression Scre	w 99682	SA-	479 TY 316		75 ksi	
Design Specification certification		TIFICATION OF DES		WAReg. n	28777	
Design Report certified by	37/4			I/A Reg. n	. N/A	
	CEPT	IFICATE OF COMPLI	ANCE	<u> </u>		
We certify that the stateme	nts made in this report are correct:			for construction of the	ASME Code, Section	
NV Certificate of Authoriza			Expires	November 18, 199	4	
3-18-94	Kunkle Industries,	•	2.1	Hellen		
Date	Name <u>Ionergan Valve Divi</u>		6 - William 6	(authorited representative		
	· ·					

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

137317-1-1 throug Certificate Holder's Serial No. 137317-1-2

CERTIFICATE OF INSPECTION
the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by HSBI & I Co.
Hartford, CI have inspected the valve described in this Data Report
MARCI 18, 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
n 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 cophected with this inspection.
Date 3-18-94 Signed & Jakard Lacy Commissions NB7444 (NB14), Ind 840
[Net'l. Ed. (inclendorsements/ and state or prev. and no.)

... interestation



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/2/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

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

4. Identification Of System: 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CAC-HR-1B	Air Products	76 130 3	5210	N/A ÷	1977	Replacement	Yes, Code Class 2
		. •			,		

- 7. Description Of Work Performed: Replaced relief valve CAC-RV-65B and associated piping. The replacement work was performed as follows
 - 1) Removed existing piping material and the relief valve
 - 2) Installed new piping material
 - 3) Installed new valve CAC-V-29B
 - 4) Made required socket welds
 - 5) Performed PT examination on the final socket welds. PT examination results acceptable
 - 6) Installed new relief valve CAC-RV-65B
 - 7) Installed new bolting material for the relief valve flanged joint
 - 8) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNER'S REPORT	FOR REPAIRS OR REPLACEMENTS (Back)
B Tests Conducted: Hydrostatic Pneumatic Test Pressure: 38.5/63 and 63.5 Ps Component Design Pressure:	sig Test Temperature: 83/76.2 and 70° F
9. Remarks: See attached NPV-1 and NV-1 Code Data Rep EPN No Serial No CAC-V-29B PB 1029 CAC-RV-65B 137317 1 2	16.
) Nominal operating pressure test on the flanged joints - test pre) Pneumatic test on the welded joints - test pressure of 63 and 6	
CERTIFICA	TE OF COMPLIANCE
We certify that the statements made in this Ow to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable	vner's Report are correct and this replacement conforms
Prepared By Kuldip Singh - Materials Arld Inspection Date 9254	
1	
CERTIFICATE O	F INSERVICE INSPECTION
Vessel Inspectors and the State of Washington a (Factory Mutual Engineering Association) of Norwood described in this Owner's Report during the pe	n issued by the National Board of Boiler and Pressure and employed by Arkwright Mutual Insurance Company od, Massachusetts have inspected the components eriod 1-26-94 to 8-4-94 and the Owner has performed examinations and taken
corrective measures described in this Owner's ASME Code, Section XI By signing this certificate neither the inspector implied, concerning the examinations and corr	r 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 kind	
Unspector's Signature Date 8-4-94	National Board, State, and Endorsements

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES* As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of ____

1. Manufactured and certified	Kunkle Industrie	V	Bluffton Road F	ort Wayre. IN 4	6809 PLANNO 2-08
	_		Accre Pay M.D.O		Richland, WA 99352-0968
		. (//3	we are society of Lockresei	•	
3. Location of installation Was	thington Public Powe	er Supply Syst	theme and addressi	Complex, WHSE Richle	1. No. Power Plant Loop, and, WA 99352
4. Valve NDIOHSO21-DCCO45 Imodel no., series no.)	Orifice size1_052	2 No.1	m, inlet size1.5	·· Outle	t sizeGn.i
5. ASME Code, Section III. Di	vision 1: 1989	199) * (addende date)	2 /	N/A (Code Case no.)
.6. Type 'Spring	45	N/A	_450° F	68	33 °E
spring, pilotat power oper	eted) (set pressure, paig)	(Dlowdown, psi)	Lonet betay	thydra. test, psig, in	let)
7. Identification 137317-1-2		Δ·	930277 Rev. 1	n/a `	1994
(Gert. Holder	s serial no.) (GR		(drawing no.)	(Net'L 8d. na.)	(year built)
9 Castal das assissa	N/A				
8. Control ring settings	<u> </u>	C PV- 65	5B S N 137	317-1-2	•
0	<i>بر</i> ت	6C-KA- 0-	0,0114 131		01 00 1.
9. Pressure retaining items:	•		•	لعلنه	ip Sings
	Serial No. or		Mat'l.	Spec.	7/23/94 Tensile
•	Identification		Including Ty		Strength
8ody	T3736-1 / T3	732-2	SA-216 WCB		70 ksi
Bonnet XXXXXX		169-5	SA-216 WC8		70 ksi .
SOMMON Sten		4918-16	SA-479 TY 316	 	75 ksi
Nozzie	23016		SA-479 TY 316		75 ksi
Disk	702395		SA-479 TY 316	······································	75. ksi
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		7069-27	SA-216 WCB		70 ksi
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			SA-479 TY 316		75 ksi
SOUDER Spring Step	870890		SA-479 TY 316	······································	75 ksi
Spring 5	A7471H		ASTM A-313 TY	316	. *
AND WHeavy Hex Nut	80795/1 /N/C		SA-194 Gr. 7H		N/A
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			SA-479 TY 316	•.	75 ksi
Ring Pin Screw	30091		SA-479 TY 316		75 ksi
2. Relieving capacity81.50	XO 16./hr. (163 GPM)	@_102		s certified by the N	ational Board 01/25/85
1. Remarks: *Spring exe	isseem or fluid, butter mpt from material re	equirements of		s design requir	rements of NC-3595.
* Stud	8866612		SA-193 Gr. B7		125 ksi
Compression Screw	99682		SA-479 TY 316		75 ksi.
	4	CERTIFICATION			20777
esign Specification certified by			P.E. State _	17/A	Reg. no
osign Report certified by	N/A		P.E. State _	10/A	Reg. no
··. · · · · · · · · · · · · · · · · · ·		ERTIFICATE OF	2010/10105		
e certify that the statements m				ules for construction	of the ASME Code, Section
	N-2853			. November 18	1994
V Certificate of Authorization N	· · · · · · · · · · · · · · · · · · ·	- T	Expire:	s wvemer 10	, 1/34
3-18-94	Kunkle Industrie	=	· .	1. H. Soline	
aceNam	io <u>Lonervan Valve D</u>		_ Signed	(authorized repre	ISAN(Street)
				[authorited repre	ISAN(SUVE)

^{*} 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.

FORM NV-1 (Back - Pg. 2 of 2)

L37317-1-1 through
Certificate Holder's Serial No. 137317-1-2

. CERTIFICATE OF	
I, the undersigned, holding a valid commission issued by the National Board Michigan and employed by HSBI & I Co.	rd of Boiler and Pressure Vessel Inspectors and the State or Province
of Hartford, CT	have inspected the valve described in this Data Report on
MARCI 18, 1994, and state that to the best of my knowledge and b	elief, the Certificate Holder has constructed this valve in accordance
with the ASME Code, Section III, Division 1.	A A A A B A A A A A A A A A A A A A A A
By signing this certificate peither 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 sha	If be liable in any manner for any personal injury or property damage or
a loss of any kind arising from or connected with this inspection	
Date 3-18-94 Signed France	Commissions NB7444 (NB14), Ind840
(Authorized Inspector)	[Net'l, Bd., (incl.endorsements) and state or prev. and no.]

*Addends 6/30/76

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TOAM NEV-	H CERTIFICA	by the fravisions						
	LIAY DESCRIPTION	4 AAGGGG ALM CAN	SSL Excela	lucult.	عم فلا ـــ	عــداء	A 20630	
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er Type	240		He	No.		Ciess	84 Me	\$~4
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4								
<u> </u>		SAC-1	<u> 7:= 2:9</u>	8-	316	j¥	2B-1-0	29
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101								
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Cold Working Fro Frontiera Actories		pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro		Bral deservation of the	Artic for entrop o	Y as Valv	1 0000		2300.	
Cold Working Fro Freedom Returning Mark In	Fine 4000_	pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro Freshore Automor Mark H	Fine 4000_	pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro Freshwa Raturan Mark H	Fine 4000_	pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro Freshore Automor Mark H	Fine 4000_	pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro Freshore Automor Mark H	Fine 4000_	pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro Freshina Automin Mark H	Fine 4000_	pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro Franking Automorp Mark H	Fine 4000_	pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro Franking Automorp Mark H	Fine 4000_	pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro Freshina Automin Mark H	Fine 4000_	pul or 1007.	Artic for entrop o	Y as Valv	e ferm			
Cold Working Pro	Promoted and a second a second and a second and a second and a second and a second	Mennel Spec P	NO STATE OF THE ST	Y as Valv	o film			
Cold Waring Professional Relationship Profes	Promoted and a second a second and a second and a second and a second and a second	Mennel Spec P	10	Y or Volve	o film		Asmo	
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(4) Once Paris			
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Union Nut	ASHE \$4679 TY 316	Crucible Spee, Hel	, WT A1960)
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^{*} Supplemental photos or form of first, statishes or drawings may be used provided [1] pages & 10° a 11°, [2] intermption in and 1, 2 and 8 on the Die Arport is behalf on eith sheet, and 131 eith sheet is numbered and number of sheets meletate of the lowers a



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 5/16/94

Address: 3000 George Washington Way, Richland, Washington 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) Sheet: 1 of 1

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

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

4. Identification Of System: Standby Liquid Control (SLC) System

5. (a) Applicable Construction Code; ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC(2)-4S	WPPSS	SLC(2)-4S-P1	N/A	N/A	1982	- Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Fabricated and installed modified connection with valves SLC-V-42 and SLC-V-43. The fabrication and installation work was performed as follows
 - 1) Fabricated pipe nipple
 - 2) Performed PT examination on the final machined surfaces of the pipe nipple. PT examination results acceptable
 - 3) Beveled the socket ends of the new valves for butt welding
 - 4) Performed PT examination on the beveled ends of both the valves, PT examination results acceptable
 - 5) Cut and removed the existing connection
 - 6) Installed pipe nipple and valves and made required welds
 - 7) Performed PT examination on the final welds. PT examination results acceptable
 - 8) Performed RT examination on the final circumferential butt welds. RT examination results acceptable



	FORM NIS-2 OWNER'S	HEPOKI FOK KEPAIKS	OH HEPLACEMEN IS (Back)
8 Tests Col	nducted: Hydrostatic F Test Pressure: Psig Component Design		Operating Pressure Other X No. Test Temperature: ° F Temperature: ° F
9. Remarks EPN No SLC-V-43 SLC-V-43	2 PB 1151	eport for the following new valve	·
	C	ERTIFICATE OF COMPL	LIANCE
			re correct and this replacement conforms
	iles of the ASME Code, Sect		
	ode Symbol Stamp: Not applical ate Of Authorization No.: Not a		
	o n Date: Not Applicable	фрисвою	
1	^ .		O-Am
Prepare	d By Vular Duet	Signed By	KNMain
	Kuldip Singh - Materials An	i Inspection	Manager, Materials And Inspection
Date	5)16/94	Date	5-17-94
	CERTIF	TICATE OF INSERVICE I	INSPECTION
I the un	dersianed, holdina a valid ci	ommission issued by the	National Board of Boiler and Pressure
			by Arkwright Mutual Insurance Company
(Factory	Mutual Engineering Association	of Norwood, Massachusett	ts have inspected the components
describe	ed in this Owner's Report du	ring the period///2/	93 to <u>5//7/94</u> and
			performed examinations and taken ordance with the requirements of the
	ode, Section XI	a Office a nepolitifiacci	ordance with the requirements of the
		nspector nor his emplo	yer makes any warranty, expressed or
			es described in this Owner's Report.
			liable in any manner for any personal or connected with this inspection
		·	•
Jan	sogail.	Commission	s 4556 W NBI
Ì	Cospector's Signature		National Board, State, and Endorsements
Date	<i>3/17/44</i>	 	
	P. 10	1	
L			

FORM NPV-1	N CERT PLATE HOLDERS' DATA REPORT FOR ESPLEAR PUMPS	S OR VALVES"
•	As Required by the Provisions of the ASME Code, Section III, Div. 1	PLAN NO. 2-088

(a) Model No (b)	(Name and Address) Valve N Certificate Holds		Inlet Size1/3	2Out		•
Series No. or Type	Serial No.	Registration No.	(d) Drawing No.	(c) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1) 7N057SWD	PB1144	N/A	16954	1_	N/A	1992
(2)	thru		Rev. N/C			
(3)	PB1153		-, -, -, -, -, -, -, -, -, -, -, -, -, -	,		
(4) <u>EPN</u>	No.	SERIAL NO.	 			
(6)				,		
(7) SLC-		PB 4151			****	~~~
(B) <u>SLC-</u>	V- 43	PB 1152	7 a II	AFORM	ALIUN	MALT
(9)		Bulait &	2006 4137193			·····
(10),			7/21/13			
,	Globe Valve			(10Pc:	s.)	
		ption al service los wh	ich equipment was de			
Cold Working Pressure	(Pressure) 3600 psi	(Temperature) at 100°F.	°F or Valve Pre	ossuro Clas s _	•	(1)
Cold Working Pressure	(Pressure) 3600 psi	(Temperature)	*F or Valve Pre		Remark	•
Cold Working Pressure Pressure Retaining Places Mark No	(Pressure) 3600 psi	(Temperature) at 100°F.			•	•
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Cold Working Pressure Pressure Retaining Places Mark No. (a) Castings N/A	(Pressure) 3600 psi	(Temperature) at 100°F. If Spec. No.		orer	•	ks
Cold Working Pressure — Pressure Retaining Places Mark No. (a) Castings N/A (b) Forgings HT.AJ9461	(Pressure) 3600 psi Materia ASME SA16	(Temperature) at 100°F. If Spec. No.	Manufactu	orer	Remark	ks
Cold Working Pressure — Pressure Retaining Pieces Mark No. (a) Castings N/A (b) Forgings HT.AJ9461	(Pressure) 3600 psi Materia ASME SA16	(Temperature) at 100°F. If Spec. No.	Ajax Forge (Ajax Forge (Co.	Remark	ks
Cold Working Pressure Pressure Retaining Places Mark No. (a) Castings N/A (b) Forgings HT_AJ9461	(Pressure) 3600 psi Materia ASME SA16	(Temperature) at 100°F. If Spec. No.	Ajax Forge (Ajax Forge (Co.	Remark	ks

⁽¹⁾ For manually operated valves only.

^{*} Supplemental slicets in form of lists, sketches or drawings may be used provided (1) size is 0-1/2" x 11", (2) information in items 1, 2 and 5 on this Oata Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

Mark No.	aterial Spec. No.	Manufactu ()	Remarks •				
(c) Bolting N/A							
							
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			-				
(d) Other Parts							
HT.853543	ASME SA564 Gr. 630	Carpenter Steel	Disc				
	-		-				
•			-				
9. Hydrostatic test 5400 p	osi. Disk Differential test pressure 360	O pri.					
<u></u>	- CERTIFICATE OF CO	BADI LA NCC	- '				
	its made in this report are correct as ode for Nuclear Power Plant Compo						
Addenda W176 (Date)	Code Case NoN/A		11,1992				
Signed <u>Dragon Valve</u>		K Dull	an l				
(N Certificate He Our ASME Certificate of Author	4000	the N symbol	1 expires 5-6-93				
•		(N)	(Dete)				
•	CERTIFICATION OF						
Design information on file at _	Washington Public Power S						
Stress analysis report (Class 1	only) on file atWashington Pul	olic Power Supply Sys	tems ·				
Design specifications certified	by [1] James F. Hagen, Jr.						
PE State WA	Reg. No. 13579						
Stress analysis certified by (1)	MONEGO	SATISEACTORYX	HAISATISFANTORY				
LC 21918		Vijaukhek	II 7-1-92				
(1) Signature not required. List	name only.	RECEIPTINSPECTOR	/ LEYEL / DATE				
•	050750475 05 0400						
	CERTIFICATE OF SHOP						
I, the undersigned, holding a and the State or Province of	valid commission issued by the Nati California	onal Board of Boiler and Pro d employed by <u>H.S.B.</u>					
of Hartford, CT.	have inspected the	oump, or valve, described i	n this Data Report on				
<u>1</u>	9 Ct., and state that to the best of m	y knowledge and belief, the N C	ertificate Holder has con-				
structed this pump, or valve, in	accordance with the ASME Code, Se	ction IIL					
	her the inspector nor his employer m						
	is Data Report. Furthermore; neither						
4.15	or property damage or a loss of any l くんと	Anio arising from or connected	s with this inspection.				
Date LU, like	19 77 70 10	Ca 1194	·/ *				
(Inspector)	Commissions	(Nat'l Rd. State Prov.	and No.1				

Date: 5/16/94

Sheet: 1 of 1

Unit: WNP-2



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

1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Bechtel Construction, Inc. PO Box 600, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: C20069

4. Identification Of System: Process Instrument (PI) System

- 5. (a) Applicable Construction Code: ASME Section III Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X-77Ad	JCI	PI(1)-4S-X-77Ad	N/A	N/A	1983	Replacement	Yes, Code Class 1
						ı •	

- 7. Description Of Work Performed: Fabricated and installed modified connection with valves PSR-V-001/3 and PSR-V-001/4. The fabrication and installation work was performed as follows
 - 1) Fabricated pipe nipple
 - 2) Performed PT examination on the final machined surfaces of the pipe nipple. PT examination results acceptable
 - 3) Beveled the socket ends of the new valves for butt welding
 - 4) Performed PT examination on the beveled ends of both the valves. PT examination results acceptable
 - 5) Cut and removed the existing connection
 - 6) Installed pipe nipple and valves and made required welds
 - 7) Performed PT examination on the final welds. PT examination results acceptable
 - 8) Performed RT examination on the final circumferential butt welds. RT examination results acceptable



,	ted: Hydrostatic Test Pressure: Psig Component Design			nperature: ° F	Other X
	Sorial No PB 1144	Report for the following new va	elves		
,		CERTIFICATE OF COM	IPLIANCE		
		le in this Owner's Repor	rt are correc	et and this rep	lacement <i>conforms</i>
	of the ASME Code, Sec				
	Symbol Stamp: Not applica Of Authorization No.: Not				
	ate: Not Applicable	, аррисало			
•		, ,	00	D04.00	
Prepared By	Yuloup Sur Kuklip Singh - Materials A	طم Signed By		nager, Materials	A/
				• • • • • • • • • • • • • • • • • • • •	and inspection
Date	5/16/94	Date		-17-94	
	CERTI	IFICATE OF INSERVIC	E INSPECT	TON	
Vessel Inspe (Factory Mutua described in	ectors and the State of Vallengineering Association this Owner's Report du	commission issued by to Washington and employed n) of Norwood, Massachusuring the period _/-/2	ed by Arkwrig setts <i>have Ir</i> 2 - 9 3	ght Mutual Inst Inspected the Ito 5-/	urance Company components 7 - 94 and
	easures described in th Section XI	and belief, the Owner ha	ccordance	with the requ	irements of the
ASME Code,		he Inspector nor his emp			
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ASME Code, By signing ti Implied, cond Furthermore,	, neither the inspector i	of any kind arising from	m or connec	cted with this	inspection
ASME Code, By signing ti Implied, cond Furthermore,	, neither the inspector i	of any kind arising from	n or connections9	cted with this	

FORM NPV-1	N CERTECATE HOLDERS' DATA REPORT FOR I	ESLEAR PUMPS	OR VALVES*
•	.As Required by the Provisions of the ASME Code, S	Section III, Div. 1	PLAN 2-0884

1. Mar	nufactured by	Dragon Valves,	Inc. 13457	Excelsion Dr	ive. Norwa	lk, CA	90650
	•	(Name and Address of shington Public)	of N Certificate I	Holder) v Svetame – D	0 Box 969	Pichlan	ചയം വേ
2. Mar	rulactured for mai	[Name and Address of P	RICHEZEL OL CALLEL			•	
J. Loca	stion of Installation	WNP-2 North Po	wer Plant	Loop, Richlan	nd. WA. 9	9352	
4. Purr	np or Valve	(Name and Address) Valve	Nominal	Inlet Size	Qui	let Size	1/2 ·
	(a) Model No (I	o) N Certificate Holder's		(30)	City		(more)
	Series No.	Serial	Registration	(d) Drawing		(f) Nat'l.	(g) Year
	ar Type	No.	No.	No.	(c) Class	Bd. No.	Built
(1)	7N057SWD	PB1144	N/A	16954	11	N/A	1992
(2)		thru		Rev. N/C			
(3)		PB1153					
(4)							
(5)	EPI	V No	SERIBL N	'o ·			
(6)							
(7)	PSR	-V-001/3	PB 1144				
(8)	PSR.	V-001/4	PB 1149		JEURIM	ATTON	TIMIY
(9)							OTTET
(10)			Quarp	Eurs			
,,,,				1/27(83.		•	
5		Globe Valve	•	$q\nu a x $.	(10Pc	s.)	
·			n al service las wh	ich equipment was de			
. Press	sure Retaining Piec	es 					
	Mark No.	• Material S	pec. No.	Manufactu	ırar .	Romark	\$
(a) C	stings N/A						
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(b) Fo	orgings						
н	T.AJ9467	ASME SA182	TY F316	Ajax Forge	·	Body	
H	T.AJ9461 T.Al9167	ASME SA182	Gr. F316	Ajax Forge (Bonnet Yo	ke
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				Y	, 		
_			SATISEACTORY -	_X_UISATISFACTOR			
	 		Vijank	bell It I	-1-12		
_			2/10	COTOR / IFYEL /	-0ATE		

⁽¹⁾ For manually operated valves only.

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

Mark No.	alcrial Spec. No.	· Manufactu ()	Remarks •
(c) Bolting N/A			
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		-	-
			-
(d) Other Parts			
HT.853543	ASME SA564 Gr. 630	Carpenter Steel	Disc
			•
•		-	
			-
•			
5400			
9. Hydrostatic test 5400	psi. Disk Differential test pressure 36	00pil.	
	- CERTIFICATE OF CO	MPLIANCE .	
We certify that the circum-			
construction of the ASME	nts made in this report are correct : Code for Nuclear Power Plant Comp	and that this pump, or valve,	conforms to the rules of
Addenda W* 76 (Date)			11,1992
Signed Dragon Valv	es, Inc.	. 155.11	
(N Certificate H	folder)	N N	5.6.02
Our ASME Certificate of Auth	orization No to us	to thesymbo	1 expires 5-6-93 (Dete)
	<u>i</u>		
_	CERTIFICATION OF	DESIGN	
Design information on file at	Washington Public Power		
Stress analysis report (Class	only) on file at Washington' Pu	blic Power Supply Sys	tems
	•		•
Design specifications certified		•	
PE State <u>WA</u> Stress analysis certified by (1)	Reg. No. 13579	,	
PE StateCA	Reg. No. M20589	SATISEACTORYX_T	ASATISFACTORY
•		Vijaukheh	II 7-1-92
(1) Signature not required. Lis	it name only.	RECEIPVINSPECTOR	/ LEVEL / DATE
•			
	CERTIFICATE OF SHOP		
, the undersigned, holding a	valid commission issued by the Nat	ional Board of Boiler and Pres	ssura Vessel Inspectors
and the State or Province of _ ofHartford, CT.	· · · · · · · · · · · · · · · · · · ·	nd employed by H.S.B.	Insp. & Ins. Co.
	19 Co., and state that to the best of m	pump, or valve, described in	this Data Report on
structed this pump, or valve, i	n accordance with the ASME Code, Se	ction IIL	entificate Holder has con-
	ther the Inspector nor his employer m	•• •	
he equipment described in the	nis Data Report. Furthermore; neither	the inspector nor his amotous	r shall be liable in any
nanner for any personal injur	y or property damage or a loss of any	kind arising from or connected	with this inspection
Date	19 42	7	
LU. liken	Commissions	(a. 1994	
(Inspector)	7	(Nat'l Rd., State, Prov. a	ini No.)



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 5/16/94 Sheet: 1 of 1 Unit: WNP-2

Address: 3000 George Washington Way, Richland, Washington

Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Bechtel Construction, Inc, PO Box 600, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: C20069
- 4. Identification Of System: Process Instrument (PI) System
- 5. (a) Applicable Construction Code: ASME Section III Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Class: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980

Addenda, Code Case: N-308

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X-77Ac	JCI	PI(1)-4S-X-77Ac	N/A	N/A	1983	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Fabricated and installed modified connection with valves PSR-V-002/3 and PSR-V-002/4. The fabrication and installation work was performed as follows
 - 1) Fabricated pipe nipple
 - 2) Performed PT examination on the final machined surfaces of the pipe nipple. PT examination results acceptable
 - 3) Beveled the socket ends of the new valves for butt welding
 - 4) Performed PT examination on the beveled ends of both the valves. PT examination results acceptable
 - 5) Cut and removed the existing connection
 - 6) Installed pipe nipple and valves and made required welds
 - 7) Performed PT examination on the final welds. PT examination results acceptable
 - 8) Performed RT examination on the final circumferential butt welds. RT examination results acceptable



Tests Conducted: Hydrostatic Preumatic Nominal Operating Pressure Other Notation Test Pressure: Pag Test Temperature: For Tem	FC	ORM NIS-2 OWNER'S	REPORT FOR R	EPAIRS OF	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 Kuklip Singh - Materials And Inspection Date SILE S4 CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 1-12-93 to 5-17-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Lidebtor's Signature Commissions National Board, State, and Endorsements	Tests Conducte	Test Pressure: Psig		Test	t <i>Temperature</i> : ° F	Other X Non
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By	EPN.No Se PSR-V-002/3 P	orial No B 1145	Report for the following	new valves		
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By Luch Sup Signed By Manager, Materials And Inspection Date SILE S4 Date S-17-94 CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 1-12-93 to 5-17-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 1550 W NBT 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		C	ERTIFICATE OF	COMPLIAN	NCE	
CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 1-12-93 to 5-17-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 1556 W NBT National Board, State, and Endorsements	to the rules of Type Code Sy Certificate Of	f the ASME Code, Sect mbol Stamp: Not applice Authorization No.: Not	tion XI able	Report are c	orrect and this replac	ement <i>conforms</i>
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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 1-/2-93 to 5-/7-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 1556 W NBT National Board, State, and Endorsements	Prepared By_	Kuldip Singh - Materials A	Signe on Inspection	ed By	Manager, Materials And	d Inspection
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period/-/2-93 to	Date	5/16/94	Date_	·	5-17-94	
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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period/-/2-93 to		CERTI	FICATE OF INSE	RVICE INSI	PECTION	
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 456 W NBI National Board, State, and Endorsements	Vessel Inspection (Factory Mutual described in the state to the becomective median)	gned, holding a valid of stors and the State of V I Engineering Association this Owner's Report du est of my knowledge a asures described in th	commission issue Nashington and em n) of Norwood, Mass uring the period _ and belief, the Owr	d by the Nat aployed by A sachusetts h J-/2-93 her has perf	tional Board of Boile Arkwright Mutual Insura ave Inspected the co to 5-/7-5 comed examinations	ance Company omponents 9 <u>4</u> and s and taken
Inspector's Signature National Board, State, and Endorsements	By signing thi	is certificate neither the eming the examination	ns and corrective nor his employer :	measures d shall be liab	lescribed in this Ow le in any manner fol	ner's Report. r any personal
- 617.01	Furthermore.	erty damage or a loss	of any kind arisin	ig irom or co	onnectea will uns n	nspecuon
	Furthermore.	erty damage or a loss			9556 W	NBI

			rovisions of the				
	ufactured by	(Name and Address	s of N Certificate H	older)	•		
Man	ulactured for Was	shington Public	Power Supply	Systems. E	2.0.Box 968	Richla	nd. WA
Loca	tion of Installation	WNP-2 North	Power Plant	Loop, Richla	nd. WA.	99352	,
	p or Valve	(Name and Address)		•	-		
, ,,,,,				(i	nch)		(inch)
	(a) Model No., (E Series No.) N Certificate Holder Serial	Registration	(d) Drawing		(f) Nat'L	(g) Y
	or Typa	No.	No.	No.	(e) Class	• •	Bui
	7N057SWD	PB1144	N/A	16954	1	N/A	100
(1) (2)		thru		Rev. N/C		W	
(3)		PB1153					
(4)						,	
(5)	_ EPN	No. 9	CERIAL NO.				
(6)	Och I	e 0210	00 11 4 5				
(7)	PSR-V		PB 1145 PB 1147		KIEDDM	ATION	OKI
(8)	PSK-V	· 002/4	FO 1141		MEOUM	KIULIK	-0141
(9) (10)			Culark &	Swob		·	
,			• 7			•	
		Globe Valve		স[(10Pc	s.) .	
		(Brief descrip	tion of service for whi	ch equipment was d	esigned)		
	,			· · · · · · · · · · · · · · · · · · ·	١.		
		3600	100 (Temperature)	F or Valve P	ressure Class _		
Desig	n Conditions	psi .					
		(Pressure) 3600 psi a				•	
Cold	n Conditions Working Pressure : ure Retaining Pleco	psi a				•	
Cold	Working Pressure	psi a		Manufact		Ramar	•
Cold 'Press	Working Pressure ure Retaining Place Mark No.	psi a	t 100°F.			•	
Cold 'Press	Working Pressure ure Retaining Piece	psi a	t 100°F.			•	
Cold 'Press	Working Pressure ure Retaining Place Mark No.	psi a	t 100°F.			•	•
Cold 'Press	Working Pressure ure Retaining Place Mark No.	psi a	t 100°F.			•	
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Cold 'Press	Working Pressure ure Retaining Place Mark No.	psi a	t 100°F.			•	•

F316 F316 Ajax Forge Co

Ajax Forge Co.

TEVEL Y

Body

Bonnet Yoke

(b) Forgings

HT.AJ9461 HT.A19167 ASME ASME SA182 SA182

TY.

⁽¹⁾ For manually operated valves only.

^{*} Supplemental slicets in form of lists, sketches or drawings may be used provided (1) size is 0-1/2" x 11", (2) information in litems 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

Mark No.	aterial Spec. No.	Monufactu (2)	Remarks •
(c) Bolting N/A			:
<u> </u>		···	
		<u> </u>	_
			-
			-
(d) Other Parts			
HT.853543	ASME SA564 Gr. 630	Carpenter Steel	Disc
		4	
•			
		<u> </u>	
0. Hydrostatic test 5400	psi. Disk Differential test pressure 36	00 _{pri}	<u> </u>
	cols made in this report are correct Code for Nuclear Power Plant Comp	• • •	ition <u>1974</u>
(N Gentificate Our ASME Certificate of Aut	Holder) N-1033	se the N symbo	il expires 5-6-93 (Date)
•	i_ CERTIFICATION OF		İ
Design information on file a	Washington Public Power	Supply Systems	
Stress analysis report (Class	1 only) on file at Washington Pt	blic Power Supply Sys	stems .
Design specifications certific PE State WA	d by (1) <u>James F. Hagen, Jr</u> Reg. No. <u>13579</u>	:-	
Stress analysis contilied by (Harold M. Braund		
PE StateCA	Reg. No. <u>M20589</u>	SATISEACTORYX	UNSATISFACTORY
(1) Signature not required. L	ist name only.	RECEIPTINS PECTOR	/ LEVEL / DATE
		HSDEN 4 INST COTON	/ CLICE / DATE
•	CERTIFICATE OF SHOP	INSPECTION	
the undersigned, holding and the State or Province of .	a valid commission issued by the Na California	tional Board of Boiler and Pro and employed by H.S.B.	
Hartford, CT.		pump, or valve, described i	n this Data Report on
tructed this pump, or valve,	in accordance with the ASME Code, S	ection III.	
ly signing this certificate, no	either the Inspector nor his employer i	makes any warranty, expressed	or implied, concerning
he equipment described in	this Data Report, Furthermore; neither ry or property damage or a loss of any	the inspector nor his employ	er shall be liable in any
	92	s Campa	
(Inspector		(Net'l IId., State, Prov.	and No.1

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Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 3/22/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
 (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Nozzles For MSRV's	Crosby	See Item No 7 Below For Serial No's Of Spare Nozzles	N/A	N/A	1971	Repair	No, Code Class 1 Nozzles

- 7. Description Of Work Performed: Refurbished (reconditioned) spare nozzles for future use for Main Steam Relief Valves (MSRV's). When need arises, the spare refurbished (reconditioned) nozzles will be installed in Main Steam Relief Valves (MSRV's) under separate ASME Section XI Work Plans. The spare nozzles were refurbished (reconditioned) as follows
 - 1) Machined the spare nozzle seating surfaces
 - 2) Performed PT examination on the final machined seating surfaces of the spare nozzles. PT examination results acceptable

The following is a listing of the spare nozzles which were refurbished (reconditioned) and stored for future use

Nozzlo No	Nozzie Serial No	Nozzle No	Nozzie Serial No
1 .	N93184-38-0067	9	N93184-42-0104
2	N93184-33-0070 ·	10 -	N93184-38-0059
3	N93184-44-0107	11	N93184-33-0053
4	N93184-33-0055	12	N93184-44-0111
5	N93184-42-0101	13	N93184-33-0065
6	N93184-33-0074	14	N93184-33-0072
7	N93184-36-0118	15	N93184-41-0099
8	N93184-44-0113	16	N93184-33-0068



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

8 Tests Condu	ıcted: Hydrostatic Pneu Test Pressure: Psig Component Design Pres	,	Operating Pressure Other X No Test Temperature: ° F Temperature: ° F
9. Remarks: N	one	•	
			•
	CERT	TIFICATE OF COMPL	IANCE
We certify t	hat the statements made in t	his Owner's Report a	re correct and this repair conforms
	of the ASME Code, Section 2 Symbol Stamp: Not applicable	XI	
Certificate (Of Authorization No.: Not applic	able	
Expiration L	Date: Not Applicable		
Prepared By	v Rudib Suil	2 Signed By	KAMOR_
	Kuldip Singh - Materials And Insp	pection of group by	Manager, Materials And Inspection
Date	3 22 194	Date	3 - 22 - 94
	•		
	CERTIFICA	TE OF INSERVICE II	NSPECTION
1 46 a con d a a a			
Vessel Inspe	signed, noiding a valid comm ectors and the State of Washi	ngton and employed b	National Board of Boiler and Pressure y Arkwright Mutual Insurance Company
(Factory Mutu	ual Engineering Association) of N	Norwood, Massachuşetts	s have inspected the components
	n this Owner's Report during hest of my knowledge and he		/ <u>93</u> to <u>3/24/94</u> and erformed examinations and taken
corrective m	neasures described in this O	wner's Report in acco	rdance with the requirements of the
ASME Code,	, Section XI		
			ver makes any warranty, expressed or significations significated in this Owner's Report.
Furthermore	, neither the inspector nor hi	is employer shall be l	lable in any manner for any personal
Injury or pro	perty damage or a loss of an	y kind arising from o	r connected with this inspection
Don XII	regarts	Commissions	9550W NBI
	Irspector's Signature	<u></u>	National Board, State, and Endorsements
Date	7247 74	<u> </u>	



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/7/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2	WPPSS	HPCS(1)-4CL2-P2	N/A	N/A	1982	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Modified existing Restricting Orifice (RO) plates HPCS-RO-8 and HPCS-RO-9. The work was performed as follows
 - 1) Added ten (10) more holes in Restricting Orifice (RO) plate HPCS-RO-8
 - 2) Reinstalled the modified Restricting Orifice (RO) plate HPCS-RO-8 in the piping system
 - 3) Added four (4) more holes in Restricting Orifice (RO) plate HPCS-RO-9
 - 4) Reinstalled the modified Restricting Orifice (RO) plate HPCS-RO-9 in the piping system
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other None Test Pressure: 390 Psig Test Temperature: 71° F Component Design Pressure: 1575 Psig Temperature: 212° F
9.	Remarks: None
	CERTIFICATE OF COMPLIANCE
	OLITIMICATE OF COMPERMOR
	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI
	Type Code Symbol Stamp: Not applicable
	Certificate Of Authorization No.: Not applicable
	Expiration Date: Not Applicable
	Prepared By Villais Eauts Signed By & Moe
	Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
	Date 7/7/94 Date 7-7-94
	·
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1	<u> </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 Washington and employed by Arkwright Mutual Insurance Company
	(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
	described in this Owner's Report during the period <u>6-9-93</u> to <u>6-27-94</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
	Jan Hoggaist Commissions 9556W NBI
	Date - 7-11-94 National Board, State, and Endorsements
	Date - 7-// - 74
- [



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/25/94

Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Reactor Pressure Vessel (RPV)

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	8	N/A	1974	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced Local Power Range Monitoring (LPRM) incore assembly. The replacement work was performed as follows
 - 1) Removed existing Local Power Range Monitoring (LPRM) incore assemblies
 - 2) Installed new Local Power Range Monitoring (LPRM) incore assemblies



	ORM NIS-2 OWNER'S REPO		••••	(2)
Tests Conduc	ted: Hydrostatic Pneuma Test Pressure: Psig Component Design Pressu	Tes	erating Pressure t Temperature:° F nperature:° F	Other X Non
Remarks See	attached N-2 Code Data Report for the	following new Local Power	Range Monitoring (LPF	M) incore assembly
Core Location	LPRM Serial No	ione in great 2002 to the control	, J (•
16-25	M426			
16-41	M424			
24-33	M425			
24-41	M435			
32-41	M430			
32-57	M437			•
48-25	M429			
	CERTIF	ICATE OF COMPLIA	NCE	
to the rules of Type Code S	nat the statements made in this of the ASME Code, Section XI Symbol Stamp: Not applicable		correct and this rep	placement <i>conforms</i>
Certificate O	of Authorization No.: Not applicable	•		
Expiration D	ate: Not Applicable			
	0 0 1		DAM.	
Prepared By	Vuldib ∓	Signed By	1CN moer	-
	Kuldip Singh - Materials And Inspec	rtion	Manager, Materials	And Inspection
Date	6125194	Date	7-4-94	
<u> </u>				
	CERTIFICAT	E OF INSERVICE INS	PECTION	
Vessel Inspections (Factory Mutual described in state to the language of the l	signed, holding a valid commisectors and the State of Washingtal Engineering Association) of Note this Owner's Report during the best of my knowledge and believes ures described in this Owner, Section XI his certificate neither the Inspireering the examinations and	islon issued by the Nation and employed by twood, Massachusetts in period 4/29/94 ief, the Owner has perioder's Report in accordance to rnor his employed corrective measures	ational Board of Boar	surance Company components S/94and ons and taken uirements of the anty, expressed or Owner's Report.
Vessel Inspection (Factory Muture described in state to the language of the la	signed, holding a valid commisectors and the State of Washingtal Engineering Association) of Note this Owner's Report during the best of my knowledge and beling the sures described in this Owner, Section XI	ision issued by the Nation and employed by rwood, Massachusetts in period 4/29/94 lef, the Owner has period ector nor his employed corrective measures employer shall be liable kind arising from or other the state of the correction of the state of the s	ational Board of Board of Board of Board inspected the board of Bo	surance Company components // 94 and ons and taken uirements of the anty, expressed or Owner's Report. for any personal s inspection
Vessel Inspection (Factory Muture described in state to the language of the la	rigned, holding a valid commisectors and the State of Washing al Engineering Association) of Note this Owner's Report during the best of my knowledge and belies ures described in this Owner, Section XI his certificate neither the inspector nor his petitions and a neither the inspector nor his	ision issued by the Nation and employed by rwood, Massachusetts in period 479/94 ief, the Owner has period accordance to nor his employed corrective measures employer shall be liab	ational Board of Board of Board of Board Mutual Instance inspected the board of Boar	surance Company components S/94and ons and taken uirements of the anty, expressed or Owner's Report. for any personal is inspection NBL
Vessel Inspection (Factory Muture described in state to the language of the la	rigned, holding a valid commisectors and the State of Washing al Engineering Association) of Note this Owner's Report during the best of my knowledge and belies ures described in this Owner, Section XI his certificate neither the inspector nor his petitions and a neither the inspector nor his	ision issued by the Nation and employed by rwood, Massachusetts in period 4/29/94 lef, the Owner has period ector nor his employed corrective measures employer shall be liable kind arising from or other the state of the correction of the state of the s	ational Board of Board of Board of Board Mutual Instance inspected the board of Boar	surance Company components // 94 and ons and taken uirements of the anty, expressed or Owner's Report. for any personal s inspection
Vessel Inspection (Factory Muture described in state to the language of the la	signed, holding a valid commission of the State of Washingtal Engineering Association) of Notathis Owner's Report during the best of my knowledge and belineasures described in this Owner's Section XI his certificate neither the inspectoring the examinations and an ineither the inspector nor his perty damage or a loss of any	ision issued by the Nation and employed by rwood, Massachusetts in period 4/29/94 lef, the Owner has period ector nor his employed corrective measures employer shall be liable kind arising from or other the state of the correction of the state of the s	ational Board of Board of Board of Board Mutual Instance inspected the board of Boar	surance Company components S/94and ons and taken uirements of the anty, expressed or Owner's Report. for any personal is inspection NBL

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules Quildup Eu
1. (a) Manufactured by GE REUTER-STOKES, INC. 8499 DARROW ROAD, TWINSBURG, OHIO 44087 (Name and address of Manufacturer of part)
(b) Manufactured for WNP-2 - WASHINGTON PUBLIC POWER SUPPLY SYSTEM, RICHLAND, WA 9935 (Name and address of Manufactures of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part M423 thru M437 Nat'l Bd. No. N/A
(a) Constructed According to Drawing No. RS-E5-1260-201 Drawing Prepared by GE REUTER-STOKES
.(b) Description of Part Inspected POWER RANGE DETECTOR DRY TUBE SUMMER
(c) Applicable ASME Code: Section III, Edition 1977, Addenda date 1977, Case No. N/A Class 1
3. Remarks: DESIGN: PRESSURE 1250 PSIG, DESIGN TEMPERATURE 575°F (Brief description of service for which component was designed)
HYDROSTATIC TEST PRESSURE: 1925 PSIG
· ·
We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not include in the component Design Specification and Stress Report.)
J. Z/25 10 92 since GE REUTER-STOKES and Composition
Certificate of Authorization Expires SEPTEMBER 16, 1994 Certificate of Authorization No. N-2703
CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)
Design information on file at GE REUTER-STOKES, INC. TWINSBURG, OHIO CDS-C-5026-1
Stress analysis report on file at _GE REUTER-STOKES, INC. TWINSBURG, OHIO CDR-C-5253-04
Design specifications certified by SURINDER L. KAMPANI Prof. Eng. State OH Reg. No. E-03411
Stress analysis report certified by DOUGLAS E. BACSO Prof. Eng. State OH Reg. No. E-04407
CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of OHIO and employed by H.S.B.I. & I. Co.
of HARTFORD, CT have inspected the part of a pressure vessel described in this
Manufacturer's Partial Data Report on 2-24 19 93, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Date
Jacob C. Lefall Inspector's Signature Commissions NB 79 20 - A-N - OHIO - PA WC 2454 National Board, State, Province and No.
mishadiac a silunta.



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 8/5/94 Sheet: 1 of 1 Unit: WNP-2

- 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Bechtel Construction Company, PO Box 600, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: C30236
- 4. Identification Of System: Diesel Oil (DO) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
DO-TK-1A	Huico, Inc	SK-18-1	N/A	N/A	1975	Replacement	Yes, Code Class 3
				·		,	,

- 7. Description Of Work Performed: Installed ultrasonic (UT) sensor mount on tank DO-TK-1A. The work was performed as follows
 - 1) installed new manway cover plate on the existing manway nozzie
 - 2) Installed new piping material on the manway cover plate
 - 3) Made required welds
 - 4) Performed MT examination on the final circumferential butt weld. MT examination results acceptable
 - 5) Installed new mounting plate for the ultrasonic (UT) sensor
 - 6) Installed new boiting material



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 T	rests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Nome Test Pressure: Psig Test Temperature: F Component Design Pressure: Psig Temperature: F
9. 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
ı	Expiration Date: Not Applicable
1	Prepared By Villach Subb Signed By Amor
ļ	Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
	Date 8594 Date 8-5-94
L	
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	CERTIFICATE OF INSERVICE INSPECTION
	to the state of th
-	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 Arkwright Mutual Insurance Company
	(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
	described in this Owner's Report during the period 4-14-93 to 8.8-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken
	corrective measures described in this Owner's Report in accordance with the requirements of the
-	ASME Code, Section XI
١	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
1	Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
	injury or property damage or a loss of any kind arising from or connected with this inspection
	DILL Warran The Commissions 9556 W NBI
	Mational Board, State, and Endorsements
	Date 8-8-94-
	į



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 8/8/94 Sheet: 1 of 1 Unit: WNP-2

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Bechtel Construction Company, PO Box 600, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: C30236
- 4. Identification Of System: Diesel Oil (DO) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
DO-TK-1B	Huico, Inc	SK-18-2	N/A	N/A	1975	Replacement	Yes, Code Class 3

- 7. Description Of Work Performed: Installed ultrasonic (UT) sensor mount on tank DO-TK-1B. The work was performed as follows
 - 1) Installed new manway cover plate on the existing manway nozzle
 - 2) Weld repaired manway cover plate at four (4) places
 - 3) Blended weld repaired areas
 - 4) Performed MT examination on the final blended weld repaired areas, MT examination results acceptable
 - 5) Installed new piping material on the manway cover plate
 - 6) Made required welds
 - 7) Performed MT examination on the final circumferential butt weld. MT examination results acceptable
 - 8) Installed new mounting plate for the ultrasonic (UT) sensor
 - 9) installed new bolting material



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

ests Cor		<i>Pressure:</i> P			Test	rating Pressure	er 🔀 No
Remarks	: None						
			h.			t.	
			1.				
			CERTIFIC	ATE OF COM	LIAN	CE	
14/	ifu that the at	stomonte m	ada in this ()wner's Renort	are co	prect and this replacement Co	onforms
to the ru	iles of the AS	ME Code, S	ade III diis C Section XI	wiiei s nepoit	210 00	Treet and tries topusonion of	
Type Co	de Symbol S	tamp: Not ap	plicable				
	te Of Authori		Not applicable				
Expirati	on Date: Not Ap	plicable	_		,	α ,	
Prepare	ABY DUL	ash s	Zub	Signed By _	K	XM1 co	
rrepare	Kuldip S	ingh Materia	Is And Inspectio			Manager, Materials And Inspecti	on
Date	1	818194		Date		8-8-94	
<i>Date</i>							
							
		<u></u>	DTICATE	OF INSERVICE	INCE	PECTION	
		CE	MIIFICATE	OF INSERVICE	. //\>r	2011014	
I. the ur	ndersigned, he	olding a val	id commissi	ion issued by ti	ie Nati	ional Board of Boiler and F	ressure
Vessel	Inspectors an	d the State	of Washingto	n and employe	d by A	rkwright Mutual Insurance Co	mpany
(Factory	Mutual Engine	ering Associ	ation) of Norw	ood, Massachus	etts ha	inspected the component	ents
describ	ed in this Ow	ner's Repoi	t during the	period <u>4-1</u>	- 7 <u>-</u> 5	to 8-9-94	and
state to	tne best of m	y knowied docaribad	je ana bellei In thie Owns	r, liie Owner na ore Benort in si	corda	ormed examinations and to nce with the requirements	of the
	ive measures Code, Section		ni uns Owne	a s neport in a	,00, 44	noc man are requirement	
By sign	ing this certif	icate neithe	er the Inspec	tor nor his emp	oloyer	makes any warranty, expr	essed or
implied	. concerning	the examin	ations and c	orrective meas	ures d	lescribed in this Owner's R	leport.
Further	more, neither	the Inspec	tor nor his e	mployer shall b	e llab	le in any manner for any p	ersonal Ion
injury o	or property da	mage or a i	oss of any K	ina arising trot	n or cc	onnected with this inspect	OII
An	u (Xlaacion	H-		Commissi	ons	9556W NE	37
	Inspector's	s Signature				National Board, State, and Endo	rsements
Date	· · · ·	94					
UHIC							



1. Owner: Washington Public Power Supply System (WPPSS) Address: 3000 George Washington Way, Richland, Washington Date: 8/5/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

(b) Repair Organization P.O. No, Job No, etc.: C30236

4. Identification Of System: Diesel Oil (DO) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1972 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
DO-TK-2	Huico, Inc	SK-20	N/A	N/A	1975	Replacement	Yes, Code Class 3

- 7. Description Of Work Performed: Installed ultrasonic (UT) sensor mount on tank DO-TK-2. The work was performed as follows
 - 1) Installed new manway cover plate on the existing manway nozzle
 - 2) Installed new piping material on the manway cover plate
 - 3) Made required welds
 - 4) Performed MT examination on the final circumferential butt weld. MT examination results acceptable
 - 5) Installed new mounting plate for the ultrasonic (UT) sensor
 - 6) Installed new bolting material



F	ORM NIS-2 OWNER'S REP	ORT FOR REPAIRS C	R REPLACEMENTS	(Back)
3 Tests Conduct	ted: Hydrostatic Pneun Test Pressure: Psig Component Design Press	Te	perating Pressure est Temperature: ° F emperature: ° F	Other X Non
9. Remarks: None	•			
			•	
				*
<u> </u>				
	CERT	IFICATE OF COMPLIA	ANCE	
	at the statements made in th		correct and this replac	cement conforms
	of the ASME Code, Section X Symbol Stamp: Not applicable	u		
	f Authorization No.: Not applica ate: Not Applicable	able		
ļ ·	2 2. 0 11		Physica	
Prepared By	Kuldip Singh - Materials And Insp	Signed By	Manager, Materials An	d Inspection
Date	8/5/94	Date	8-5-94	
		•		
L				
	CERTIFICA	TE OF INSERVICE IN	ISPECTION	
I, the unders	igned, holding a valid comm	ission issued by the l	lational Board of Boile	er and Pressure
Vessel Inspe	ectors and the State of Washi al Engineering Association) of N	ngton <i>and employed b</i> Norwood. Massachusetts	y Arkwright Mutual Insur • have inspected the c	ance Company <i>omponents</i>
described in	this Owner's Report during	the period 4-8-	<u>93 to 8-8</u>	<u>- 94</u> and
corrective m	best of my knowledge and be leasures described in this O	eller, the Owner has pe wner's Report in accol	rdance with the requir	ements of the
ASME Code.				
implied, con	cerning the examinations ar	nd corrective measure	s described in this Ov	vner's Report.
Furthermore	e, neither the inspector nor h perty damage or a loss of a	iis employer shall be li ny kind arising from oi	able in any manner fo r connected with this i	r any personal Inspection
7.02	/_04		•	NRT
	basector's Signature	Commissions	National Board, State,	and Endorsements
Date	8-8-94			
	1			



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 3/10/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980
 Addenda, Code Case: N-308 And N-416
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4B	WPPSS	MS(1)-4B-P3	N/A	N/A	1983	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Removed existing drain connection with valves MS-V-238B and MS-V-239. The replacement work was performed as follows
 - 1) Cut and removed the existing drain connection
 - 2) Installed new pipe and pipe cap
 - 3) Made required socket welds
 - 4) Performed MT examination on the final socket wolds. MT examination results acceptable. The MT examination satisfied both ASME Section III, Code Class 2 and Code Case N-418 requirements
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

Revision - Revised Item 9 "Remarks" (Underlined portion only):



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

<i>9.</i> hy	Test Pressure: 939.3 Psig Test Temperature: 535° F Component Design Pressure: 1250 Psig Temperature: 575° F Remarks: Visual examination (VT-2) for leakage at nominal operating pressure and temperature was performed in lieu of the required drostatic test as permitted by Code Case N-416. The required hydrostatic test will not be performed based on ASME Section XI, Article (A-5214(d), See attached IOM from RA Moon/TL Mead to HE Kook, Subject - Justification for not performing hydrostatic test of repairs to aim Steam (MS) drip leg, dated February 22, 1994
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By
İ	
	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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 1-29-93 to 8-23-93 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection



INTEROFFICE MEMORANDUM

PLANI NO. 2-0911 Enclip Engs 3/10/94

DATE: February 22, 1994

TO: HE Kook, Manager WNP-2 Licensing (PE20)

ROM: 1L Meade, Manager Technical Programs (PE27)

RA Moen, Manager Materials and Inspection (PE22)

SUBJECT: JUSTIFICATION FOR NOT PERFORMING HYDROSTATIC TEST OF REPAIRS TO

MS LINE DRIP LEG

REFERENCE:

From October 1988 through January 1993, several ASME Section XI work plans were implemented to perform repair/replacement work on the two-inch NPS drain connection attached to ASME Section III, Code Class 2 Main Steam system, Line "B" drip leg. ASME Section XI, Article IWA-4400 requires such repair/replacements to be hydrostatically tested. At the time the repair/replacements were performed, the hydrostatic tests were deferred using ASME Code Case N-416 which allows deferral of hydrostatic tests of piping that cannot be isolated by existing valves to the next scheduled system hydrostatic test. The next scheduled system hydrostatic test was anticipated to be the test required at a ten year interval.

During preparation for the ten year hydrostatic tests using Code Case N-498, it was noticed that ISI Program Plan, Note 4 of page 4-3 states that Class 2 portion of Main Steam line (downstream of outboard MS isolation valves) does not perform any safety function and is capable of automatic isolation, therefore no pressure test will be performed on these lines. This position was further confirmed with NRC during our request to use Code Case N-498 (Ref. letter G02-92-017, dated January 23, 1992). Use of Code Case N-498 for Class 1 and 2 piping systems allows leakage test at nominal operating pressure in lieu of the hydrostatic tests.

Independent review by a member of Plant Technical staff concluded that provisions of IWA-5214(d) can be used to justify waving hydrostatic test requirements for affected repairs. IWA-5214(d) states that when a system hydrostatic test imposes system conditions which conflict with limitations included in the plant Technical Specifications, a system inservice test at nominal operating temperature shall be acceptable in lieu of the system hydrostatic test. Justification for the application of this Article is as follows:

- The configuration of the affected piping requires that the Reactor Pressure Vessel (RPV) be included in the hydrostatic pressure boundary.
- •The required hydrostatic test pressure for the affected piping is 1563 PSIG. To reach that pressure in the RPV would necessitate gagging the Safety Relief Valves (SRV's) because their set points are all less than the required test pressure.

- Technical Specification 2.1.3, Reactor Coolant System Pressure, limits reactor pressure to LE 1325 psig steam dome pressure (equivalent to 1375 psig at the lowest elevation of the reactor coolant system).
- •The Pressure/Temperature curves for the RPV in Technical Specifications Figure 3.4.6.1 indicate the required temperature of the RPV to pressurize to !563 PSIG is > 250 degrees F.
- •With Reactor Coolant temperature >200 degrees F, Technical Specifications require that the Mode Switch be in operational condition 3 (Hot Shutdown).
- Technical Specification 3.4.2b) requires 4 SRV's to be operable while in Mode 3 which would not be the case with all SRV's gagged.

This conflict with limitations of WNP-2 Technical Specifications allows application of Article IWA-5214(d). The inservice test required in lieu of the hydrostatic test was performed each time the repair/replacements were made and is documented on the Section XI work plans. NIS-2 form will be updated to reflect this position.

DISTRIBUTION:

LC Mauws/lb LCM	PE27
R Rana/Ib RRaha	PE27
PJ Inserra	PE27
CM King	PE22
K Singh	PE22
DP Ramey	901B
DE Hoggarth	901B
MG Eades	PE20
RL Webring	PE27
TT.M/lb	



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 6/28/94
Sheet: 1 of 1
Unit: WNP-2

- 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
 (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Bullt	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW-V-44	Borg Warner	22342	N/A	N/A	1977	Repair	Yes, Code Class 2

- 7. Description Of Work Performed: Made body to bonnet seal weld for valve SW-V-44. The work was performed as follows
 - 1) Cut valve body to bonnet seal weld
 - 2) Removed valve internals for troubleshooting
 - 3) Prepped cut/ground areas on the valve body and the bonnet
 - 4) Reinstalled valve internals and the bonnet
 - 5) Made valve body to bonnet seal weld
 - 6) Performed PT examination on the final seal weld. PT examination results acceptable
 - 7) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



Test Pressure: 342 Paig Test Pressure: 342 Paig Component Design Pressure: 3500 Paig Test Temperature: 64.3° F 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 Kukip Singh - Muterials And Inspection Date CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period Jate SME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or impiled, 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 impiled, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Massachia. Commissions Passonal Board, State, and Endorsements Commissions Commissions National Board, State, and Endorsements Date Output Commissions National Board, State, and Endorsements		FORM NIS-2 OWNER'S REPOR	RT FOR REPAIRS	OR REPLACEMENTS	(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 Prepared By	Tests Condu	Test Pressure: 342 Psig	7	est Temperature: 64.30	
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: No	one .			
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					
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					
to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By		CERTIFI	CATE OF COMPL	ANCE	
to the rules 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 to	hat the statements made in this	Owner's Report ar	e correct and this renair	conforms
Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By	to the rules	of the ASME Code, Section XI		o de la companya de l	
Prepared By Lucin Sund Inspection Nuklip Singh - Materials And Inspection Date 6 28 94 Date 7-4-94 CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 3 4 93 to 6 722 94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection					
Ruldip Singh - Materials And Inspection Date					
Kuldip Singh - Materials And Inspection Manager, Materials And Inspection Date	•	7		BL.	
CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 3]4]93 to 6/22/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Way and Commissions 956 NBI And Octor's Signature National Board, State, and Endorsements	Prepared By	y Kuldisp Eugh	Signed By	KAMoer	
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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 3]4]93 to 6/22/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Mayouth Commissions 956 W NBT National Board, State, and Endorsements		Kuldip Singh - 'Materials And Inspect	ion	▼ :	d 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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 3/4/93 to 6/22/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Mational Board, State, and Endorsements Mational Board, State, and	Date	6/28/94	Date	7-4-94	
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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 3/4/93 to 6/22/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Mational Board, State, and Endorsements Mational Board, State, and					
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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 3/4/93 to 6/22/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Warranty Commissions 956W NBT National Board, State, and Endorsements					
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 3/4/93 to 6/22/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Matonal Board, State, and Endorsements Commissions PSSe W NBT National Board, State, and Endorsements National Board, State, and Endorse Nat		CERTIFICATE	OF INCEDVICE II	ICRECTION	
Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 3/4/93 to 6/22/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Warranty		CENTIFICATE	OF INSERVICE II	ISPECTION	
(Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 3/4/93 to 6/22/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Description					
described in this Owner's Report during the period 3/4/93 to 6/22/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Description					
state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Description					
ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Warranty Commissions 956 W NBT National Board, State, and Endorsements		•			·——
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Warranty, expressed or implied to 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 Owner's Commissions			er's Report in acco	rdance with the require	ements of the
implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Way and Commissions 956 W NBT National Board, State, and Endorsements			alau mau bla amede		
Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Way and Commissions 9556 W NBT National Board, State, and Endorsements					
Injury or property damage or a loss of any kind arising from or connected with this inspection DM Way arth Commissions 9556 W NBT National Board, State, and Endorsements					
Inspector's Signature National Board, State, and Endorsements					
Inspector's Signature National Board, State, and Endorsements	Dru (VA	herasith	Commissions	955% W	NRI
	_CHECKE	Inspector's Signature	Commissions	National Board, State, a	nd Endorsements
	Date	7/5/94		,	
					•



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/30/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

- (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Process Sample Radioactive (PSR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PSR-V-003/A	Target Rock	5	N/A	N/A	1982	Repair	Yes, Code Class

- 7. Description Of Work Performed: Made body to bonnet seal weld for valve PSR-V-003/A. The work was performed as follows
 - 1) Cut valve body to bonnet seal weld
 - 2) Removed valve internals for troubleshooting
 - 3) Prepped cut/ground areas on the valve body and the bonnet
 - 4) Performed PT examination on the final prepped surfaces of the valve body and bonnet. PT examination results acceptable
 - 5) Installed new valve main disc
 - 6) Reinstalled the bonnet in the valve
 - 7) Made valve body to bonnet seal weld
 - 8) Performed PT examination on the final seal weld. PT examination results acceptable



•	SUPPLI SISII	217	
FORM NIS-2 OWNER'S R	EPORT FOR REPAIRS	OR REPLACEMENTS	(Back)
8 Tests Conducted: Hydrostatic Pri Test Pressure: Psig Component Design Pi		Operating Pressure	Other X Non
9. Remarks: See attached N-2 Code Data Report	t for the new valve main disc, S	ierial No 2076	
		-	•
		-	
	, 		·
CE	RTIFICATE OF COMPL	LIANCE	
We certify that the statements made it to the rules of the ASME Code, Section Type Code Symbol Stamp: Not applicable	n XI	re correct and this repair (conforms
Certificate Of Authorization No.: Not ap Expiration Date: Not Applicable	plicable	-	
•	'h '	PAMOEL	
Prepared By Lucib Sur Kuldip Singh - Materials And	Signed By Inspection	Manager, Materials And	Inspection
Date 6/30/94		7-4-94	
1		4	
CERTIFI	CATE OF INSERVICE I	NSPECTION	
I, the undersigned, holding a valid conversel inspectors and the State of Wa (Factory Mutual Engineering Association) described in this Owner's Report during state to the best of my knowledge and corrective measures described in this ASME Code, Section XI	shington and employed a of Norwood, Massachusett and the period 4/19 abelief, the Owner has period owner's Report in acceptance.	by Arkwright Mutual Insural is have inspected the colory is have inspected the colory is have inspected the colory is have inspected the colory in the required t	nce Company mponents 24and and taken ments of the
By signing this certificate neither the implied, concerning the examinations Furthermore, neither the inspector no injury or property damage or a loss of	and corrective measurer his employer shall be	es described in this Own liable in any manner for	ner's Report. any personal
Don Xbygasth	Commission	s 9556W	NBI
Date 7/5/94		National Board, State, an	d Endorsements
			•

FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL

NUCLEAR PARTS AND APPURTENANCES*

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

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Rued	/ -	4120	194
		ے در م	Ί,

Not To Exceed One Day's Production

			10// 5 5 11 11		2-1-1- NV 11725
1. Man	ufactured and certified by	Target Rock Cor	p.; 1966E Broadno	LLOW Rd; E. rare of certificate holder)	ningdale, NY 11735
2. Man	ufactured for Washing	gton Public Power	Supply System; Ric	hland, WA 99352	2
			(name and address of po	urchaser)	
3. Loca	ation of installation	NP-2; North Power	Plant Loop; Richl	land, WA 99352	
·			(name and addr	ess)	
4 Type	202539-1 (drawing no.)	SA-564 630	140 ksi	N/A	1992
4. 19p	(drawing no.)	(mat'l, spec, no.)	(tensile strength)	(CRN)	= {year built} .
	AE Code, Section III:	1974	Winter 1975	1	None
J. AJI	AL Code, Section III.	(edition)	(addenda)	(class)	(Code Case no.)
6. Fab	ricated in accordance w	ith Const. Spec. (Div. 2 on	nly) N/A Rev	ision N/A	DateN/A
			fram)		
7. Ren	narks: Span	re parts for compl	eted valve assembl	ly Model No. 82N	1-001
	Psr	-4-003/A DISC	c s N 2076	•	
	, , , , , , , , , , , , , , , , , , , ,				
	N/A		. N/A	N/A	N/A
					overall (ft. & in.) N/A
9. Whe	en applicable, Certificate	e Holders' data reports are	attached for each item o	f this report:	

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board Number in Numerical Order
2064	N/A	(26)	·
2076	N/A	(27)	
2087	N/A	(28)	
2096	N/A	(29)	
2099	N/A	(30)	
2102	N/A	(31)	
N/A	N/A	(32)	
		(33)	
		(34)	
)		(35)	
)		(36)	
		(37)	
)		(38)	
.)		(39)	
)	2	(40)	
)		(41)	
)		(42)	
3)		(43)	
)		(44)	
)		1 (45)	*
)		SATISFACTORY -	X Unsationation
		(47) Vijayk	Bell I 12-15-9
)		(48) RECEPTION	CTOR / LEVEL / DATE
		(49)	
j)	<u> </u>	(50)	

Ambient *Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8% X 1, (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.

(when applicable)

FORM N-2 (back)

		Mfr. Serial No. See Brotte
,	CERTIFICATE OF DESIG	N
Design specifications certified by	G. L. Mayfield	P. E. state OR Reg. no. 7140
	(when applicable) J. Miazza	P. E. state NY Reg. no. 51883
Design report* certified by	(when applicable)	P. E. StateHeg. noHeg.
1.	CERTIFICATE OF SHOP COMP	LIANCE
We certify that the statements made in the conform to the rules of construction of		Part
NPT Certificate of Authorization no.	1948	Expires12-12-92
Date 11/30/93 Name Tar	get Rock Corporation (NPT Ceruficate Holder)	Signed <u>E. Brivada</u> Lor E. Champéy; Director, Q.A.
	CERTIFICATE OF SHOP INSPI	ECTION
ince of New York and employed Boston, Mass. have inspect	byed by <u>Commercial Union Ins</u> ted these items described in this data re	sport on $\frac{11/30/93}{}$, and state that to the
Section III. Each part listed has been au		ts or appurtenances in accordance with the ASME Code, a above.
• •		arranty, expressed or implied, concerning the equipment or shall be liable in any manner for any personal injury or
property damage or loss of any kind aris	ing from or connected with this inspect	N. Y. STATE COMMISSION NO. 2 Commissions Commissions
(6	(Authorized Inspector)	(Nat'l, Bd. (incl, endorsements) state or prov. and no.)



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

Date: 7/11/94 Sheet: 1 of 1 Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Process Sample Radioactive (PSR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PSR-V-003/B	Target Rock	6	N/A	N/A	1982	Repair	Yes, Code Class 1
			,				

- 7. Description Of Work Performed: Made body to bonnet seal weld for valve PSR-V-003/B. The work was performed as follows
 - 1) Cut valve body to bonnet seal weld
 - 2) Removed valve internals for troubleshooting
 - 3) Prepped cut/ground areas on the valve body and the bonnet
 - 4) Performed PT examination on the final prepped surfaces of the valve body and bonnet. PT examination results acceptable
 - 5) Installed new valve main disc
 - 6) Reinstalled the bonnet in the valve
 - 7) Made valve body to bonnet seal weld
 - 8) Performed PT examination on the final seal weld. PT examination results acceptable



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9.	Remarks: See attached N-2 Code Data Report for the new valve main disc, Serial No 2096
	•
1	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this repair conforms
١	to the rules of the ASME Code, Section XI
	Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable
	Expiration Date: Not Applicable
ı	Branged By D. J. of M. Star & Stand By RAMON
	Prepared By Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
	Date 7/11/94 Date 7-12-94
	CERTIFICATE OF INSERVICE INSPECTION
	CENTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
	Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components
	described in this Owner's Report during the period 4-19-93 to 7-/3-94 and
1	state to the best of my knowledge and belief, the Owner has performed examinations and taken
	corrective measures described in this Owner's Report in accordance with the requirements of the
	ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
	implied, concerning the examinations and corrective measures described in this Owner's Report.
	Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
	injury or property damage or a loss of any kind arising from or connected with this inspection
	Commissions 9556W NBI
	Obspector's Signature National Board, State, and Endorsements
	Date
,	

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

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

(xceed One Day's Proc		Pg_1_of_2
1.	Manufactured and certified	by Target Rock Co	rp.; 1966E Broadh (name and addre	ollow Rd; E. Far	mingdale, NY 11735
2.	Manufactured for Washi	ngton Public Power	Supply System; R		2
3.	Location of installation	WNP-2; North Power			
5.	Type 202539-1 (drawing no.) ASME Code, Section III: Fabricated in accordance	1974 (edition)	(tensile strength) Winter 1975 (addenda)	N/A (CRN) 1 (class)	1992 (year built) None (Code Case no.) Date N/A
7.	nemarks.	V-003 B, DISC	leted valve assemi		_
	Nom. thickness (in.) N/A When applicable, Certifica	A Min. design thickness	(in.) N/A Dia. ID (ft.	& in.) N/A Length	<u> </u>

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board Number In Numerical Order
1) 2064	N/A	(26)	
2) 2076	N/A	(27)	
3) 2087	N/A	(28)	
2096	N/A	(29)	
2099	N/A	(30)	
3) 2102	N/A	(31)	
7) N/A	N/A	(32)	
3)		(00)	
9)		(34)	
0)		(35)	
11)		(36)	
12)		(37)	
13)		(38)	
14)		(39)	
15)		1 (440)	
(6)		1441	
17)		1401	
18)			
19)		(44)	
20)	5	1	
21)		DIALOCAL TOOM	<u>X_Unsatisfactory</u>
22)		1 (47)//ii RUA A	60 L 12-15-97
23)		(48) RECEIPTING EC	TOR / LEVEL / DATE
24)		(49)	
25)		(50)	

Ambient *Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8% X 1, (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.

(when applicable)

FORM N-2 (back)

			Mfr. Serial	No. See Eront
,	CERTIFICATE OF DE	SIGN		
Design specifications certified by	G. L. Mayfield	P. E. sta	te_OR	Reg. no. 7140
-	(when applicable) J. Miazza	P F sta	te NY	Reg. no. 51883
Design.report* certified by	(when applicable)			
	CERTIFICATE OF SHOP CO	MPLIANCE		
We certify that the statements made in t		950)	Part	
conform to the rules of construction of	the ASME Code, Section III.			
NPT Certificate of Authorization no.	1948	Expires1	2-12-92	
Date ///32/Ga Name Ta	rget Rock Corporation	Signed	xuada_	ler
	(NP1 Certificate Holder)	E. Champ	ocified representative (ey; Direct	or, Q.A.
	CERTIFICATE OF SHOP IN	SPECTION		
i, the undersigned, holding a valid commince of New York and emp				and the state or pro-
of Boston, Mass. have inspec	cted these items described in this dat	a report on	30/92-	and state that to the
best of my knowledge and belief, the C		• • • • • • • • • • • • • • • • • • • •	n áccordance v	ith the ASME Code,
Section III. Each part listed has been at By signing this certificate, neither the	· •		implied conce	roing the equipment
described in this data report. Furthermo		=		
property damage or loss of any kind any		ection		
Date 11/10/97 Signed Will	sem C. Holand	Commissions	iissiored in F	SSION NO. 228 ENN., OHIO & CO.
	(Authorized Inspector)	(Nat'l. 8d	l. (incl. endorsemen	ts) state or prov. and no.)



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 6/19/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Equipment Drains Radioactive (EDR) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped , (Yes Or No) Code Class
EDR-V-40	Anchor Darling	3N 357		N/A	1975	Replacement	Yes, Code Class 3
				•			

- 7. Description Of Work Performed: Installed bushing retainer tab for valve EDR-V-40. The work was performed as follows
 - 1) Installed new bushing retainer tab
 - 2) Made required welds
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNER'S REPORT	T FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumati Test Pressure: 55 Psig Component Design Pressure	Test Temperature: 73.8° F
9. Remarks: None	
•	
	·
CERTIFIC	ATE 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	0.4
Propared By Quedus Luis	Signed By KAN cum
Kuldip Singh - Materials And Inspection	n Manager, Materials And Inspection
Date 6 19 19 4	Date 6 - 20 - 94-
•	
CERTIFICATE	OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission	on issued by the National Board of Boiler and Pressure
(Factory Mutual Engineering Association) of Norwa	n and employed by Arkwright Mutual Insurance Company ood, Massachusetts have inspected the components
described in this Owner's Report during the	period <u>5/8/93</u> to <u>5//2-/94</u> and
	the Owner has performed examinations and taken
ASME Code, Section XI	's Report in accordance with the requirements of the
By signing this certificate neither the inspect	tor nor his employer makes any warranty, expressed or
implied, concerning the examinations and co	prrective measures described in this Owner's Report.
Furthermore, neither the inspector nor his en	nployer shall be liable in any manner for any personal nd arising from or connected with this inspection
mjury of property damage of a root of any mi	
Maxogath	Commissions
Install 191	National Board, State, and Endorsements
Date	
1	



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/21/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

(b) Repair Organization P.O. No. Job No. etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Valve	Crosby	N63790-00-0045	N/A	N/A	1981	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced disc insert and nozzle for spare main steam relief valve, Serial No N63790-00-0045. The replacement work was performed as follows

- 1) Removed existing disc insert and nozzle from the valve
- 2) Installed new disc insert and nozzle in the valve
- 3) Installed new studs for the valve inlet joint



ests Conduc	ted: Hydrostatic Pne Test Pressure: Psig Component Design Pre	Te	perating Pressure st Temperature: ° F mperature: ° F	Other X None
	ssure test to confirm pressure boun separate ASME Section XI plan	dary integrity on the flanged join	nts will be performed when th	e spare valve is installed
	•		•	•
			•	•
	٠.			
	CER	RTIFICATE OF COMPLIA	ANCE	
	nat the statements made in of the ASME Code, Section		correct and this replace	ement conforms
	Symbol Stamp: Not applicable			
	Of Authorization No.: Not applicable Oate: Not Applicable	licable		
Expiration L	ete: Not Applicable	0 1	Pán.	
Prepared By	Ludip Lu	Signed By	12XI Mose	lana setta a
	Kuldip Singh - Materials And Ir	-	Manager, Materials And	Inspection
Date	6/21/94	Date	. 6-22-94	<u> </u>
	»		,	
, , , , , , , , , , , , , , , , , , ,	CERTIFIC	CATE OF INSERVICE IN		
		•	•	15
I, the unders	signed, holding a valld con ectors and the State of Was	าmission issuea by เกe ก shinaton and emploved b	<i>lational board of bolle</i> v Arkwright Mutual Insur	ince Company
(Factory Muti	ual Engineering Association) o	of Norwood, Massachusetts	have inspected the co	mponents
described in	n this Owner's Report during best of my knowledge and	ng the period <u>8-3 -</u>	73 to 6.23	-94- and
corrective n	neasures described in this	Owner's Report in accor	rdance with the require	ements of the
ASME Code	e. Section XI			
By signing	this certificate neither the lacerning the examinations	inspector nor his employ	er makes any warrant s described in this Ow	y, expressed or ner's Report.
Furthermore	e, neither the inspector no	r his employer shall be li	lable in any manner foi	any personal
injury or pro	operty damage or a loss of	any kind arising from o	· connected with this in	nspection
Den Or	roa sull	Commissions	9556W	NKI
_ cun xx	Unspector's Signature		National Board, State, a	nd Endorsements



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 6/21/94 . Sheet: 1 of 1

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

 (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced disc insert and nozzle for spare main steam relief valve, Serial No N63790-00-0055. The replacement work was performed as follows

- 1) Removed existing disc insert and nozzle from the valve
- 2) Installed new disc insert and nozzle in the valve
- 3) Installed new studs for the valve inlet joint



Tests Conducted: Hydrostatic Pneun Test Pressure: Psig Component Design Press	T	Operating Pressure Other X None lest Temperature: Comperature:	---	---	--
Remarks: Pressure test to confirm pressure boundars system under a separate ASME Section XI plan	ry integrity on the flanged jo	oints will be performed when the spare valve is installed.			
• •		.			
CERT	IFICATE OF COMPLI	IANCE			
We certify that the statements made in the to the rules of the ASME Code, Section X Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicate Expiration Date: Not Applicable		e correct and this replacement conforms			
Prepared By Just Sung S	Signed By	Manager, Materials And Inspection			
Date 6/21/14	Date	6-22-94			
CERTIFICA	TE OF INSERVICE II	NSPECTION			
I, the undersigned, holding a valid comm Vessel inspectors and the State of Washi (Factory Mutual Engineering Association) of N described in this Owner's Report during state to the best of my knowledge and be corrective measures described in this Of ASME Code, Section XI By signing this certificate neither the ins implied, concerning the examinations an	ngton and employed b Norwood, Massachusett: the period <u> </u>	by Arkwright Mutual Insurance Company s have inspected the components 93 to <u>6-23-94</u> and performed examinations and taken bridance with the requirements of the syer makes any warranty, expressed or			
Furthermore, neither the Inspector nor h injury or property damage or a loss of a	is employer shall be l	liable in any manner for any personal			
Dan Vogaath Osfector's Signature Date 6-23-94	Commission	s 4556W NBI			
Ipspector's Signature		National Board, State; and Endorsements			



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 6/21/94

Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced disc insert and nozzle for spare main steam relief valve, Serial No N63790-00-0051. The replacement work was performed as follows
 - 1) Removed existing disc insert and nozzle from the valve
 - 2) Installed new disc insert and nozzle in the valve



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

ests Conducted: Hydrostatic Test Pressure Component D			Operating P Test Tempe Temperature	ature: ° F	Other X N
Remarks: Pressure test to confirm proystem under a separate ASME Section		egrity on the flanged	joints will be pe	formed when the	spare valve is insta
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	CERTIFICA	ATE OF COMP	LIANCE		
We certify that the statement		wner's Report a	re correct a	nd this replacer	ment <i>conforms</i>
to the rules of the ASME Cod					
Type Code Symbol Stamp: No Certificate Of Authorization N					
Expiration Date: Not Applicable	10 Not applicable				
	<i></i>		0	L _	
Prepared By <u>Kulaup</u>	Lund	Signed By	RX	Moen	
Kuldip Singh - Ma	terials And Inspection	1		r, Materials And I	
Date 6/21/9	4	Date	.6-2	2-94	
<u> </u>					
,	CERTIFICATE C	OF INSERVICE	INSPECTIO	N	
I, the undersigned, holding a Vessel Inspectors and the St (Factory Mutual Engineering Ass described in this Owner's Re state to the best of my knowl corrective measures describ	ate of Washington sociation) of Norwo port during the p ledge and bellef,	n and employed ood, Massachuse period <u>8-3</u> the Owner has	by Arkwright tts have insp - 93 to performed e	Mutual Insurar ected the cor 6 23 xaminations	nce Company mponents 94 and and taken
ACIIE Cada Castian VI		or nor hie amni	over makes	any warranty,	expressed or
By signing this certificate ne implied, concerning the exan Furthermore, neither the insp	ninations and co pector nor his en	rrective measu npioyer shall be	res describe · liable in an	/ manner for a	any personal
By signing this certificate ne implied, concerning the exan Furthermore, neither the insp	ninations and co pector nor his en	prective measu nployer shall be nd arising from	res describe liable in any or connecte	manner for a with this in:	any personal
By signing this certificate ne implied, concerning the example for the inspirit formation or property damage or the following th	ninations and co pector nor his en a loss of any kir	rrective measu npioyer shall be	res describe liable in any or connecte ns <u>95</u>	manner for a with this in:	any personal spection NBZ
ASME Code, Section XI By signing this certificate ne implied, concerning the exan Furthermore, neither the insp injury or property damage or Unspector's Signature	ninations and co pector nor his en a loss of any kir	prective measu nployer shall be nd arising from	res describe liable in any or connecte ns <u>95</u>	manner for a with this in:	any personal spection NBZ
By signing this certificate ne implied, concerning the example for the inspirit or property damage or the following the content of the implication	ninations and co pector nor his en a loss of any kir	prective measu nployer shall be nd arising from	res describe liable in any or connecte ns <u>95</u>	manner for a with this in:	any personal spection



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/11/94 Sheet: 1 of 1 Unit: WNP-2

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

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

- 7. Description Of Work Performed: Replaced disc insert, nozzle and inlet stud for spare main steam relief valve, Serial No N63790-00-0047. The replacement work was performed as follows
 - 1) Removed existing disc insert and nozzle from the valve
 - 2) Installed new disc insert and nozzle in the valve
 - 3) Installed new stud for the valve inlet joint



Test Pressure: Psig Test Temperature: ° F Temperature: °	Test Pressure: Psig Component Design Pressure: Psig Temperature: ° F Tempe	FORM NIS-2 OWNER'S REF	PORT FOR REPAIRS	OR REPLACEMENT	S (Back)
CERTIFICATE OF COMPLIANCE We certify that the statements made in this Owner's Report are correct and this replacement conform to the rules 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 Supply Kuicip Singh - Materials And Inspection Date Signed By Manager, Materials And Inspection Date 7-12-94 CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressur Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 5-3-93 to 7-13-94 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 compiled, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be 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 Way Author 1	CERTIFICATE OF COMPLIANCE certify that the statements made in this Owner's Report are correct and this replacement conforms the rules of the ASME Code, Section XI secode Symbol Stamp: Not applicable tillicate Of Authorization No.: Not applicable biration Date: Not	Test Pressure: Psig		Test Temperature: ° F	Other X Nor
We certify that the statements made in this Owner's Report are correct and this replacement conform to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By	certify that the statements made in this Owner's Report are correct and this replacement conforms the rules of the ASME Code, Section XI be Code Symbol Stamp: Not applicable stificate Of Authorization No.: Not applicable obtained for a conformal state of the Asplicable of Authorization No.: Not applicable obtained by Signed By Signed By Signed By Signed By State of Materials And Inspection Manager, Materials And Inspection Date 7-12-94 CERTIFICATE OF INSERVICE INSPECTION The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure undersigned, holding a valid commission issued by Arkwright Mutual Insurance Company story Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components cribed in this Owner's Report during the period 5-3-93 to 7-13-94 and the to the best of my knowledge and belief, the Owner has performed examinations and taken rective measures described in this Owner's Report in accordance with the requirements of the ME Code, Section XI signing 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, thermore, neither the inspector nor his employer shall be liable in any manner for any personal and or property damage or a loss of any kind arising from or connected with this inspection with this inspection of the Commissions (Commissions (Commissio		ary integrity on the flanged	joints will be performed when	the spare valve is installe
We certify that the statements made in this Owner's Report are correct and this replacement conform to the rules 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 Sup Signed By Manager, Materials And Inspection Date 7 11 94 Date 7 - 1/2 - 94 CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressur Vessel inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period \$-3-93 to 7-13-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed c implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal inlury or property damage or a loss of any kind arising from or connected with this inspection Washest Commissions 9556W NBT	certify that the statements made in this Owner's Report are correct and this replacement conforms the rules of the ASME Code, Section XI be Code Symbol Stamp: Not applicable stificate Of Authorization No.: Not applicable obtained for a conformal state of the Asplicable of Authorization No.: Not applicable obtained by Signed By Signed By Signed By Signed By State of Materials And Inspection Manager, Materials And Inspection Date 7-12-94 CERTIFICATE OF INSERVICE INSPECTION The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure undersigned, holding a valid commission issued by Arkwright Mutual Insurance Company story Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components cribed in this Owner's Report during the period 5-3-93 to 7-13-94 and the to the best of my knowledge and belief, the Owner has performed examinations and taken rective measures described in this Owner's Report in accordance with the requirements of the ME Code, Section XI signing 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, thermore, neither the inspector nor his employer shall be liable in any manner for any personal and or property damage or a loss of any kind arising from or connected with this inspection with this inspection of the Commissions (Commissions (Commissio		•		
We certify that the statements made in this Owner's Report are correct and this replacement conform to the rules 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 Sup Signed By Manager, Materials And Inspection Date 7 11 94 Date 7 - 1/2 - 94 CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressur Vessel inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period \$-3-93 to 7-13-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed c implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal inlury or property damage or a loss of any kind arising from or connected with this inspection Washest Commissions 9556W NBT	certify that the statements made in this Owner's Report are correct and this replacement conforms the rules of the ASME Code, Section XI be Code Symbol Stamp: Not applicable stificate Of Authorization No.: Not applicable obtained for a conformal state of the Asplicable of Authorization No.: Not applicable obtained by Signed By Signed By Signed By Signed By State of Materials And Inspection Manager, Materials And Inspection Date 7-12-94 CERTIFICATE OF INSERVICE INSPECTION The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure undersigned, holding a valid commission issued by Arkwright Mutual Insurance Company story Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components cribed in this Owner's Report during the period 5-3-93 to 7-13-94 and the to the best of my knowledge and belief, the Owner has performed examinations and taken rective measures described in this Owner's Report in accordance with the requirements of the ME Code, Section XI signing 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, thermore, neither the inspector nor his employer shall be liable in any manner for any personal and or property damage or a loss of any kind arising from or connected with this inspection with this inspection of the Commissions (Commissions (Commissio				
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CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressur Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 6-3-93 to 7-/3-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed of implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 9556W NBT	CERTIFICATE OF INSERVICE INSPECTION The undersigned, holding a valid commission issued by the National Board of Boller and Pressure is a linspectors and the State of Washington and employed by Arkwright Mutual Insurance Company story Mutual Engineering Association) of Norwood, Massachusetts have inspected the components cribed in this Owner's Report during the period 6.3.93 to 7-/3-94 and the to the best of my knowledge and belief, the Owner has performed examinations and taken rective measures described in this Owner's Report in accordance with the requirements of the ME Code, Section XI signing this certificate neither the inspector nor his employer makes any warranty, expressed or silled, concerning the examinations and corrective measures described in this Owner's Report, thermore, neither the inspector nor his employer shall be liable in any manner for any personal any or property damage or a loss of any kind arising from or connected with this inspection Commissions 956W NBT National Board, State, and Endorsements	· · · · · · · · · · · · · · · · · · ·		Manager, Materials A	nd Inspection
I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressur Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 6-3-93 to 7-13-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed of implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 956W NBT	the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure is a linspectors and the State of Washington and employed by Arkwright Mutual Insurance Company story Mutual Engineering Association) of Norwood, Massachusetts have inspected the components of the Insurance Company to Massachusetts have inspected the components of the Insurance Company to Massachusetts have inspected the components of the Insurance Company to Massachusetts have inspected the components of the Insurance Company to Massachusetts have inspected the components of Insurance Company to Massachusetts have inspected the components and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the to the best of my knowledge and belief, the Owner has performed examinations and taken are to the to the best of my knowledge and belief, the Owner has performed examinations and taken are to the to the best of my knowledge and belief, the Owner has performed examinations and taken are to the to the best of my knowledge and belief, the Owner has performed examinations and taken are to the tother than the tother the inspection are to the tother the inspection are to the	Date 7/11/94	Date	7-12-94	
I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressur Vessel inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 6-3-93 to 7-13-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed of implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 9556W NBT	the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure is a linspectors and the State of Washington and employed by Arkwright Mutual Insurance Company story Mutual Engineering Association) of Norwood, Massachusetts have inspected the components of the Insurance Company to Massachusetts have inspected the components of the Insurance Company to Massachusetts have inspected the components of the Insurance Company to Massachusetts have inspected the components of the Insurance Company to Massachusetts have inspected the components of Insurance Company to Massachusetts have inspected the components and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the best of my knowledge and belief, the Owner has performed examinations and taken are to the to the best of my knowledge and belief, the Owner has performed examinations and taken are to the to the best of my knowledge and belief, the Owner has performed examinations and taken are to the to the best of my knowledge and belief, the Owner has performed examinations and taken are to the to the best of my knowledge and belief, the Owner has performed examinations and taken are to the tother than the tother the inspection are to the tother the inspection are to the				
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	Inspector's Signature National Board, State, and Endorsements	Dan Gloggarto	Commission	s 9556W	
	0	م مرابلات		National Board, State,	and Endorsements



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/21/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Fuel Pool Cooling (FPC) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
FPC-P-1A	Worthington	44 000019 (3 LR 9)	N/A	N/A	1977	Replacement	Yes, Code Class 3
						r 11	·

- 7. Description Of Work Performed: Replaced mechanical seals (gland plates) for pump FPC-P-1A. The replacement work was performed as follows
 - 1) Removed existing inboard and outboard mechanical seals (gland plates) for the pump
 - 2) Installed new inboard and outboard mechanical seals (gland plates) in the pump
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FO	PRM NIS-2 OWNER'S RE	PORT FOR REPAIR	S OR REPLACEMENTS (Back)
Tests Conducte	ed: Hydrostatic Pne Test Pressure: 92 Psig Component Design Pre		I Operating Pressure X Other None Test Temperature: 95° F Temperature: 212° F
. Remarks: None			
		, di	•
		•	
	v *		•
			•
	<u> </u>		
	CEF	RTIFICATE OF COMP	PLIANCE
We certify that	t the statements made in	this Owner's Report	are correct and this replacement conforms
to the rules of	the ASME Code, Section		·
	mbol Stamp: Not applicable Authorization No.: Not app	llachta	
Expiration Date		iiCabie	
			QAn.
Prepared By_	Kuldip Singh Materials And In	Signed By	Manager, Materials And Inspection
Date	41	Date	6-22-94
		Date	
L			
			,
ļ	CERTIFIC	CATE OF INSERVICE	INSPECTION
I. the undersid	ned. holding a valid con	nmission issued by th	e National Board of Boller and Pressure
Vessel Inspec	tors and the State of Was	shington <i>and employed</i>	d by Arkwright Mutual Insurance Company
			etts have inspected the components
			5-94 to <u>6-23-94</u> and speriormed examinations and taken
			cordance with the requirements of the
ASME Code, S			
			loyer makes any warranty, expressed or
			res described in this Owner's Report. e liable in any manner for any personal
			or connected with this inspection
Do. 0	L 5-11-		OCCI III AIRT
sun 4	spector's Signature	Commissio	National Board, State, and Endorsements
. 15	NEW DOWN S CHANGED		
1 .	-23-94		Taubina board, ballo, and allocidentella



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/18/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
 (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Controlled Chilled Water (CCH) 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CCH-CR-1B	York	02511	55257	N/A	1980	Repair And Replacement	Yes, Code Class 3
		•			t;		4.6

- 7. Description Of Work Performed: Repaired divider plate (baffle) and replaced divider bar for CCH-CR-1B. The repair and replacement work was performed as follows
- A) Repairs For Inlet And Outlet Condenser Heads -
 - 1) Prepared the divider plate (baffle) areas for weld repair
 - 2) Wold repaired (wold built up) the divider plate (baffle)
 - 3) Blended the weld repaired (weld built up) areas on the divider plate (baffle) to provide suitable sealing surface
- B) Replacement For Inlet And Outlet Condenser Heads -
 - 1) Removed the existing divider bars
 - 2) Installed new existing divider bars
 - 3) Made required welds
 - 4) Installed both the inlet and outlet condenser heads upon completion of the repair and replacement work
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OF REPEACEMENTS (Dack)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Non Test Pressure: 140/140 Psig Test Temperature: 64/68° F Component Design Pressure: 150 Psig* Temperature: 120° F*
ac P:	Remarks: 1) * The service water side of CCH-CR-1B was rerated to design pressure of 309 Psig and design temperature of 150° F in cordance with ASME Section XI Plan No 2-0180, 2) The nominal operating pressure test on the inlet condenser head - test pressure of 14 ig and test temperature of 64° F, 3) The nominal operating pressure test on the outlet condenser head - test pressure of 140 Psig and test appearature of 68° F
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this repair and replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By Lucy Signed By Manager, Materials And Inspection Manager, Materials And Inspection
	Date 7 18194 Date 7-19-94
	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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 9-3-93 to 6-22-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 93/8W A N T National Board, State, and Endorsements Date 1-19-94



1. Owner: Washington Public Power Supply System (WPPSS) .

Date: 6/21/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Reactor Recirculation Cooling (RRC) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC(51)-4	WPPSS	RRC(51)-4-P1	N/A	N/A	1983	Repair	Yes, Code Class 3
							ı

7. Description Of Work Performed: Cut/ground existing socket weld to gain access to remove the blockage located inside the line. Reinstalled and made the required socket weld



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 T	ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9. F	Remarks: None
Γ	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms
	to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable
1	Certificate Of Authorization No.: Not applicable
	Expiration Date: Not Applicable
İ	Prepared By Kuldip Singh - Materials And Inspection Signed By Manager, Materials And Inspection
	Date 6 21 94 Date 6-22-94
_	
Г	
	CERTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
ļ	Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company
ı	(Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components
	described in this Owner's Report during the period <u>//- 23 - 93</u> to <u>6 - 23 - 94</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken
1	corrective measures described in this Owner's Report in accordance with the requirements of the
1	ASME Code, Section Xi By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
Į	Implied, concerning the examinations and corrective measures described in this Owner's Report.
1	Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
	injury or property damage or a loss of any kind arising from or connected with this inspection
	Sm Soggath Commissions 9556W NBI
	(Inspector's Signature National Board, State, and Endorsements
	Date
- 1	



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 6/25/94 Sheet: 1 of 1 Unit: WNP-2

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Bechtel Construction, Inc, PO Box 600, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: C20069
- 4. Identification Of System: Containment Electrical Penetration No X-101B
- 5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment Electrical Penetration No X-101B	PDM	Containment Vessel	790	N/A	1982	Replacement	Yes, Code Class MC

- 7. Description Of Work Performed: Replaced modules for Electrical Penetration No X-101B, Position No's 1, 2 and 3. The replacement work was performed as follows
 - 1) Removed the existing modules from Electrical Penetration No X-101B, Position No's 1, 2 and 3
 - 2) Installed new modules in Electrical Penetration No X-101B, Position No's 1, 2 and 3
 - 3) Performed pressure test on the Electrical Penetration No X-101B to module "O" ring joints Three (3) outboard joints for Position No's
 - 1, 2 and 3 to confirm pressure boundary integrity. No evidence of leakage during the pressure test



Tests Conducted: Hydrostatic Test Pressure	.7 Psig Te	perating Pressure est Temperature: 7 emperature: 340° F	Other X u
Remarks: Component design pressu M for the Containment Vessel	_) ^O F is based on the N-	-1 Code Data Report issued
	CERTIFICATE OF COMPLIA	ANCE	
We certify that the statement to the rules of the ASME Cod Type Code Symbol Stamp: No Certificate Of Authorization N Expiration Date: Not Applicable Prepared By	olicable Not applicable Signed By	Strice	replacement conforms
Date 625	Date	7-4-94	
	RTIFICATE OF INSERVICE IN	ISPECTION	
Vessel Inspectors and the State (Factory Mutual Engineering Assidescribed in this Owner's Restate to the best of my knowledge corrective measures describent ASME Code, Section XI By signing this certificate ne implied, concerning the example of the concerning the concerning the example of the concerning the example of the concerning t	id commission issued by the foof Washington and employed by ation) of Norwood, Massachusetts the during the period 4/28/4 the and belief, the Owner has per this Owner's Report in according to the Inspector nor his employations and corrective measures for nor his employer shall be listed of any kind arising from or	y Arkwright Mutual I have Inspected to Addition to 6 erformed examina rdance with the re ver makes any wal s described in this	Insurance Company the components 128
Dan Wagon th	Commissions	A	NBI
Inopoctor's Signature Date 7/5/94			tate, and Endorsements



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 6/22/94

Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

- (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Containment Vacuum Breaker (CVB) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case; N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1ST	Anderson Greenwood	VB 7899	N/A	N/A	1983	Replacement	Yes, Code Class 2

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

- 1) Removed existing front snubber from the valve
- 2) Installed new front snubber for the valve



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
87	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9.	Remarks: None
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable
	Prepared By Kuldip Singh - Materials And Inspection Signed By Manager, Materials And Inspection
	Date 6 22 94 Date 6-23-94
	CERTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 2-23-94 to 6-23-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
	Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
	Date 6-23-94 Commissions 7556W NBI National Board, State, and Endorsements



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 6/24/94 Sheet: 1 of 1

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

Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Diesel Oil (DO) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
DO-V-41B	Borg Warner	17059	N/A	N/A	1977	Repair	Yes, Code Class 2
							,

- 7. Description Of Work Performed: Made body to bonnet seal weld for valve DO-V-41B. The work was performed as follows
 - 1) Cut valve body to bonnet seal weld
 - 2) Removed valve internals for troubleshooting
 - 3) Prepped cut/ground areas on the valve body and the bonnet
 - 4) Reinstalled valve internals and the bonnet
 - 5) Made valve body to bonnet seal weld
 - 6) Performed PT examination on the final seal weld. PT examination results acceptable



	SUPPLY SYSTEM
	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Non Test Pressure: Psig Test Temperature: F Component Design Pressure: Psig Temperature: F
9.	Remarks: None
	•
	•
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this repair conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable
	Prepared By Nuclib Sund Signed By Manager, Materials And Inspection Kuldip Singh - Materials And Inspection
	Date 6 2 3 94 Date 7-4-94
	CERTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwight Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 2.24-94— to 6/24/94— and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 9560 NBT National Board, State, and Endorsements
	Date National Board, State, and Endorsements



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/14/94 Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Residual Heat Removal (RHR) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1976 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-V-209	Borg Warner	31729	N/A	N/A	1979	Ropair	Yes, Code Class 1
				•		,	

- 7. Description Of Work Performed: Made body to bonnet seal weld for valve RHR-V-209. The work was performed as follows
 - 1) Cut valve body to bonnet seal weld
 - 2) Removed valve internals for troubleshooting
 - 3) Prepped cut/ground areas on the valve body and the bonnet
 - 4) installed now disc in the valve
 - 5) Reinstalled valve the bonnet
 - 6) Made valve body to bonnet seal weld
 - 7) Performed PT examination on the final seal weld. PT examination results acceptable



Tests Conducted: Hydrostatic Test Pressure: Psig Component Design	_ 	nal Operating Pres Test Temperature: º	ure:°F
Remarks: None			
		•	
	· · · · · · · · · · · · · · · · · · ·		
C	CERTIFICATE OF COM	PLIANCE	
We certify that the statements made	e in this Owner's Renor	t are correct and	thie care conforms
to the rules of the ASME Code, Sect	tion XI	are correct ariu	uns repair contorms
Type Code Symbol Stamp: Not applica	able		
Certificate Of Authorization No.: Not Expiration Date: Not Applicable	applicable		
Expiration Date: Not Applicable		~ .	
Prepared By Villail En	ير الم	KXM	A:QL
Kuldip Singh - Materials Ar	nd Inspection		aterials And Inspection
Date 7 14194	Date	7- 14 -9	74
•			
CERTII	FICATE OF INSERVICE	INSPECTION	•
I, the undersigned, holding a valid c.	ommission issued by the	ne National Board	of Boiler and Pressure
Vessel Inspectors and the State of V (Factory Mutual Engineering Association	vasningเอก <i>and employe</i> เ า) of Norwood Massachus	a by Arkwright Mut etts have inspect	ual Insurance Company
described in this Owner's Report du	ring the period 7/	7/94 to	_7//5/94 and
state to the best of my knowledge ar	nd belief, the Owner has	performed exam	Ination's and taken
corrective measures described in th	ils Owner's Report in ac	cordance with the	e requirements of the
ASME Code, Section XI			
By signing this certificate neither the multiplied, concerning the examination	e inspector nor nis emp	loyer makes any	Warranty, expressed or
Furthermore, neither the Inspector n	10r his emplover shall h	nes uescripeu III a llable in anv me	ulla UWREE'S HEPOR. Inner for any nerconal
injury or property damage or a loss (of any kind arising from	or connected wi	th this inspection
Dan Office XI		_	•
Cun Avgray X	Commissio	ons <u>9556 U</u>	
4hépector's Signature		National Board	d, State, and Endorsements
Date 7//5/94			



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/2/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

- 4. Identification Of System: Reactor Water Clean Up (RWCU) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with no Addenda, Code Case: None
- (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RWCU-FCV-33	Hammel Dahl	71 2009 005	N/A	N/A	1974	Replacement	Yes, Code Class 3

- 7. Description Of Work Performed: Replaced disc (plug) for valve RWCU-FCV-33. The replacement work was performed as follows
 - 1) Removed existing disc (plug) from the valve
 - 2) Installed new disc (plug) in the valve
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

8 Tests Conducted: Hydrostatic Pneuma Test Pressure: 1090 Psig Component Design Pressu	Test Temperature	2: 425 ⁰ F
9. Remarks: None		
•		
CERTIF	CATE OF COMPLIANCE	
We certify that the statements made in this	Owner's Report are correct and thi	s replacement conforms
to the rules of the ASME Code, Section XI	·	
Type Code Symbol Stamp: Not applicable	•	i
Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable	ı	
Expiration Date: Not Applicable	04	
Prepared By Lulaib Luck	Signed ByRTMC	
Kuldip Singh - Materials And Inspec	ion Manager, Mate	orials And Inspection
Date 812150	Date & 2-94	
CERTIFICATE	OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commis	rion issued by the National Pourd s	of Boller and Bressure
Vessel Inspectors and the State of Washington		
(Factory Mutual Engineering Association) of Nor	wood, Massachusetts have Inspected	the components
described in this Owner's Report during the	period <u>3-//-94</u> to <u>8</u>	3 - 4 - 94 and
state to the best of my knowledge and belie	f, the Owner has performed examin	nations and taken
corrective measures described in this Own	er's Report in accordance with the	requirements of the
ASME Code, Section XI By signing this certificate neither the inspe	ctor nor his employer makes any w	varranty, expressed or
implied, concerning the examinations and	corrective measures described in the	nis Owner's Report.
Furthermore, neither the inspector nor his	employer shall be liable in any man	ner for any personal
injury or property damage or a loss of any	kind arising from or connected with	this inspection
Don Vhannit	Commissions 9556	U NRI
Inspector's Signature		State, and Endorsements
Date 8-4-94		,
		



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/15/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

- (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Reactor Water Clean Up (RWCU) 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RWCU-V-103	Borg Warner	53056	N/A	N/A	1980	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced bonnet and disc assembly for valve RWCU-V-103. The replacement work was performed as follows
- A) Removal Of Bonnet And Disc Assembly From Spare Valve Serial No 54184 -
 - 1) Cut/ground valve body to bonnet seal weld
 - 2) Removed the bonnet and the disc assembly from the valve
 - 3) Prepped the valve bonnet cut/ground surfaces
 - 4) Performed PT examination on the valve bonnet prepped surfaces. PT examination results acceptable
- B) Installation Of Bonnet And Disc Assembly In Valve RWCU-V-103 -
 - 1) Cut/ground valve body to bonnet seal weld
 - 2) Removed existing bonnet and disc assembly from the valve
 - 3) Prepped the valve body cut/ground surfaces
 - 4) Performed PT examination on the valve body prepped surfaces. PT examination results acceptable
 - 5) Installed the bonnet and the disc assembly removed from the spare valve Serial No 54184
 - 6) Made valve body to bonnet seal weld
 - 7) Performed PT examination on the final seal weld. PT examination results acceptable
 - 8) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other None Test Pressure: 1021 Psig Test Temperature: 200.7° F Component Design Pressure: 3600 Psig Temperature: 100° F
	Remarks: See attached NPV-1 Code Data Report for the spare valve Serial No 54184 from which the bonnet and disc assembly was moved and installed in valve RWCU-V-103
-	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules 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 Signed By Manager, Materials And Inspection Date Date Date
	CERTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 4/20/94 to 7/1/3/94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
	Commissions 9556W NBT Inspector's Signature National Board, State, and Endorsements Date 7-/5-94

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

As Required by the Provisions of the ASME Code, Section III, Div. 1 PLAN NO. 2-0997

Manufactured by Miscles	er Valve Div.	Borg Warner	, 7500 Tyron	e Ave., V	ın Muys, C	alif.
Manufactured for Boves	& Crail/G.E.	R,I, P,O,	Box 1040, R	ichland, 1	Mashington	99352
Location of Installation	Richland, Wash	hington WPI	288 Hantord	#2 Job Sit	:•	
Pump or ValveGLO	be Valve"	Nominal		2 Ou	tlet Size	2
(a) Model No., (b) N (Certificate Holder		(i	nch)		(inch)
Series No.	Serial	Registration	(d) Drawing		(f) Nat'l.	(g) Year
or Type	No.	No.	No.	(e) Class	8d. No.	Built
(1) 1500#	54180 Thru	M/A	76630-3	1	N/A	1980
(2)	54185					
(4)						
(5) USED B	BONNET 1	AND DIS	C FOR	RWCU-	V-103	
(6) FROM	1 SPARE	VALVE	SIN 54	101		
(8)	, STARE	0/1000	3/10 34	104		
(9)				Kulan) Sup	2
(10) The valves are					4	21194
\$P1	00 pel	100 (Temperature)	3 % 21 \$1.45A	ressure Class	H/X	(1)
Design Conditions 1970 Cold Working Pressure 1970 Pressure Retaining Please	00 pel at	(Temperature)	The Property of the Property o	ressure Class .		
Design Conditions	00 pel	(Temperature)	3 % 21 \$1.45A	ressure Class .	원/처 Remark	
Design Conditions	00 pel at	(Temperature)	The Property of the Property o	ressure Class .		
Design Conditions	00 pel at	(Temperature): 100°F.	*F or Valve P Manufact	ressure Class .		
Design Conditions	pel 3600 pel at	(Temperature): 100°F.	The Property of the Property o	ressure Class .		
Design Conditions	pel 3600 pel at	(Temperature): 100°F.	*F or Valve P Manufact	ressure Class .	Remark	3
Design Conditions	pel 3600 pel at	(Temperature): 100°F.	*F or Valve P Manufact	ressure Class .		3
Design Conditions	pel 3600 pel at	(Temperature): 100°F.	*F or Valve P Manufact	turer	Remark	
Design Conditions	pel 3600 pel at	(Temperature): 100°F.	Manufact	turer	Remark	1382
Design Conditions	pel 3600 pel at	(Temperature): 100°F.	Manufact	turer	Remark	1382
Design Conditions	pel 3600 pel at	(Temperature): 100°F.	Manufact	turer	Remark SHIEL WICH	1382
Design Conditions	pel 3600 pel at	(Temperature): 100°F. Spec. No.	Manufact Rex Proc	turer	Remark MARK :	1 138? 11 138?
Design Conditions	Material S COLMONOY	(Temperature) 100°F. Spec. No.	Manufact Rex Prec Kawaguch:	turer	Remark MARK :	1 138? 11 138?
Design Conditions	Material S COLMONOY	(Temperature) 100°F. Spec. No.	Manufact Rex Proc	turer	Remark MARK :	1 138? 11 138?
Design Conditions	Material S COLMONOY	(Temperature) 100°F. Spec. No.	Manufact Rex Prec Kawaguch:	turer	Remark MARK :	1 138? 11 138?
Design Conditions	Material S COLMONOY	(Temperature) 100°F. Spec. No.	Manufact Rex Prec Kawaguch:	turer	Remark MARK :	1 138? 11 138?

(1) For manually operated valves only.

This form (E00037) may be obtained from the Order Dept., ASIAR, 316 E. 17th St., New York SEW, 10017

(10/77)

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1)

^{*}Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2 3/15-12) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

manner for any personal injury or property damage or a loss of any kind arising from or connected with this ingrection.

- Commissions .

1275 CA.

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

2

The state of the s



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/2/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-V-20	Anchor Darling	2N 347	NA	N/A	1975	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Replaced parts for valve MS-V-20. The replacement work was performed as follows
 - 1) Removed existing disc from the valve
 - 2) Installed new disc in the valve
 - 3) Removed existing bonnet from the valve
 - 4) installed new bonnet in the valve
 - 5) Removed existing retaining ring gland from the valve
 - 6) Installed new retaining ring gland in the valve
 - 7) Reassembled the valve
 - 8) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

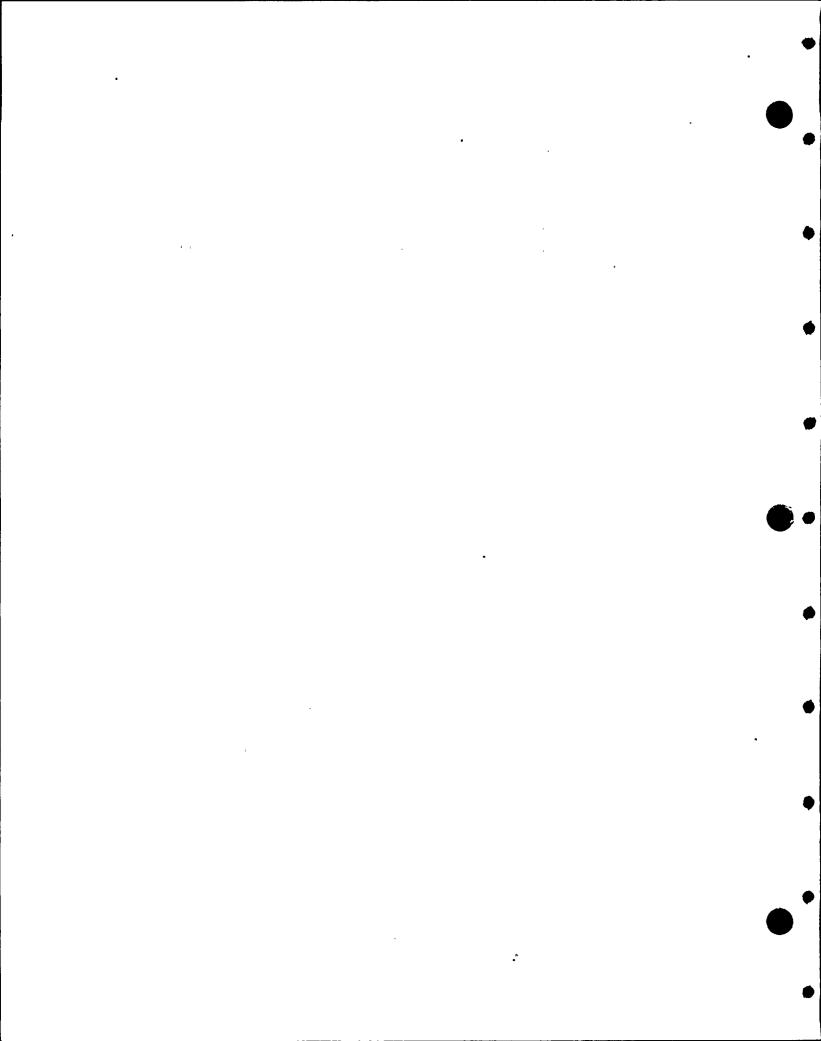
9. Remarks: See a	ed: Hydrostatic Pneumatic Test Pressure: 927 Psig Component Design Pressure: attached N-2 Code Data Reports for the fe	: 2160 Psig	Operating Pressure X Other Non Test Temperature: 520° F Temperature: 100° F
Disc 8	erial No		•
Bonnet 1		'1	
			
	CERTIFICA	ATE OF COMPL	JANCE
		wner's Report al	re correct and this replacement conforms
	f the ASME Code, Section XI		
1	mbol Stamp: Not applicable Authorization No.: Not applicable		
Expiration Date			
	H. C. C?		PANICO
Prepared By _	Kuldip Singh - Materials And Inspection	_ Signed By	Manager, Materials And Inspection
Data	812194		8-2-94
Date	3/2/1-	Date	
			İ
	CERTIFICATE O	F INSERVICE II	NSPECTION
	- 		,
			National Board of Boiler and Pressure
			by Arkwright Mutual Insurance Company s, have inspected the components
	his Owner's Report during the p		
state to the be	st of my knowledge and belief, i	the Owner has p	erformed examinations and taken
		s Report in acco	ordance with the requirements of the
ASME Code, S		or nor hie emplo	yer makes any warranty, expressed or
			es described in this Owner's Report.
Furthermore, i	neither the Inspector nor his em	ployer shall be l	liable in any manner for any personal
injury or prope	erty damage or a loss of any kin	d arising from o	r connected with this inspection
Dry Hos	e and to	Commissions	9556W NBI
/ les	spector's Signature	COMMISSIONS	National Board, State, and Endorsements
Date	3/4/94	_	
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PLAN NO. 2-0998 Kuldip Eurb 2194

PORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES. As required by the Provision of the ASME Code Rules, Section III, Div. 1

Appendix of the first of the second of the second	1001 (7 AVE 000) 1 7 7 1			
(a) Meanfarmed by Anchor/Darling Valve Co.,	701 First St.	Williamsport.	'PA' 17701	· · ·
Washington Public Power Su	pply. P.O. Box	c 968, Richland		
Oleme and antropole Mentification-Certificate Helder's Serial No. of Part	(Il Coralbegie Heider for e	empioted hadden company		
(a) Conscious According to Drawing No. 012090	· LANCERSON			72%
(a) Concreted According to Drawing No. 2012090	Drowing Prepa	red by Anchor/Ua	riing Valve	Compan
(N) Description of Part laspected Disc, Heat No.	*A577****	SA105	p [∓]	
(ef Appliesbic ASME Coder Section III, Edition 1971	Addenda dece Wnt.	172, Case No	Class	2
3"-900#-GTobe		les spirit	w k	
A/DV Shop Order P-L152-2:			'sx	
Note: No Disc Hydro Performe	ed	•	• .	
			<u></u>	
				'ada caa
We certify that the statements made in this report are currents to the rules of construction of the ASME Code Section III applicable Design Specification and Stress Report are not the	and introduced and	Territorio Mold	deliber in the C	er Comb
a: Holder for appurcaments in responsible, for farmining a sees used in the compensat Design Specification and Street Rep	rate Design Specifics	cion and Stress Report	t if the appartune	ece is not
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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. 1	الم
6/24	194
1. (a) Manufactured by Anchor/Darling Valve Co., 701 First St., Williamsport, PA 17701	
(b) Manufactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 99	9352
2. Identification-Certificate Holder's Serial No. of Part S/N - 1 Nat'l Bd. No. N/A	
(a) Constructed According to Drawing No. D13582 Drawing Prepared by Anchor/Darling Valve Co	mpar
(b) Description of Part Laspected 3"-900#-Globe Bonnet w/Backseat, Heat #A956A SA10	5_
(c) Applicable ASME Code: Section III, Edition 1971, Addenda date Wnt '72, Case No Class 2	
3. Remarker 3"-900#-Globe Valve (Brist description of corvies for Which companies was designed)	
A/DV S.O. P-X206-1	
•	
Certificate of Authorization Expires Anchor/Darling Valve Co. By Olive C. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive C. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive C. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive C. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive C. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive C. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive C. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive C. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. Studens (No. 1994 Signed Anchor/Darling Valve Co. By Olive Co. By Olive Co. By Olive Co. By Olive Co. By Olive Co. By Olive Co. By Olive Co. By Olive Co. By Olive Co. By Oli	laga —
CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)	•
Design information on file at	
Scress analysis report on file at	-
Design specifications certified by Prof. Eng. State Reg. No.	-
Stress analysis report certified by Prof. Eng. State Reg. No.	
CERTIFICATE OF SHOP INSPECTION .	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the Scare oxymetrical Pennsylvania and employed by Commercial Union Insurance Companed Boston, Mass. have inspected the part of a pressure vessel described in this Partial Data Report on 19, and state that to the best of my knowledge and belief, the NPT Cartificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this cartificate, seither the Inspector for his employer makes my warranty, expressed or implied, concerning the part described in this Partial Data Report. Furthermore, neither the Inspector for his employer shall be liable in any massner for my personal injury or property damage or a loss of any kind arising from or connected with this inspection.	y
Date 1994	





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

Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 6/22/94

Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington

Unit: WNP-2

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

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Bechtel Construction, Inc, PO Box 600, Richland, WA
 - (b) Repair Organization P.O. No, Job No, etc.: C20069
- 4. Identification Of System: Containment Exhaust Purge (CEP) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
- (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced valves CEP-V-1A and CEP-V-2A. The replacement work was performed as follows
 - 1) Modified existing support CEP-1 to facilitate the installation of the new valves
 - 2) Modified pipe flange upstream of valve CEP-V-2A
 - 3) Installed new valves
 - 4) Installed new bolting material for pipe to valves CEP-V-1A and CEP-V-2A flanged joints
 - 5) Performed pressure test on the containment side of the flanged joint for valve CEP-V-2A to confirm pressure boundary integrity. No evidence of leakage during the pressure test
 - 6) Performed pressure test on the flanged joints between valves CEP-V-1A and CEP-V-2A to confirm pressure boundary integrity. Leakage was observed during the pressure test. The leakage was evaluated to be acceptable



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

8 Tests Conducted: Hydrostatic Test Pressure: 38.94 Component Design 9. Remarks: See attached NPV-1 Code Data I EPN No Serial No CEP-V-1A 93-2543-01(N)-01 CEP-V-2A 93-2543-01(N)-02	Psig Te Pressure: 45 Psig Te	perating Pressure Other X LLR est Temperature: 81° F emperature: 340° F
•	CERTIFICATE OF COMPLIA	ANCE .
We certify that the statements made to the rules of the ASME Code, Secting Code Symbol Stamp: Not applicate Certificate Of Authorization No.: Not Expiration Date: Not Applicable Prepared By Lucip Surface Kuldip Singh Materials A	able applicable Signed By	Amou Manager, Materials And Inspection 6-23-94
	1	
CERTI	FICATE OF INSERVICE IN	SPECTION
Vessel Inspectors and the State of Vessel Inspectors and the State of Vestering Association described in this Owner's Report distate to the best of my knowledge as corrective measures described in the ASME Code, Section XI By signing this certificate neither the Implied, concerning the examination	Nashington and employed by n) of Norwood, Massachusetts uring the period 4/5-ind belief, the Owner has pentis Owner's Report in according the Inspector nor his employens and corrective measures nor his employer shall be list	94 to 6-24-94 and erformed examinations and taken reduce with the requirements of the ser makes any warranty, expressed or a described in this Owner's Report.
Am V branch	Commissions	0557.41 0/85
Date 6-24-94		National Board, State, and Endorsements

YLAN NO. 2-1001

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

			•	4/wait &	swe 5
4 4 4 4 4 4 4 4 4 4	avist 280	'n Niclear Products D	iv.: 40 Chestnut A	ve.; Westmont, IL 60559	6/21/94
		farana and addes	ee of M Contilleets Holder		ØI viti
2. Manufactured for War	ashington Public Po	wer Supply; P.O. Box 9	68; Richland, Wash	ington 99352-0969	
x .		(name and address	of Purchaser)	•	
3. Location of installation	on WP-2 OPS WHS C	complex, WHS #1; North	Power Plant Loop;	Richland, WA 99352	
	- Pimo Va			CRN_N/A	
4. Model No., Series No	., or TypePurge_ver	Drawing 35-2040-	01(N) Rev. A ·		
5. ASME Code, Section	III, Division 1: 1989	No Add	lenda <u> </u>	NA	
	{	edition) (addenda da		(Code Case no.)	
6. Pump or valveV	alve Nomin	al inlet size30"	Outlet size3		
CA	040 0 100	(in.)	CA 246 CA LIPO	(in.)	D300
7. Material: Body SA	216 Gr. WUB Bonne	t <u>NA</u> Disk	SA 216 Gr. WCB E	Bolting See back side of	page
					_
(a)	(b)	(c)	(d)	(e) .	•
Cert. Holder's	Nat'i Board	Body Serial	Bonnet Serial	Disk Serial	
Serial No.	No.	No.	No.	No.	
93-2543-01(N)-01	- NA	Heat: 29594	N/A		
33-2343-01(N)-01	IVA	Serial: 78658-1	IVA	Heat: 212594 Serial: 78659-2	
		<u> </u>		<u> </u>	
		• •			
		· 			
	CEP-V-IA				
					
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(12/88)

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

^{*} 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.

FORM NPV-1 (Back — Pg. 2 of _____)

	•	Certificate Holder's	s Serial No93-2543-0	<u> </u>
8. Design conditions 218 (pressure)	psi 340 (temperature)	°F or valve pressure	class150	(1)
9. Cold working pressure 285	psi at 100°F			
10. Hydrostatic test	psi. Disk differential test pre	* 45		psi
Gland - Material: Stud - Material: S Hex Nut - Material:	- Material: SA 193 Gr. SA 516 Gr. 70 Heat A 193 Gr. 82M Heat SA 194 Gr. 8M Hea	Code; SIE Code: J5 t Code: E7	MF1	
Pipe Plug - Materia	1: SA 479 T 316 He	at Code: ULE	•	
	CERTIFICATION OF	DESIGN	•	
Design Specification certified by	ck R. Cole A	P.E. State	Reg. no	
-,,				
•	CERTIFICATE OF COM	IPLIANCE		
We certify that the statements made in to the ASME Code, Section III, Division N Certificate of Authorization No	1. N-2723	Div. Signed 1	C 100 10F	etion
<u> </u>	CERTIFICATE OF INS	PECTION		
I, the undersigned, holding a valid conthe State or Province of Illinois of Norwood, MA April 23 1994 . an structed this pump, or valve, in accorda By signing this certificate, neither the is component described in this Data Report any personal injury or property damage Date 4/23/94 Signed (Authorize)	have inspendent to the best of mance with the ASME Code, Seconspector nor his employer mant. Furthermore, neither the interest of any kind arising from the control of the	ind employed by * Aller cted the pump, or valve, de- ry knowledge and belief, the ction III, Division 1. *Factory Mutual Eng skes any warranty, expresse spector nor his employer sh om or connected with this in	adale Mutual Ins. Conscribed in this Data Reports Conscribed in this Data Report Conscribed in this Data Report Conscribed in Association Conscribing	ort on con-
, . 1) For manually operated valves only.				ikaleglog .

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

				Kulding Sup 16/21
A 14		. Nuclear Products D	iv.: 40 Chestnut Ave	; Westmont, IL 60559
1. Manutactured and cer	Tilled by Sas Varve Go.	(name and addre	ss of N Certificate Holder)	
2 Manufactured for Wa	shington Public Powe	r Supply; P.O. Box 9	68; Richland, Washin	gton 99352-0969
		iname and additess	or Purchaser)	
3. Location of installation	n WNP-2 OPS WHS Com	plex, WHS #1; North	Power Plant Loop; Ki	chiand, wa 99332
		(name an	d address)	
4. Model No., Series No.	, or Type Purge Vent	Drawing <u>93-2543-</u>	01(N) RevA	CRN_WA
		No Add	lenda 2	N/ A
5. ASME Code, Section	III, Division 1: (edit			(Code Case no.)
6. Pump or valveVa	lve Nominal i	nlet size 30"	Outlet size30"	<u> </u>
·		(in.)		(in.)
7. Material: Body SA	216 Gr. WCB Bonnet _	N/A Disk	SA 216 Gr. WCB Bol	Iting <u>See back side of</u> page
(a)	* (b)	(c) -	, (d)	(e)
Cert.	' Nat'l '	Body	Bonnet	Disk Serial
Holder's	Board	Serial .	Serial No.	No.
Serial No.	No.	No.		
93-2543-01(N)-02	N/A	Heat: 210094	N/A·-	<u> Heat: 217694</u> Serial: 78659-3
		Serial: 78658-2	,	<u>Serial:_/0009=3</u>
		•		
•				
		•		
	CEP-V-ZA		-	
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(12/88)

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

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FORM NPV-1 (Back — Pg. 2 of _____)

	•	Certificate Holder's	Serial No. <u>93-2</u>	543-01(N)-
. Design conditions 218	psi340	°F or valve pressure	450	
(pressure)	(temperature)	·		
. Cold working pressure285	psi at 100°F			
450		45		_
. Hydrostatic test psi.	Disk differential test pressu	re		P:
Remarks: Cover Plate - Material:	SA 516 Gr. 70 H	eat Code: FME		
Hex Head Cap Screw - M			MF1	
Gland - Material: SA 5			<u> </u>	
Stud - Material: SA 19				
Hex Nut - Material: SA Pipe Plug - Material:		Code: E7 Code: ULE		
The Fing - Fine Int.	3A 473 310 18aC	une. une		
· · · · · · · · · · · · · · · · · · ·	<u> </u>	· · · · · · · · · · · · · · · · · · ·	* *	
•	CERTIFICATION OF DES	SIGN		
Jack R	R. Cole		2	76563
esign Specification certified by		P.E. State	Reg. no	
esign Report certified byIVA		P.E. State	Reg. no	
Ve certify that the statements made in this r f the ASME Code, Section III, Division 1. I Certificate of Authorization No	N_2722	Expires		
			•	
ate 21/23/94 Name C&S Valve				
, (N	Certificate Holder)	(autho	rized representative	·) ————
	CERTIFICATE OF INCRE	YTON		
•	CERTIFICATE OF INSPEC	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `		
the undersigned, holding a valid commis- ne State or Province of <u>Illinois</u>	sion issued by the National	Board of Boiler and Pre	ssure Vessel Ins dale Mutual I	pectors and
Norwood, MA		d the pump, or valve, des		
	ate that to the best of my k	nowledge and belief, the		
tructed this pump, or valve, in accordance				
н		*Factory Mutual Eng		
y signing this certificate, neither the inspe				
omponent described in this Data Report. Fu ny personal injury or property damage or a l				, manner for
	•			
ate 4/23/94 Signed Signed Signed Southerized in	Commissions .	NB 9762 NZB Z	16 1296	
/ / IAushadaad la	enemani	INAM! Rd fine! andorrame	neel and etate or n	I an bae vo

(1) For manually operated valves only.

E 4/23/24



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

1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/25/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

(b) Repair Organization P.O. No, Job No, etc.: C30236

4. Identification Of System: Containment Supply Purge (CSP) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced valves CSP-V-3 and CSP-V-4. The replacement work was performed as follows
 - 1) Drilled and tapped hole in the pipe flange upstream of valve CSP-V-4
 - 2) Installed new plug on the modified pipe flange upstream of valve CSP-V-4
 - 3) Drilled and tapped hole in the pipe flange upstream of valve CSP-V-5
 - 4) Installed new plug on the modified pipe flange upstream of valve CSP-V-5
 - 5) Made plug to pipe flange seal weld
 - 6) Performed PT examination on the final seal weld. PT examination results acceptable
 - 7) Installed new valves CSP-V-3 and CSP-V-4
 - 8) Installed new bolting material for pipe to valves CSP-V-3 and CSP-V-4 flanged joints
 - 9) Performed pressure test on the flanged joints for valves CSP-V-3, CSP-V-4 and CSP-V-5 to confirm pressure boundary integrity. No evidence of leakage during the pressure test except for leakage was observed on the flanged joints between valves CSP-V-3 and CSP-V-4 during the pressure test. The leakage was evaluated to be acceptable



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

Test Pressure: 38.7/38.6	/38.9/31.7 Psig	I Operating Pressure Other X LLF Test Temperature: 100/80/83,4/74,6° F Temperature: 340° F
rks: See attached NPV-1 Code Data Rep No <u>Serial No</u> /-3 93-2543-02(N)-01 /-4 93-2543-02(N)-02	orts for the following new val	lves
CEI	RTIFICATE OF COMP	PLIANCE
rules of the ASME Code, Section Code Symbol Stamp: Not applicable licate Of Authorization No.: Not applicable atlan Date: Not Applicable licated By Kuldip Singh - Materials And I	Signed Bynspection	Manager, Materials And Inspection 8-29-94
undersigned, holding a valid contended in the State of Wastry Mutual Engineering Association) of the United In this Owner's Report during the best of my knowledge and extive measures described in this E Code, Section XI aming this certificate neither the leter, concerning the examinations ermore, neither the Inspector not	nmission issued by the shington and employed of Norwood, Massachuse of the period 4/20, belief, the Owner has Owner's Report in accordance or his employer shall be this employer shall be	to National Board of Boller and Pressure If by Arkwright Mutual Insurance Company Into have inspected the components If yellow and the secondarian and taken If yellow and the requirements of the If yellow and warranty, expressed or the layer makes any warranty, expressed or tres described in this Owner's Report. If yellow in any manner for any personal or connected with this inspection
	Test Pressure: 38.7/38.6 Component Design Processing Pr	Test Pressure: 38.7/38.6/38.9/31.7 Psig Component Design Pressure: 45 Psig ks: See attached NPV-1 Code Data Reports for the following new value Serial No 39.2543-02(N)-01 4 93-2543-02(N)-02 CERTIFICATE OF COMF Partify that the statements made in this Owner's Report rules of the ASME Code, Section XI Code Symbol Stamp: Not applicable licate Of Authorization No.: Not applicable ation Date: Not Applicable red By Kuldip Singh - Materials And Inspection R 2.1 94 CERTIFICATE OF INSERVICE Undersigned, holding a valid commission issued by the Inspectors and the State of Washington and employed ry Mutual Engineering Association) of Norwood, Massachuse bed in this Owner's Report during the period 4/20 to the best of my knowledge and belief, the Owner has betive measures described in this Owner's Report in act Code, Section XI Ining this certificate neither the Inspector nor his employer shall be or property damage or a loss of any kind arising from Commission Commission

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 <u>2</u>

		. Nuclear Products (Div.; 40 Chestnut Av	e.; Westmont, IL 60559
1. Manufactured and ce	railed by cas valve co	(name and addr	ess of N Certificate Holder)	00050 0050
2 Manufactured for W	ashington Public Pow	er Supply; P.O. Box S	968; Richland, Washi	ngton 99352-0969
3. Location of installation	on WNP-2 OPS WHS Co	mplex, WHS #1; North	Power Plant Loop; 1	dichiand, wa 99352
		(name at	ng aggress)	
4. Model No., Series No	., or Type Purge Vent	Drawing - 93-2543	-UZ(N) RevB	CRN_ N/A
	1989	No Ado	denda 2	. N/A
5. ASME Code, Section	I III, DIVISION I:	ition) (addenda d		(Code Case no.)
6. Pump or valveV	alve Nominal	inlet size 24"	Outlet size24	<u> </u>
6. Pump or valve	Nomina	(in.)		(in.)
7. Material: Body SA	216 Gr. WCB Bonnet	N/A Disk	SA 216 Gr. WCB B	olting See back side of page
(a)	(b)	(c)	(d)	(e) '
Cert.	Nat'l	Body	Bonnet	Disk Social
Holder's	Board	Serial	Serial No.	Serial No.
Serial No.	No.	No.		Heat: 211494
93-2543-02(N)-01	N/A	<u> Heat: 210894</u> Serial: 78661-1	N/A	Serial: 78662-1
		Serial: 70001=1		<u> </u>
	•			
				
	CSP-V-33	N 93-2543	02(N)-01	
	4			
			Mark Swall	
		······································	The state of the s	
			8/3/94	
				
				
				
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This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

F-4/23/24

^{*} 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.

FORM NPV-1 (Back — Pg. 2 of _2_)

Certificate Holder's Serial No. 93-2543-02(N)-01 218 340 150 8. Design conditions . of or valve pressure class. (pressure) (temperature) 285 psi at 100°F 9. Cold working pressure. 45 __ psi. Disk differential test pressure. 10. Hydrostatic test _ 11. Remarks: Cover Plate - Material: SA 516 Gr. 70 Heat Code: FME Hex Head Cap Screw - Material: SA 193 Gr. B7 Trace Code: Gland - Material: SA 516 Gr. 70 Heat Code: SIE Stud - Material: SA 193 Gr. BBM Heat Code: Hex Nut - Material: SA 194 Gr. 8M Heat Code: Pipe Plug - Material: SA 479 T 316 Heat Code: ULE **CERTIFICATION OF DESIGN** Jack R. Cole _ P.E. State Design Specification certified by Reg. no. WA Design Report certified by . P.E. State Reg. no. ___

CERTIFICATE OF COMPLIANCE					
We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction					
of the ASME Code, Section III, Division 1. N Certificate of Authorization No. N-2723	Expires 6/20/95				
Date 4/23/91 Name C&S Valve Co., Nuclear Prod. Div. (N Certificate Holder)	Signed Lecture (authorized representative)				

1					
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 Illinois and employed by * Allendale Mutual Ins. Co. of Norwood, MA have inspected the pump, or valve, described in this Data Report on Apair and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.					
*Factory Mutual Engineering Association By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.					
Date 4/23/94 Signed Commissions N8 9762 TUL 1296 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)					

(1) For manually operated valves only.

4/25/94

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 ce	nified by <u>C&S Valve</u>	Co., Nuclear Pro	xducts Div.; 4	O Chestnut	Ave.;	Westmont, IL 60559	9
2. Manufactured for Wa	ashington Public	Power Supply; P.(and address of N C Box 968; Ric	chland, Was	hingto	n 99352-0969	
3. Location of installation	n WNP-2 OPS WHS	Complex, WHS #1	nd address of Purch North Power	asen Plant Loop;	Richla	and, WA 99352	
4. Model No., Series No		· ·	(name and address 93-2543-02(N)	1)	В	CRN_N/A	
5. ASME Code, Section	100	39	No Addenda	2	<u>. </u>	· N/A	
6. Pump or valve Va	ilve Nom	•	sddenda date) 	(class)	24"	(Code Case no.)	
7. Material: Body SA	216 Gr. WCB Bon	netN/A	Oisk SA 216	er. WCB		See back side of	page
(a)	(b)	(c)		(d)	-	(e)	
Cert.	Nat'l	Body		Bonnet		Disk	
Holder's Serial No.	, Soard No.	Serial No.		Serial		Serial No.	
93-2543-02(N)-02			2404	No.			
35-25-5-02(11)-02	· NA	<u>Heat: 21</u> Serial:		N/A		Heat: 212594 Serial: 78662-2	
·			<u> 78661-2 ° </u>			<u>Serial: 78662-2</u>	
		-				•	
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	······		~~~~		~ 		
	<u> </u>	-V-4,5 N	93-2543	5-02 (N	7-55		•
							
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F 1/23/91

^{*}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.

FORM NPV-1 (Back — Pg. 2 of ____)

	•				Certificate I	dolder's Serial No	. <u>93-2543-02(N)-</u> 02
8.	Design condition	ns 218	psi _	340	°F or valve p	essure class	150(1
		(pres:		(temperature)		•
9.	Cold working pro	essure2	95 psi	at 100°F			
10.	Hydrostatic test	450	psi. Disk dif	ferential test pr	essure45		psi
11.			sterial: SA 5		Heat Code: FME		· · · · · · · · · · · · · · · · · · ·
			rew - Material			ode: TT2	
			l: SA 516 Gr. SA 193 Gr. E		t Code: SIE Code: J5		
					at Code: E7_		
	Pipe	Plin - Mate	rial: SA 479	T 316 H	eat Code: ULE		~
	, 100	- 1 10g - 1 110	31d1. St 4/3	1 510 12	ar we. ou	'	
			CER	TIFICATION OF	DESIGN		
			Jack R Cole		WΔ		206563
	sign Specification		N/A		P.E. State WA	Reg. n	0
De	sign Report certif	fied by	1411		P.E. State	Reg. n	0
		γ					
			CERTI	FICATE OF CO	MPLIANCE		
14/-			. in this		o ship asses accepts a		(
				correct and tha	t this pump or valve c	ontorms to the rui	es for construction
	the ASME Code, Certificate of Autl		NL-27	23		6/20/95	;
					•		· · · · · · · · · · · · · · · · · · ·
Dat	4123196	i Name C&S	Valve Co., Nu	clear Prod.	DÏV. Signed	يهءادسه	\mathfrak{D} .
-			(N Certificate	Holder)	Olyrica	Tauthorized represe	intative)
		•	CERT	IFICATE OF INS	PECTION		
I, ti	he undersigned. State or Province	holding a valid	commission issue		nal Board of Boiler a		
	Norwo	od. MA			cted the pump, or val		
of .	April 23				cted the pump, or val ly knowledge and bel		
stru	icted this pump,				ction III, Division 1.		1
.	-!! AL!!	di	!		*Factory Mutua		
					ikes any warranty, ex		· ·
					spector nor his emplo om or connected with		in any manner for
-	• <u>4/23/94</u> s	• • •	· —		ns N2 9762 N2	B , ILL 12	96
	, ,	(Aut	horized inspector)		(Nat'l. Bd. (incl. end	forsements) and sta	te or prov. and no.]

(1) For manually operated valves only.

£ 4/23/74.



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

1. Owner: Washington Public Power Supply System (WPPSS)

Date: 3/10/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Crosby Valve And Gage Co, 43 Kendrick Street, Wrentham, Massachusetts, 02093 (b) Repair Organization P.O. No, Job No, etc.: PO No C30786
- 4. Identification Of System: Main Steam Relief Valve (MSRV)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-SPARE	Crosby	N56000-01-0037 Modified To N63790-00-0134	N/A	N/A	1973	Replacement (Modification))	Yes, Code Class 1

7. Description Of Work Performed: WNP-2 Main Steam Relief Valves (MSRVs) were manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at WNP-2 plant. "Bailty" Main Steam Relief Valve (MSRV) were also manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at Northern Indiana Public Service Co (NIPSCO), Bailly Generating Station Nuclear 1 Plant. Supply System procured six (6) new (unused) "Bailly" valves from NIPSCO as spares for use at WNP-2 plant. "Bailly" valves were sent to Crosby for modification (upgrade) to make them equivalent in form, fit and function and interchangeable with WNP-2 valves which were also modified (upgraded) by Crosby. The "Bailly" modified (upgraded) valves will be used as spare valves for future use for WNP-2 plant. "Bailly" Main Steam Relief Valve (MSRV), Serial No N56000-01-0037 was modified (upgraded) to Serial No N63790-00-0134 by Crosby in accordance with PO No C30786. The details of the modification (upgrade) work is documented in the documentation package furnished by Crosby



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

POHM NIS-2 OWNER'S REPO	ni i un nerains	On the Experiment of Backy	
Tests Conducted: Hydrostatic Pneumo	7	Operating Pressure Other [Test Temperature: F	X No
Component Design Pressu	Ire: Psig 7	Temperature: ° F	
. Remarks: 1) See attached NV-1 (Pre - Modification) C 2) See attached "Repair And Replacement Report (QC 292A) documenting the modifie	To Nuclear Components	s And Systems in Nuclear Power Plants* Cer	rtification
CERTIF	ICATE OF COMPL	IANCE	-
We certify that the statements made in this	Owner's Report are	e correct and this replacement (modific	ation)
conforms to the rules of the ASME Code, S Type Code Symbol Stamp: Not applicable	ection XI		
Certificate Of Authorization No.: Not applicable		•	
Expiration Date: Not Applicable	•		
Prepared By Quidib Suit	Signed By	RAmon	
Kuldip Singh - Materials And Inspec	tion	Manager, Materials And Inspection	
Date3 10 94	Date	3-11-94	
CERTIFICATE	OF INSERVICE IN	ISPECTION	
I, the undersigned, holding a valid commission Vessel Inspectors and the State of Washington	sion issued by the I	National Board of Boiler and Press	ure
(Factory Mutual Engineering Association) of Nor	wood, Massachusetts	have inspected the components	13
described in this Owner's Report during the	e period <u>/ み・</u> 9・	- 93 to 3-16-94 BI	nd
state to the best of my knowledge and belie	f, the Owner has pe	erformed examinations and taken	
corrective measures described in this Own ASME Code, Section XI	ers κεροπ in accoi	rdance with the requirements of th	ie
By signing this certificate neither the inspe	ctor nor his employ	ver makes anv warrantv. expresser	d or
implied, concerning the examinations and c	corrective measures	s described in this Owner's Repor	t.
Furthermore, neither the Inspector nor his of injury or property damage or a loss of any l			nal
Dry Strongarth	Commissions	9556W NBI	
Inspector's Signature	Continussions	National Board, State, and Endorsemen	nts
Date 3/16/94			

CROSBY

CROSBY VALVE & GAGE COMPANY WRENTHAM, MA

PLAN NO. 1003

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

E	1	audib Euris	E
		REPAIR AND REPLACEMENT	
		REPAIR AND REPLACEMENT	
E		TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS	E
E	1	,	E
E	<u>_</u>		
E	1	Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham, MA 02093	7
E	"	(Name and Address)	
		(Repair organization's P.O. No., Job No., etc.). NV4000020	_
E		NACUINCTON DUDI IC DOMED DICHI AND MA 00252 DOCD	" [=
	7.	Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968 (Name and Address)	1
E	=	Progressia Maria Magazaria	╪
	3.	Name and Identification of Nuclear Power Plant HANFORD #2	-1
	<u> </u>		
	4.	Address of Nuclear Power Plant_RICHLAND, WA	
			░
	5.	a. Identifying Nos. N63790-00-0134 1973	- =
		(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built) b. Identification of component repaired or replacement component ———————————————————————————————————	
		c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY	
	=		抓
J	_	Tours and used the boards (V) December (V) December (V)	
	6.	Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi	
	7.	Identification of SystemMAIN STEAM	
	==		裮
OMITT	==	Applicable Section(s) III of ASME Code, 19_71 Edition	
	==	Applicable Section(s) III of ASME Code, 19_71 Edition	
nammanat	8.	Applicable Section(s) III of ASME Code, 19_71 Edition Addenda_NO Code Case =	
	8.	Applicable Section(s) III of ASME Code, 19_71 Edition Addenda_NO Code Case =	
	8.	Applicable Section(s)III of ASME Code, 19_71 Edition Addenda_NO Code Case = Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 < (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)	
	8.	Applicable Section(s) III of ASME Code, 19_71 Edition Addenda_NO Code Case =	
alamanda anamana	9.	Applicable Section(s)III of ASME Code, 19_71 Edition Addenda_NO Code Case = Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 < (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA.	
	9.	Applicable Section(s)III of ASME Code, 19_71 Edition Addenda_NO Code Case = Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 < (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:	
	9.	Applicable Section(s)III of ASME Code, 19_71 Edition Addenda_NO Code Case = Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 < (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI,1980 EDITION WINTER 1980 ADDENDA. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO.	
	9.	Applicable Section(s)III of ASME Code, 19_71 Edition Addenda_NO Code Case = Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 <	
	9.	Applicable Section(s)III of ASME Code, 19_71 Edition Addenda_NO Code Case =	
	9.	Applicable Section(s) III of ASME Code, 19_71 Edition Addenda_NO Code Case =	
	9.	Applicable Section(s) Of ASME Code, 19_71 Edition Addenda_NO Code Case = Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 < (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-43-0126 BONNET N89717 N93407-41-0052 SPINDLE ASSY K55465 K62873-46-0060 SPR.WASHER N89724 K62856-41-0200 SPR.WASHER N89723 K62857-41-0200	
	9.	Applicable Section(s)III of ASME Code, 19_71 Edition Addenda_NO Code Case Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 / (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-43-0126 BONNET N89717 N93407-41-0052 SPINDLE ASSY K55465 K62873-46-0060 SPR.WASHER N89724 K62856-41-0200 SPR.WASHER N89723 K62857-41-0200 SPR.WASHER N89723 K62858-31-0006	
	9.	Addenda NO Code Case — Addenda NO Code Case — Description of work N56000-01-0037 WAS MODIFIED TO N63790-00-0134 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-43-0126 BONNET N89717 N93407-41-0052 SPINDLE ASSY K55465 K62873-46-0060 SPR.WASHER N89724 K62856-41-0200 SPR.WASHER N89723 K62857-41-0200 SPR.WASHER N89723 K62858-31-0006 PART PART NO. REPLACED WITH NOZZLE N89713 N93184-51-0156	
	9.	Applicable Section(s)	
	9.	Applicable Section(s)	
	9.	Applicable Section(s)	
սիսասում և աստարարդությունը անձագարարարությունը։	9.	Applicable Section(s)	
	9.	Applicable Section(s) III of ASME Code, 19_71 Edition	
որորդութարդարարարարարարարարարարարարարարարար	9.	Applicable Section(s)	

Certificate Holder's Serial No. N63790-00-0134

PARTIES CONTRACT			VOL. 19 19 19 19		
	CERTII	FICATE OF COM	PLIANCE	•	
We co	rtify that the statements made in thi	s report are correct and a	ll design, material, as	nd workmanship on this	
IOM ISSE	pair/replacement)	o the applicable section o	the Asiac Code.	•	
				•	
	, /	2			
Signe	Aurtense 7 111 (Authorized Rep. of Repair C	QA Eng 1	Manager 2	1974 Feb 1974	
	(Authorized Rep. of Repair C	organization)	true) P	(Date)	
				THE PROPERTY OF THE PARTY OF TH	
					100
Decare Le					
	CERT	IFICATE OF INS	PECTION		
	•				7
I, the	e undersigned, holding a valid commi ectors and the State or Province of	ssion issued by the Natio	nal Board of Boiler a	nd Pressure Vessel	
Insp	Norwood, Massachusetts have been been been been been been been be	WA INCOMPTANT THE TANKER (I)	r remacement descri	300 III WING TOPOLO	
has	been made or constructed in accorda	ance with the applicable s	ection of the ASME	Code.	2
By s	igning this certificate, neither the Ins	spector nor his employer r	makes any warrant, (expressed or implied,	ye
cond	erning the repair or replacement des be liable in any manner for any pers				
con	nected with this inspection.		Factory Mutual S		
Date	<u>2/24</u> 19 <u>94</u> .	11.	14. 15.		
Sign	red(Inspector)	Commissions	(Nat'l. Bd., S	tate, Prov. and No.)	- 経

PLAN NO. 2-1003



Spindle Point

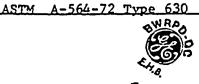
CROSBY VALVE & GAGE COMPANY 3/90/94 WRENTHAM, MASS

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

Q.C.-44A

,	DATA REPORT Safety and Safety Relie	r F Valves		=======================================
1. Manufactured By Crosby Valve	& Gage Co., 43 Ken		entham, Mass. 02093	<u> </u>
UR-65-RP-TN			6/28/71	
Model No. HB-65-BP-FN General Elect	Order No. Nation	Cor	tract Date 0/20//1	
2 Manufactured For San Jose, Cal	ifornia	0	der No. 205-AD14	.8
2. Manufactured For San Jose, Cal	me and Address		oc. 110.	
3. Owner Northern Indiana Publ				
0. 0	Name and Address		aileytown, Indiana	
4. Location of Plant Baileytown,	Indianá		·	
5. Valve Identification MPL #B-22-FO	13_Serial No. <u>N56000-</u>	01-0037 Drawing	No. <u>H-56000 Rev.</u>	<u>c</u>
Type Safety Relief Safety.Safety Relief.Pilot.Power	Orifice Size	ze <u>R</u> Pipe Size	Inch Inch Outlet	10 Inch
6. Set Pressure (PSIG) 1175	•		575° Rated Temperature	F
			Rated Temperature	
Stamped Capacity 883950 Sat. Steam	_ Lbs. Hr. &3 % Ov	erpressureBlo	wdown (PSIG)5%	
Hydrostatic Test (PSIG) Inlet	2370	Complete Valve	825	
7. The material, design, construction and	workmanship comply with	ASME Code, Section	ıı.	
Class 1 Edition	1971	_ Addenda Date	<u>Summer 1972</u>	
Pressure Containing or Pressure Retai	ning Components			
a.XXXXXXXXX Forgings	Serial No. Identification		Material Specification neluding Type or Grade A-105-71 Gr. II	
Body	N90118-32-0008	ASME	SA-105 Gr. II	
Bonnet BXXXXX	N89717-32-0021	ASTM ASME	A-105-71 Gr. II SA-105 Gr. II	
b. Bar Stock and Forgings			······································	·
: XXXXXXXXXX Disc Insert	N89715-31-0028	_ASTM	A-461-65 Type 630	<u>) </u>
Nozzle	N89713-32-0039	ASTM ASME	A-182-71 F316 SA-182 F316	
Disc Holder Top	N89714-32-0037 N89724-32-0037	AMS ASTM	5662 B A-105-71 Gr. II	
Spring Washers Bottom	N89723-31-0008		SA-105 Gr. II	
Adjusting XXXX Bolt	N89726-33-0046	ASME	sA-193-71.GF B6	

N89720-32-0046



	Senal No. or	Material Specification
	Identification •	Including Type or Grade
c. Spring	NX2689-0042	ASTM A-304-66 Gr. 4161H
d. Bolting		
e. OKOKKKIKSKO OKOKKA KOKKA OKOKA OKOKA O	er	
Inlet Stud	N89727-0433 thru 0444	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Inlet Stud Nut	N89728-0437 thru 0448	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
Bonnet Stud	N89718-0437 thru 0448	ASTM A-193-71 Gr. B/ ASME SA-193 Gr. B7
Bonnet Stud Nut	N89719-0439 thru 0450	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
	••	
OTHER PARTS		
Spindle Ball	N89721-0046	Stellite 6
BARS & FORGINGS		
Thrust Bearing Adapter	N89725-32-0035	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
		
We certify that the statements made in the	his report are correct.	
Date Signe	. Crochy Volue & Coco Co	- Of Henrie
Date Signer	Manufacturer	QA Manager
Certificate of Authorization No.	331 expires November	9, 1974

CERTIFICATE OF SHOP INSPECTION

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

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

*Factory Mutual Group of Insurance Co.

Date Citaber 31: 19 73

Long Life Character Commissions N.B. & C. & S. Mass. 109 C.

National Board, 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: Washington Public Power Supply System (WPPSS)

Date: 3/10/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hantord Reservation, Benton County, Washington

3. (a) Work Performed By: Crosby Valve And Gage Co, 43 Kendrick Street, Wrentham, Massachusetts, 02093

(b) Repair Organization P.O. No, Job No, etc.: PO No C30786

4. Identification Of System: Main Steam Relief Valve (MSRV)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: WNP-2 Main Steam Relief Valves (MSRVs) were manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at WNP-2 plant. "Bailly" Main Steam Relief Valve (MSRV) were also manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at Northern Indiana Public Service Co (NIPSCO), Bailly Generating Station Nuclear 1 Plant. Supply System procured six (6) new (unused) "Bailly" valves from NIPSCO as spares for use at WNP-2 plant. "Bailly" valves were sent to Crosby for modification (upgrade) to make them equivalent in form, fit and function and interchangeable with WNP-2 valves which were also modified (upgraded) by Crosby. The "Bailly" modified (upgraded) valves will be used as spare valves for future use for WNP-2 plant. "Bailly" Main Steam Relief Valve (MSRV), Serial No N56000-01-0099 was modified (upgraded) to Serial No N63790-00-0135 by Crosby in accordance with PO No C30786. The details of the modification (upgrade) work is documented in the documentation package furnished by Crosby



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS	(васк)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F	Other X Non
 Remarks: 1) See attached NV-1 (Pre - Modification) Code Data Report for MSRV, Serial No N56000-01-009 See attached "Repair And Replacement To Nuclear Components And Systems in Nuclear Pow Report (QC 292A) documenting the modification (upgrade) work performed by Crosby 	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replace conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable	coment (modification)
Prepared By Quidin Suisb Signed By RAMON Manager, Materials And Inspection Date 3-11-94	d Inspection
,	
I, the undersigned, holding a valid commission issued by the National Board of Boile Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insura (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the codescribed in this Owner's Report during the period 12-7-83 to 3-16-9 state to the best of my knowledge and belief, the Owner has performed examinations corrective measures described in this Owner's Report in accordance with the require ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty implied, concerning the examinations and corrective measures described in this Owner 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 Date 3/16/94 Commissions 9556 W National Board, State, and Date 3/16/94	ance Company components A — and s and taken ements of the y, expressed or ner's Report. r any personal aspection
2/11/41	nd Endorsements

C R O S B Y

· CROSBY VALVE & GAGE COMPANY WRENTHAM, MA

PLAN NO. 2-1004

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

Buldip Saig's

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

E	<u> </u>		旦
	1.	Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093 (Name and Address) (Repair organization's P.O. No., Job No., etc.). NV4000020	
	2.	Owner WASHINGTON PUBLIC POWER RICHLAND.WA 99352-0968 (Name and Address)	
	з.	Name and Identification of Nuclear Power Plant HANFORD #2	
	4.	Address of Nuclear Power PlantRICHLANDWA	
	5.	a. Identifying Nos. N63790-00-0135 1973 (Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built) b. Identification of component repaired or replacement component c. Name of ManufacturerCROSBY VALVE & GAGE COMPANY	
		Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi Identification of System MAIN STEAM	
	8.	Applicable Section(s)lll of ASME Code, 19_71 Edition Addenda_NO Code Case	
	,	Description of work N56000-01-0099 WAS MODIFIED TO N63790-00-0135 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO, MODIFIED TO PART NO. BODY N90118 N93183-46-0129 BONNET N89717 N93407-42-0053 SPINDLE ASSY K55465 K62873-45-0059 SPR.WASHER N89724 K62856-42-0201 SPR.WASHER N89723 K62857-42-0201 SPRING ASSY K55466 K62858-31-0003 PART PART NO, REPLACED WITH NOZZLE N89713 N93184-51-0155 DISC INSERT N89715 N93185-52-0199 SPRING NX2689 N89722-0072 THR.BRG.ADAPT.N89725 N93409-32-0006 ADJ.BOLT N89726 N93410-32-0005 ADJ.BOLT ASSY COMMERCIAL N93411-33-0012 ADJ.BOLT ASSY COMMERCIAL K63618-31-0005	
		1- 2/23/54	

CERTIFICATE OF COMPLIANCE
We certify that the statements made in this report are correct and all design, material, and workmanship on this MOD conforms to the applicable section of the ASME Code.
(repair/replacement)
Signed Courses of February Charles (Date) 1994
and the second s
CERTIFICATE OF INSPECTION
CERTIFICATE OF INSTECTION
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</u>
of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 19 57 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.
By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employe
shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Date 2/25 1994.
Signed No. (Inspector) Commissions 1814 1455 (Nat'l. Bd., State, Prov. and No.)

PLAN NO. 2-1004 Lundif Guyts



CROSBY VALVE & GAGE COMPANY WRENTHAM, MASS

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

Q.C.-44C

	DATA	RE	PORT	
Safety	and Sal	lety	Relief	Valves

t. Manufactured By Crosby Valv	ve & Gage Co., 43 Kendi	rick St., Wrentham, Mass. 02093
HB-65-BP-	Name and Address	
		1/27/75
Model NoOrder No	Contract Dat	e 1/27/75 National Board No
General Fig	ectric Co.,.175 Curther	Ave.,
2. Manufactured For San Jose, C	alifornia 95125	Order No. 205-AD148
N	ame and Address	:
3. Owner Northern Indiana Pul	olic Service Co., Baill	ly Generating Station Nuclear I
	Namerand Address	
Pailouterm	•	
4. Location of Plant Baileytown, Spare	Indiana	
Spare		
5. Valve Identification MPL#B22-F01	3 Serial No. N56000-01-0	0099 Drawing No. H-56000 Rev. C
•		
TypeSafety Reli	ef Orifice Size R	Pipe Size Inch Inch Outlet 10
Safety, Safety Relief, Pilot, Powe	er Actuated In	nch Inch Inch Inch
6. Set Pressure (PSIC) 1130		575° F Rated Temperature
6. Set Pressure (PSIG)		Rated Temperature
Stamped Capacity 850500#/Hr.	Sat. 5 3 % Overpre	ssureBlowdown (PSIG) 57
• • •	•	
	270	225
Hydrostatic Test (PSIG) Inlet2	Compl	lete Valve
Class 1 Edition 197 Pressure Containing or Pressure Reta		mmer 1972 ,Case No.
	Serial No.	Material Specification
a. desay Forging	Identification	including Type or Grade
	N00110 25 0022	ASTM sA105-71
Body	N90118-35-0032	
_	N89717-36-0083	ASTM Al05-71 ASME SAl05
Bonnet	109717-30-0083	ASILE SAIOS
b. Bar Stock and Forgings		*
or but those the parkings	V00715 06 0106	ASTM A564-71 Type 630
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N89715-36-0106	ASME SA564 Type 630 ASTM A182-71 Type 316 ASME SA182 Type 316
Marala	N89713-36-0106	ASME SA182 Type 316
Nozzle	1107,123 33 0220	1101111 0111101 1,700 010
Disc Holder K55484-39-01	35 <u>N89714-35-0173</u>	AMS 5662B
Spring Washers K55466-36-00	N89724-36-0122	ASTM A105-71 ASME SAI05
Spring Washers K55466-36-00	63 NOA152-30-0131	ASTM A193—/1 Gr. B6
Adjusting Bolt	N89726-40-0119	ASME SA193 Gr. B6
najusting port		ASTM A504 Type 030
Spindle K55465-35-0106	N89720-38-0129	ASME SA564 Type 630
Spindle Ball	N89721-0206	Stoody No. 6
phruare part	103721-0200	
Thrust Bearing Adapter	N89725-34-0116	ASTM A193-71 Gr. B6 ASME SA193 Gr. B6
cot bearing napter		
		•

(75

	Senal No. or		Material Sp	CILIC BEION
	Identification		Including Ty	pe or Grarie
- Spring	N89722-0072	ASTM	A304-66	
d. Bolting				
Other Parts such as Pilot Components				
Inlet Stud	N89727-1203 thr	u 1214	ASME SA193	Gr. B7
Inlet Nut	N89728-1197 thr	1208	ASME SA194	
Bonnet Stud	N89718-1222 thr		ASME SA193	
Bonnet Nut	N89719-1216 thr		ASME SA194	
				····
				····
				
e certify that the statements made in this ate $6-22$ 19 76 Signed		ge Co. Bu	Dú G	Jennan)
ate <u>6-22</u> 19 <u>76</u> Signed 9	Crosby Valve & Ga	•	•	Managér
ate <u>6-22</u> 19 <u>76</u> Signed 9	Crosby Valve & Ga	•	•	Managér
ertificate of Authorization No. 920	Crosby Valve & Ga	ober 28, 1	•	Managér
ate 6-2Z 1976 Signed Sertificate of Authorization No. 920	Crosby Valve & Ga Manufacturer 6 expires Oct CIFICATE OF SHOP INSE	ober 28, 1 PECTION by the Vational Mass.	977 Board of Boiler	and
certificate of Authorization No. 920 CERT I. the undersigned, holding a Pressure Vessel inspectors and	Crosby Valve & Ga Manufacturer 6 expires Oct "IFICATE OF SHOP INSE valid commission issued it the State or Province of the State or Province of the State of Province of the State of the State or Province of the State or Province of the State or Province of the State or Province of the State or Province of the State or Province of the State or Province of the State or Province of the State or Province of the State or Province of the State or Province of the State of	ober 28, 1 PECTION by the Vational Mass. ss. n	Board of Boiler and empl	r and oyed by have and
certificate of Authorization No. 926 I. the undersigned, holding a Pressure Vessel Inspectors and Factory Mutual Systemspected the equipment descriptions that to the best of my known in accordance with the appressed or implied, concerning	Manufacturer Manufacturer Manufacturer CTFICATE OF SHOP INSE valid commission issued in the State or Province of the State or Province of the State of the Manufacture and belief, the Manufacture Subsections of A content the Inspector nor higher the Inspector nor higher equipment described	DECTION DECTION By the Sational Mass. SS. In manufacturer has SME Section III S employer make in this Data Re-	Board of Boiler and empl 19— constructed this	and oyed by have and equip-
certificate of Authorization No. 926 I. the undersigned, holding a Pressure Vessel Inspectors and Factory Mutual Systemspected the equipment descripance that to the best of my known in accordance with the approximation of the properties of the signing this certificate, not be set of the properties of the signing this certificate, not be set of the signing this certificate.	Manufacturer Ma	DECTION by the National Mass. SS. n annufacturer has SME Section III s employer make in this Data Report for any pers	Board of Boiler and employment by constructed this es any warranty port. Furthermore sonal injury or p	and oyed by have and equip-
certificate of Authorization No. 926 I. the undersigned, holding a Pressure Vessel Inspectors and Factory Mutual System inspected the equipment descripance that to the best of my known ment in accordance with the appressed or implied, concerning the Inspector nor his employer in the Inspector nor his employer	Manufacturer Ma	DECTION by the National Mass. SS. n annufacturer has SME Section III s employer make in this Data Report for any pers	Board of Boiler and employment by constructed this es any warranty port. Furthermore sonal injury or p	and oyed by have and equip-



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

Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 3/11/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Crosby Valve And Gage Co, 43 Kendrick Street, Wrentham, Massachusetts, 02093
 - (b) Repair Organization P.O. No, Job No, etc.: PO No C30786
- 4. Identification Of System: Main Steam Relief Valve (MSRV)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-SPARE	Crosby	N56000-02-0043 Modified To N63790-00-0136	N/A	N/A	1973	Replacement (Modification))	Yes, Code Class 1

7. Description Of Work Performed: WNP-2 Main Steam Relief Valves (MSRVs) were manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at WNP-2 plant. "Bailly" Main Steam Relief Valve (MSRV) were also manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at Northern Indiana Public Service Co (NIPSCO), Bailly Generating Station Nuclear 1 Plant. Supply System procured six (6) new (unused) "Bailly" valves from NIPSCO as spares for use at WNP-2 plant. "Bailly" valves were sent to Crosby for modification (upgrade) to make them equivalent in form, fit and function and interchangeable with WNP-2 valves which were also modified (upgraded) by Crosby. The "Bailly" modified (upgraded) valves will be used as spare valves for future use for WNP-2 plant. "Bailly" Main Steam Relief Valve (MSRV), Serial No N56000-02-0043 was modified (upgraded) to Serial No N63790-00-0136 by Crosby in accordance with PO No C30786. The details of the modification (upgrade) work is documented in the documentation package furnished by Crosby



FORM NIS-2 OWNER'S REPORT FOR	REPAIRS OR REPL	ACEMENTS (B	3ack)
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Tests Conducted: Hydrostatic Paig Test Pressure: Paig Component Design Pre	eumatic Nominal Operating Pressure Other X None Test Temperature: ° F essure: Psig Temperature: ° F
2) See attached *Repair And Replace	ion) Code Data Report for MSRV, Serial No N56000-02-0043 ment To Nuclear Components And Systems In Nuclear Power Plants* Certification podification (upgrade) work performed by Crosby
CER	RTIFICATE OF COMPLIANCE
conforms to the rules of the ASME Cod Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not appl Expiration Date: Not Applicable Prepared By Lucy Exp	Signed By AM Que
Kuldip Singh Materials And In Date 3 11 9 4	Date 3-11-94
•	
CERTIFIC	CATE OF INSERVICE INSPECTION
Vessel Inspectors and the State of Was (Factory Mutual Engineering Association) of described in this Owner's Report during state to the best of my knowledge and is corrective measures described in this of ASME Code, Section XI By signing this certificate neither the in implied, concerning the examinations a Furthermore, neither the inspector nor	Imission issued by the National Board of Boiler and Pressure thington and employed by Arkwright Mutual Insurance Company if Norwood, Massachusetts have inspected the components of the period 12-7-13 to 3-16-94 and belief, the Owner has performed examinations and taken Owner's Report in accordance with the requirements of the inspector nor his employer makes any warranty, expressed or and corrective measures described in this Owner's Report, his employer shall be liable in any manner for any personal any kind arising from or connected with this inspection
Date 3/16/94	Commissions 9556W NBI National Board, State, and Endorsements
	·

C R O S B Y

CROSBY VALVE & GAGE COMPANY WRENTHAM, MA Q.C.-292, REV.A

PLAN NO. 2-1005

SHEET 1 OF 2

REPAIR AND REPLACEMENT 3/10/94 TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093	
1. Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093	
[2]	
(Name and Address)	
	E
(Repair organization's P.O. No., Job No., etc.). NV4000020	
	والتسميد فيستدان
2. OwnerWASHINGTON PUBLIC POWER_RICHLAND,WA 99352-0968	
(Name and Address)	
(Name and Address)	
11441909 40	
3. Name and Identification of Nuclear Power Plant HANFORD #2	
	E
4. Address of Nuclear Power Plant_RICHLAND_WA	[三
T - 14-464-N NC2700 00 0120	1072
5. a. Identifying Nos. N63790-00-0136	1973
	(Year Built)
b. Identification of component repaired or replacement component	
c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY	
	E
-	j≘
6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi	I
	! ≣
7. Identification of SystemMAIN STEAM	ΙΞ
8. Applicable Section(s)III of ASME Code, 19_71 Edition	=
6. Applicable Section(s) of ASME Code, 19_/1 Edition	
∃	
Addenda NO Code Case -	
9. Description of work N56000-02-0043 WAS MODIFIED TO N63790-00-0136	<u> </u> =
(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified)	E
ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA.	
AOTHE SECURITION CONTROL WHITEN 1300 ADDELEDA.	E
	E
10.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:	
PART PART NO. MODIFIED TO PART NO.	
10.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-42-0125 BONNET N89717 N93407-43-0054 SPINDLE ASSY K55465 K62873-33-0006 SPR.WASHER N89724 K62856-43-0202 SPR.WASHER N89723 K62857-43-0202 SPRING ASSY K55466 K62858-31-0005 PART PART NO. REPLACED WITH	
BONNET N89717 N93407-43-0054	
COINTIE ACCV VEFACE VC2072 22 000C	
SPINDLE ASSY K55465 K62873-33-0006	E
SPR.WASHER N89724 K62856-43-0202	E
SPR.WASHER N89723 K62857-43-0202	F
SPRING ASSY K55466 K62858-31-0005	₽
PART PART NO. REPLACED WITH	
NOZZLE N89713 N93184-51-0153	<u> </u> =
DISC INSERT N89715 N93185-52-0203	E
DISC INSENT - NOS/15 - NOS/100-32-0205	E
NOZZLE N89713 N93184-51-0153 DISC INSERT N89715 N93185-52-0203 SPRING NX2689 NX2689-0135 THR.BRG.ADAPT.N89725 N93409-34-0009 ADJ.BOLT N89726 N93410-31-0003	E
THR.BRG.ADAPT.N89725 N93409-34-0009	∃
ADJ,BOLT N89726 N93410-31-0003	E
	_ [=
ADJ.BOLT BUTT. COMMERCIAL N93411-33-0010	
ADJ.BOLT BOTT, COMMERCIAL N93411-33-0010	J=
ADJ.BOLT ASSY COMMERCIAL N93411-33-0010 ADJ.BOLT ASSY COMMERCIAL K63618-31-0003	E
ADJ.BOLT ASSY COMMERCIAL N93411-33-0010 ADJ.BOLT ASSY COMMERCIAL K63618-31-0003	
ADJ.BOLT ASSY COMMERCIAL N93411-33-0010 ADJ.BOLT ASSY COMMERCIAL K63618-31-0003	
ADJ.BOLT BOTT. COMMERCIAL N93411-33-0010 ADJ.BOLT ASSY COMMERCIAL K63618-31-0003	

	CERTIFICATE OF COMPLIANCE	S S S S S S S S S S S S S S S S S S S
	We certify that the statements made in this report are correct and all design, material, and workmanship on this	
	MOD. conforms to the applicable section of the ASME Code.	
	(repair/epidecinent)	
	Signed Zamence Joseph OA Cong Manager 24 Feb . 1994 (Authorized Rep. of Repair Organization) (Title) (Date)	
	(Authorized Rep. of Repair Organization) (Title) (Date)	
	CERTIFICATE OF INSPECTION	
i S	•	
	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</u>	\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.
	of <u>Norwood. Massachusetts</u> have inspected the repair or replacement described in this report on <u>Fe 6 25</u> , 19 <u>97</u> and state that to the best of my knowledge and belief, this repair or replacement	
	has been made or constructed in accordance with the applicable section of the ASME Code.	
	By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employe shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or	
	connected with this inspection.	
	Pactory Mutual Systems Date 2/25 1999.	
	Signed Multi-Cll. Commissions 1941455	
	(Inspector) (Nat'l. Bd., State, Prov. and No.)	

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PLBN No. 2-1005 Culdib Euc



CROSBY VALVE & GAGE COMPANY WRENTHAM, MASS

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

Q.C.-44A

				PORT	,
Safety	and	Saf	ety	Relief	Valves

	Safety and Safety Reflet						
1. Manufactured By Crosby Valve	& Gage Co 43 Kend	rick St., Wrentham. Mass. 02093					
Model No. HB-65-BP-FN Order No. N-105286 Contract Date 6/28/71							
General Elec	tric Company						
2. Manufactured For San Jose, Ca	Order No. 205-AD148						
Name and Address							
a owner Northern Indiana Pub	lic Service Co., Bar	illy Generating Station Nuclear I.					
3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I. Name and Address Baileytown, Indiana							
4. Location of Plant Baileytown, Indiana							
4. Location of Plant Balley Cowit.	Inclana						
5. Valve Identification MPL #B-22-F013 Serial No. N56000-02-0043 Drawing No. H-56000 Rev. C							
Tune Safety Relief	Orifice Size	R Pine Size Inlet 6 Outlet 10					
Type Safety Relief Orifice Size R Pipe Size Inlet 6 Outlet 10 Safety.Safety Relief.Pilot.Power Actuated Inch Inch Inch							
6. Set Pressure (PSIG) 1205		575° F Rated Temperature					
0. 000 1.000.00 (1.010)		Rated Temperature					
Stamped Capacity 906250 Sat. Steam		pressure Blowdown weeks)5%					
Hydrostatic Test (PSIG) Inlet2	570	mpiete valve					
7. The material, design, construction and		1					
Class 1 Edition 1971 Addenda Date Summer 1972							
Pressure Containing or Pressure Retain	ning Components						
	Serial No.	Material Specification					
a.XXXXXX Forgings	Identification	Including Type or Grade					
Body	N89711-32-0025	ASTM A-105-71 Gr. II ASME SA-105 Gr.II					
BonnetXXXXXX	N89717-32-0019	ASTM A-105-71 Gr. II _ASME_SA-105 Gr. II					
b. Bar Stock and Forgings	•						
	. M00715_21_0020	ASTM A-461-65 Type 630					
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N89713-31-0029	ASTM A-182-71 F316					
Nozzle	N89713-32-0027	ASTM A-182-71 F316 ASME SA-182 F316					
Disc. Haldow	NR9714-32-0043	AMS 5662 B					
Disc Holder Top	N89714-32-0043 N89724-32-0046	ASTM A-105-/1 Gr. 11					
Spring Washers Bottom	N89723-31-0002	ASME SA-105 Gr. II ASTM A-193-71 Gr. B6					
Adjusting\X\H\X Bolt	N89726-34-0047	ASME SA-193 Gr. B6					
•	X89720-32-0035	ASTM A-564-72 Type 630					
Spindle Point	ماماهان تونيط بام به الاعتبال المام الدين المام الدين المام الدين المام الدين المام الدين المام الدين المام ال						



Serial No. or Material Specification Identification Including Type or Grade ASTM A-304-66 Gr. 4161H NX2689-0048 c. Spring d. Bolting e. MINNE CENTRO CONCENTRACIONAL MARCON DE LA CONCENTRACIONAL DE LA astm Inlet Stud N89727-0505 thru 0516 <u>ASME</u> Inlet Stud Nut N89728-0509 thru 0520 ASTM ASME Bonnet Stud N89718-0509 thru 0520 Bonnet Stud Nut N89719-0511 thru 0522 OTHER PARTS Spindle Ball N89721-0035 Stellite 6 BARS & FORGINGS Thrust Bearing Adapter N89725-32-0032 We certify that the statements made in this report are correct. Date 10-3/ 19 73 Signed Crosby Valve & Gage Co. Bi Manufacturer QA Manager

CERTIFICATE OF SHOP INSPECTION

Certificate of Authorization No. _

331 expires November 9, 1974

I. the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Mutual Boiler & Machinery Insurance Co.*, Waltham, Mass. have inspected the equipment described in this Data Report on Original 1971 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.

Page Cotoler 31 19 1973

Commissions N.A. 6C.65 140 35. 10.90

Commissions National Board, 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

Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 4/25/94

Sheet: 1 of 1

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

Unit: WNP-2

- Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Crosby Valve And Gage Co, 43 Kendrick Street, Wrentham, Massachusetts, 02093 (b) Repair Organization P.O. No, Job No, etc.: PO No C30786
- 4. Identification Of System: Main Steam Relief Valve (MSRV)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) ' Code Class
MS-RV-SPARE	Crosby	N56000-02-0042 Modified To N63790-00-0137	NVA	N/A	1973	Replacement (Modification))	Yes, Code Class 1

7. Description Of Work Performed: WNP-2 Main Steam Relief Valves (MSRVs) were manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at WNP-2 plant. "Bailly" Main Steam Relief Valve (MSRV) were also manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at Northern Indiana Public Service Co (NIPSCO), Bailly Generating Station Nuclear 1 Plant. Supply System procured six (6) new (unused) "Bailly" valves from NIPSCO as spares for use at WNP-2 plant. "Bailly" valves were sent to Crosby for modification (upgrade) to make them equivalent in form, fit and function and interchangeable with WNP-2 valves which were also modified (upgraded) by Crosby. The "Bailly" modified (upgraded) valves will be used as spare valves for future use for WNP-2 plant. "Bailly" Main Steam Relief Valve (MSRV), Serial No N56000-02-0042 was modified (upgraded) to Serial No N63790-00-0137 by Crosby in accordance with PO No C30786. The details of the modification (upgrade) work is documented in the documentation package furnished by Crosby



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

Test Pressure: Psig Component Design Pressure: Psig Temperature: ° F Tempe	REPAIRS OR REPLACEMENTS (Back)
2) See attached 'Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants' Certifled Report (QC 292A) documenting the modification (upgrade) work performed by Crosby CERTIFICATE OF COMPLIANCE	Test Temperature: ° F
We certify that the statements made in this Owner's Report are correct and this replacement (modification from the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By	Components And Systems In Nuclear Power Plants* Certification
We certify that the statements made in this Owner's Report are correct and this replacement (modification from the rules 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 Press. Vessel inspectors and the State of Washington and employed by Arkwright Mutual Insurance Compan (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 2-25-14 to 4-26-14 and 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 period 2-25-14 to 4-26-14 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in 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 fruthermore, 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 Commissions 95644 NB2	F COMPLIANCE
I, the undersigned, holding a valid commission issued by the National Board of Boller and Press Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Compan (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 2.25-14 to 4-26-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed implied, concerning the examinations 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 Commissions 9556W NB2	
I, the undersigned, holding a valid commission issued by the National Board of Boller and Press Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Compan (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 2.25-14 to 4-26-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed implied, concerning the examinations 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 Commissions 9556W NB2	med By Amee Manager, Materials And 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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components of described in this Owner's Report during the period 2-25-94 to 4-26-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed implied, concerning the examinations 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 Commissions 9556W NB2	4-25-94
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 Arkwright Mutual Insurance Companies (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 2-25-94 to 4-26-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed implied, concerning the examinations 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 Commissions 9556W NB2	
Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Companies (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 2-25-94 to 4-26-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed implied, concerning the examinations 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 Commissions 9556W NB2	ERVICE INSPECTION .
	mployed by Arkwright Mutual Insurance Company seachusetts have inspected the components 2-25-94 to 4-26-94 and when has performed examinations and taken out in accordance with the requirements of the his employer makes any warranty, expressed or a measures described in this Owner's Report.
	Mational Board, State, and Endorsoments

C R O S B Y

CROSBY VALVE & GAGE COMPANY WRENTHAM, MA

PLAN NO.2-1006

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

Couch's Engl

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

1. Work performed by <u>Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093</u> (Name and Address) (Repair organization's P.O. No., Job No., etc.). NV4000020	
2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968 (Name and Address)	
3. Name and Identification of Nuclear Power Plant HANFORD #2	
4. Address of Nuclear Power Plant RICHLAND ,WA	
5. a. Identifying Nos. N63790-00-0137 — — — — — — — — — — — — — — — — — — —	1973 (Year Built)
6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure2370.0 7. Identification of SystemMAIN STEAM	psi
8. Applicable Section(s) III of ASME Code, 19 <u>71</u> Edition	
Addenda NO Code Case —	
9. Description of work N56000-02-0042 WAS MODIFIED TO N63790-00-0137 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA.	
10.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-41-0124 BONNET N89717 N93407-44-0055 SPINDLE ASSY K55465 K62873-44-0058 SPR.WASHER N89724 K62856-44-0203 SPR.WASHER N89723 K62857-44-0203 SPRING ASSY K55466 K62858-31-0001 PART PART NO. REPLACED WITH NOZZLE N89713 N93184-51-0157 DISC INSERT N89715 N93185-54-0231 THRUST.BRG.ADAPT N89725 N93409-33-0007 ADJ.BOLT N89726 N93410-32-0006 ADJ.BOLT BUTT. COMMERCIAL N93411-34-0013 ADJ.BOLT ASSY COMMERCIAL K63618-32-0006	
	L. desist

Certificate Holder's Serial No. N63790-00-0137

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

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CHEMICA COLORS AND COL	一是目
CERTIFICATE OF COMPLIANCE	愈"目
We certify that the statements made in this report are correct and all design, material, and workmanship on the	
MOD conforms to the applicable section of the ASME Code.	福目
(repair/replacement)	
	经目
	以目
	多 目
Signed Courses Signed Of Eng Minagen = 5 Trub 19 (Cate)	4度目
(Authorized Rep. of Repair Organization) , (Title) (Date)	
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Bergin and the experience of the contraction of the	<u> </u>
CERTIFICATE OF INSPECTION	
CERTIFICATE OF HIST ECTION	
Total Control of the Library with a control is used breaks National Read of Relies and Browns Vessely away	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressura Vessel: Inspectors and the State or Province of <u>Massachusetts</u> and employed by <u>Factory Muusai</u>	
of Norwood, Massachusetts have inspected the repair or replacement described in this report on	
19 19 19 19 19 19 19 19 19 19 19 19 19 1	
thas been made or constructed in accordance with the applicable section of the ASME Code.	
By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied,	
concerning the repair or replacement described in this report. Furthermore, neither the Inspector for his example	서롱티
shall be liable in any manner for any personal injury or property damage or a loss of any kind accept from or	据目
connected with this inspection.	
Factory Mutual Systems	
Date 2/25 1994.	
Commissions 146175	
Commissions (1)	
Might Od Come Day and No. 3	
(Inspector) (Nat'l. Bd:, State, Prov. and No.)	

CROSBY

FIEN NO. 2-1006 BIGAGE COMPANY 4)24)24 CROSBY VALVE WRENTHAM, WASS

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

Q.C.-44A

DATA REPORT Safety and Safety Relief Valves					
1. Manufactured By Crosby Valve		ndrick St., Wrentham, Mass. 02093			
Model No. HB-65-BP-FN	Name and Addres Order No. N-105286	C::=::: Date 5/28/71			
General Elect 2. Manufactured For San Jose, Cal	ric Company ifornia he and Address				
	ic Service Co., Ba	ailly Generating Station Nuclear I.			
4. Location of Plant Baileytown, I	Name and Address	• -			
5. Valve [dentification MPL #B-22-FO	13 Serial No. N56000-0	02-0042 Drawing vo. H-56000 Rev. C			
Type Safety Relief Safety.Safety Relief.Pilot.Power		re R Pipe Size - Inter 6 Outlet 10			
6. Set Pressure (PSIG) 1195		575° F			
Stamped Capacity 898800 Sat. Steam	Lbs. Hr. 4 3 5 0ve	erpressure Blowtown xxxx 5%			
Hydrostatic Test (PSIG) Inlet 2	370 c	Complete Valve 825			
7. The material, design, construction and w	• • •				
Class 1 Edition	1971	Addenda Date Summer 1972			
Pressure Containing or Pressure Retain	ing Components				
a.XXXXXXX Forgings	Serial No. Identification	vaterial Specification including Type or Grade			
Body	N89711-32-0024				
BonnetXXXXXX	N89717-32-0018	ASTM A-105-71 Gr. II ASME SA-105 Gr. II			
b. Bar Stock and Forgings		•			
XXXXXXXXX Disc Insert	N89715-31-0034	ASTY 4-461-65 Type 630 ASTY 4-182-71 7316			
Nozzle	N89713-32-0031	ASME 34-182 F316			
Disc Holder Top Spring Washers Bottom	N89714-32-0042 N89724-32-0042 N89723-31-0003	AMS ===== R ASTM A=105-71 Gr. II ASME ====================================			
Adjusting XXIII Bolt	N89726-32-0012	AST 4-193-71 Gr. B6 ASM =1-193 Gr. 36			
Spindle Point	N89720-32-0034	- ASTE 1-564-72 Type 630			

Serial No. or

Material Specification

Identification

including Type or Grade

	,	
c. Spring	NX2689-0047	ASTM A-304-66 Gr. 4161H
d. Bolting		
e. The transmission of the companies	•	ASTM A-193-71 Gr. B7
Inlet Stud	N89727-0493 thru 0504	ASME SA-193 Gr. B7
Inlet Stud Nut	N89728-0497 thru 0508	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
Bonnet Stud	N89718-0497 thru 0508	ASTM A-193-71 Gr. B/ ASME SA-139 Gr. B7
Bonnet Stud Nut	N89719-0499 thru 0510	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
OTHER PARTS		
Spindle Ball	N89721-0034	Stellite 6
BARS & FORGINGS	N89725-31-0009	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
We certify that the statements made in this Date $\frac{10-31}{19}$ 19 $\frac{73}{19}$ Signed	•	Bi Herman
54.0 15 5161100	Manufacturer	QA Manager
Certificate of Authorization No. 33	1 expires November	9, 1974

CERTIFICATE OF SHOP INSPECTION

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

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

Factory futual Group of Insurance Co.

Date October	19 7	3	
Amald 1.	Chimer .	Commissions	H.R. GC65 Mass. 1090
- (Inspector)			National Board, State, Province and No.1

PLAN NO 2-1007



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

Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 3/10/94

Sheet: 1 of 1 Unit: WNP-2

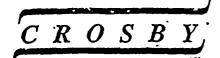
- 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Crosby Valve And Gage Co, 43 Kendrick Street, Wrentham, Massachusetts, 02093 (b) Repair Organization P.O. No. Job No. etc.: PO No C30786
- 4. Identification Of System: Main Steam Relief Valve (MSRV)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: WNP-2 Main Steam Relief Valves (MSRVs) were manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at WNP-2 plant. "Balily" Main Steam Relief Valve (MSRV) were also manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at Northern Indiana Public Service Co (NIPSCO), Balily Generating Station Nuclear 1 Plant. Supply System procured six (6) new (unused) "Balily" valves from NIPSCO as spares for use at WNP-2 plant. "Balily" valves were sent to Crosby for modification (upgrade) to make them equivalent in form, fit and function and interchangeable with WNP-2 valves which were also modified (upgraded) by Crosby. The "Balily" modified (upgraded) valves will be used as spare valves for future use for WNP-2 plant. "Balily" Main Steam Relief Valve (MSRV), Serial No N56000-01-0038 was modified (upgraded) to Serial No N63790-00-0138 by Crosby in accordance with PO No C30786. The details of the modification (upgrade) work is documented in the documentation package furnished by Crosby



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9.	Remarks: 1) See attached NV-1 (Pre - Modification) Code Data Report for MSRV, Serial No N56000-01-0038 2) See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) documenting the modification (upgrade) work performed by Crosby
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement (modification) conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 12-9-93 to 3-16-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection Commissions 9556 W NBT National Board, State, and Endorsements
-	



CROSBY VALVE & GAGE COMPANY WRENTHAM, MA

-PLAN NO. Z-1007

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

Quedip Lugh 3/10/94

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

1. Work performed by <u>Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093</u> (Name and Address) (Repair organization's P.O. No., Job No., etc.). <u>NV4000020</u>	
2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968 (Name and Address)	
3. Name and Identification of Nuclear Power Plant HANFORD #2	
4. Address of Nuclear Power Plant_RICHLAND_WA	
5. a. Identifying Nos. N63790-00-0138 1973 (Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built) b. Identification of component repaired or replacement component c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY	
6. Tests conducted: Hydrostatic (X.) Pneumatic () Design Pressure () Pressure 2370.0 psi 7. Identification of System MAIN STEAM	
8. Applicable Section(s) III of ASME Code, 1971 Edition	
Addenda_NOCode Case	
9. Description of workN56000-01-0038 WAS MODIFIED TO N63790-00-0138 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. 10.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-44-0127 BONNET N89717 N93407-45-0056 SPINDLE ASSY K55465 K62873-43-0057 SPR.WASHER N89724 K62856-45-0204 SPR.WASHER N89724 K62856-45-0204 SPR.WASHER N89723 K62857-45-0204 SPRING ASSY K55466 K62858-31-0002 PART PART NO. REPLACED WITH NOZZLE N89713 N93184-51-0154 DISC INSERT N89715 N93185-52-0201 THR.BRG.ADAPT.N89725 N93409-34-0011 ADJ.BOLT N89726 N93410-31-0004 ADJ.BOLT BUTT. COMMERCIAL N93411-33-0011 'ADJ.BOLT ASSY COMMERCIAL K63618-31-0004	
1 = 1/23/24.	

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

Certificate Holder's Serial No.__N63790-00-0138_

		567E
1		
	CERTIFICATE OF COMPLIANCE	益目
	We certify that the statements made in this report are correct and all design, material, and workmanship on this	** •
民器	MOD conforms to the applicable section of the ASME Code.	ġ I
翻譯	(repair/replacement)	莲 昌
	,	% -目
	Simon DA En Manager 24 Feb 1994	8 目
	Signed Jamens of Repair Organization) (Title) (Date)	沒言
	·	
		器目
2		数目
	OF DEVELOATE OF INCRECTION	
N.	CERTIFICATE OF INSPECTION	
	·	
	i, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel	麗目
	Inspectors and the State or Province of Massachusetts and employed by Factory Mutual	
	of Norwood, Massachusetts have inspected the repair or replacement described in this report on Feb 25, 1994 and state that to the best of my knowledge and belief, this repair or replacement	:2
	has been made or constructed in accordance with the applicable section of the ASME Code.	
1		₩.
	By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied,	数
120	concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employed shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or	變
	connected with this inspection.	100
越	Factory Mutual Systems	聚
到肾	Date 2/25 19/7	
1.00	Signed My St Colli: Commissions 1941455	爱
144	(Nat'l. Bd., State, Prov. and No.)	対

(Inspector)



CROSBY VALVE & GAGE COMPANY

WRENTHAM, MASS

Pricarp Engl

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

Q.C.-44A

	DATA REPOR' Safety and Safety Relie		
1. Manufactured By Crosby Valve			Wrentham, Mass. 02093
	Name and Addres	-	
Model No. HB-65-BP-FN	Order NoN-10528	<u> </u>	Contract Date 6/28/71
2. Manufactured For San Jose, Ca	ctric Company		205-AD1/-9
	ame and Address		Order No. 205-AD148
. Nonthern Indiana Dul	11- C		- M Chanton M - 5 W
3. Owner Northern Indiana Pul	Name and Address		ileytown, Indiana
4. Location of Plant Baileytown,]			•
4. Location of Plant ====================================			
5. Valve Identification MPL #B-22-1	7013 Serial No. N56000-	1-0038 Draw	ing No. H-56000 Rev. C
Tuna Safaty Daliaf	Auto - Au	. D n.e.	con - Inlas 6 Courtes 30
Safety Safety Relief Pilot Power	Office Si	eR_Pipe	Size - Inlet 6 Outlet 10
6. Set Pressure (PSIG) 1175		•	575°
G. Set Fressate (FSIG)			575° F Rated Temperature
Starrad Caratina 883950			Diameter 59
Sat. Steam	Los. Hr. & % Ov	erpressure	Blowdown xx3tox 5%
Hydrostatic Test (PSIC) Inlet2	370	omplete Valve _	825
7. The material design construction and	workmanship comply with	SME Code, Secti	on III.
Class 1 Edition	1971	Addenda Date	Summer 1972
I or II		• • • • • • • • • • • • • • • • • • • •	
Pressure Containing or Pressure Reta	ining Components		
	Serial No.		Material Specification
a. ARTING Forgings	Identification		Including Type or Grade
Dadu '	N90118-32-0009		TM A-105-71 Gr. II ME SA-105 Gr. II
Body	130110-32-0003		IM _A-105-71 Gr. II
Bonnet ZXXXXX	N89717-32-0022 .	AS	ME SA-105 Gr. Ti
b. Bar Stock and Forgings			· · · · · · · · · · · · · · · · · · ·
SWEETEN Disc Insert	N89715-32-0018	_AS	IM A-461-65 Type 630
Nozzle	N89713-32-0028		IM A-182-71 F316 ME SA-182 F316
Disc Holder	N89714-32-0038		S 5662 B
Top	N89724-32-0038	AS'	IM A-105-71 Gr. II
Spring Washers Bottom	N89723-31-0023	ASI ASI	ME SA-105 Gr. II FM A-193-71 Gr. B6
Adjusting XXXXXX Bolt	N89726-32-0015	ASI	IM A-193-71 Gr. B6 ME SA-193 Gr. B6
Spindle Point	N89720-32-0044	_AS	M A-564-72 Type 630

Serial No. or Material Specification **Identification** Including Type or Grade NX2689-0043 ASTM A-304-66 Gr. 4161H c. Spring d. Bolting C. XXXDEX PROPERTY SHOWS AS PROPERTY OF THE PR N89727-0445 thru 0456 Inlet Stud ASME 2H N89728-0449 thru 0460 Inlet Stud Nut **B7** N89718-0449 thru 0460 Bonnet Stud 2H N89719-0451 thru 0462 Bonnet Stud Nut OTHER PARTS N89721-0044 Stellite 6 Spindle Ball BARS & FORGINGS ASTM A-193-71 ASME SA-193 Gr. Thrust Bearing Adapter N89725-32-0033 We certify that the statements made in this report are correct. Date 10-31 19 73 Signed Crosby Valve & Gage Co. By Manufacturer QA Manager expires November 9. 1974 Certificate of Authorization No. ____331

CERTIFICATE OF SHOP INSPECTION

I. the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass, and employed by Mutual Boiler & Machinery Insurance Co.*, Waltham, Mass, have inspected the equipment described in this Data Report on Color Lot 11 1972 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Factory Mutual Group of Insurance Co.

Date Cictolian 31 19 73

Amalia : Character Commissions W.B. C. 65 Mars. 1090

(Inspector) National Board, State, Province and No.)





Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 3/10/94 Sheet: 1 of 1 Unit: WNP-2

- Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hantord Reservation, Benton County, Washington
- 3. (a) Work Performed By: Crosby Valve And Gage Co, 43 Kendrick Street, Wrentham, Massachusetts, 02093 (b) Repair Organization P.O. No, Job No, etc.: PO No C30786
- 4. Identification Of System: Main Steam Relief Valve (MSRV)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-SPARE	Crosby	N56000-01-0100 Modified To N63790-00-0139	N/A	N/A	1973	Replacement (Modification))	Yes, Code Class 1

7. Description Of Work Performed: WNP-2 Main Steam Relief Valves (MSRVs) were manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at WNP-2 plant. "Bailty" Main Steam Relief Valve (MSRV) were also manufactured by Crosby Valve And Gage Co (Crosby) for General Electric (GE) for use at Northern Indiana Public Service Co (NIPSCO), Bailty Generating Station Nuclear 1 Plant. Supply System procured six (6) new (unused) "Bailty" valves from NIPSCO as spares for use at WNP-2 plant. "Bailty" valves were sent to Crosby for modification (upgrade) to make them equivalent in form, fit and function and interchangeable with WNP-2 valves which were also modified (upgraded) by Crosby. The "Bailty" modified (upgraded) valves will be used as spare valves for future use for WNP-2 plant. "Bailty" Main Steam Relief Valve (MSRV), Serial No N56000-01-0100 was modified (upgraded) to Serial No N63790-00-0139 by Crosby in accordance with PO No C30786. The details of the modification (upgrade) work is documented in the documentation package furnished by Crosby



FORM NIS-2 OWNER'S RE	PURT FUR REPAIRS	UK HEPLACEM	IEN 13 (BUCK)
Tests Conducted: Hydrostatic Pnet Test Pressure: Psig Component Design Pre	7	Operating Pressi Test Temperature Temperature: ° F	
Remarks: 1) See attached NV-1 (Pre - Modification 2) See attached "Repair And Replacem Report (QC 292A) documenting the model.	ent To Nuclear Components	And Systems in Nucl	-01-0100 lear Power Plants* Certification
		-	
CER	TIFICATE OF COMPL	IANCE	
We certify that the statements made in a conforms to the rules of the ASME Cod Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applied Expiration Date: Not Applicable	e, Section XI	re correct and thi	's replacement (modification)
Prepared By Rudip Singh Materials And Ins	2Signed By	RAMO	
_ 1 .e	spection Date	Manager, Mate 3-11-94	rials And Inspection
			<u></u>
CERTIFICA I, the undersigned, holding a valid comi Vessel Inspectors and the State of Wash		National Board o	
(Factory Mutual Engineering Association) of described in this Owner's Report during	Norwood, Massachusett the period <u>/ ユ・</u> 9・	s have inspected 93 to 3	the components
state to the best of my knowledge and b corrective measures described in this C ASME Code, Section XI By signing this certificate neither the in	pelief, the Owner has p Owner's Report in acco	erformed examin ordance with the	nations and taken requirements of the
implied, concerning the examinations a Furthermore, neither the inspector nor i injury or property damage or a loss of a	nd corrective measure his employer shall be l	es described in ti liable in any man	nis Owner's Report. ner for any personal
Dan Hogoanth	Commission	s 9556W	NBI
lyspictor's Signature Date 3/14/94		National Board,	State, and Endorsements
Date 2/14/17			

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MA

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

PLAN NO. 2-1008

Judip Sur 5 3/10/94

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

3		E
		===
1.	Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093	<u>_</u> E
1	(Name and Address)	E
1	(Repair organization's P.O. No., Job No., etc.). NV400020	_E
=		
2.	Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968	_ E
l	(Name and Address)	[=
3.	Name and Identification of Nuclear Power Plant <u>HANFORD #2</u>	∤≣
•	•	_ =
		7
4.	Address of Nuclear Power Plant_RICHLAND_,WA	_=
=		==
5.		- ≣
		J≣
		-ほ
	c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY	-/≡
		==
		≡
6.	Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi	ΙĒ
7.	Identification of SystemMAIN STEAM	<u>=</u> E
	A. H. 14 O. of 14 1 1111	7
8.	Applicable Section(s) or ASME Code, 19_/1 Edition	
	A. J. J. 110	E
	Addenda_NO Code Case =	
_	Description of work NEGOOD 01.0100 MAS MODIFIED TO NEGOOD 00.0139	
J.		- =
		ΙΞ
	SOME OF STAT	-⊫
		-E
10	Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:	- =
		- <u> </u> =
		-⊫
		- ≡
		_
	SPR.WASHER N89724 K62856-46-0205	ΪΕ
		_
	SPRING ASSY K55466 K62858-31-0004	_} ≡
	PART PART NO: REPLACED WITH	- (=
	- ION ION ION INCLEASED WITH	_/≡
	NOZZLE N89713 N93184-51-0158	
	NOZZLE N89713 N93184-51-0158 DISC INSERT N89715 N93185-52-0200	
	NOZZLE N89713 N93184-51-0158 DISC INSERT N89715 N93185-52-0200 THR.BRG.ADAPT.N89725 N93409-34-0010	
	NOZZLE N89713 N93184-51-0158 DISC INSERT N89715 N93185-52-0200 THR.BRG.ADAPT.N89725 N93409-34-0010 ADJ.BOLT N89726 N93410-36-0139	
	NOZZLE N89713 N93184-51-0158 DISC INSERT N89715 N93185-52-0200 THR.BRG.ADAPT.N89725 N93409-34-0010 ADJ.BOLT N89726 N93410-36-0139 ADJ.BOLT BUTT. COMMERCIAL N93411-33-0009	
	NOZZLE N89713 N93184-51-0158 DISC INSERT N89715 N93185-52-0200 THR.BRG.ADAPT.N89725 N93409-34-0010 ADJ.BOLT N89726 N93410-36-0139	
	NOZZLE N89713 N93184-51-0158 DISC INSERT N89715 N93185-52-0200 THR.BRG.ADAPT.N89725 N93409-34-0010 ADJ.BOLT N89726 N93410-36-0139 ADJ.BOLT BUTT. COMMERCIAL N93411-33-0009	
	NOZZLE N89713 N93184-51-0158 DISC INSERT N89715 N93185-52-0200 THR.BRG.ADAPT.N89725 N93409-34-0010 ADJ.BOLT N89726 N93410-36-0139 ADJ.BOLT BUTT. COMMERCIAL N93411-33-0009	
	NOZZLE N89713 N93184-51-0158 DISC INSERT N89715 N93185-52-0200 THR.BRG.ADAPT.N89725 N93409-34-0010 ADJ.BOLT N89726 N93410-36-0139 ADJ.BOLT BUTT. COMMERCIAL N93411-33-0009	
	2. 3. 4. 5.	(Repair organization's P.O. No., Job No., etc.). NV4000020 2. Owner WASHINGTON PUBLIC POWER RICHLAND WA 99352-0968 (Name and Address) 3. Name and Identification of Nuclear Power Plant HANFORD #2 4. Address of Nuclear Power Plant RICHLAND WA 5. a. Identifying Nos. N63790-00-0139 1973 (Mitr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built) b. Identification of component repaired or replacement component - c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY 6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure2370.0 psi 7. Identification of System MAIN STEAM 8. Applicable Section(s) III of ASME Code, 19_71 Edition Addenda NO Code Case - 9. Description of work N56000-01-0100 WAS MODIFIED TO N63790-00-0139 (Use of additional sheat(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. 10.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO MODIFIED TO PART NO. BODY N90118 N93183-45-0128 BONNET N89717 N93407-46-0057 SPINDLE ASSY K55465 K62873-42-0056 SPR.WASHER N89724 K62856-46-0205 SPR.WASHER N89723 K62857-46-0205 SPRING ASSY K55466 K62858-31-0004

	CERTIFICA	TE OF COMPLIANCE	•
6 We certify that the MOD. (repair/replace	conforms to the	ort are correct and all design, material applicable section of the ASME Code	, and workmanship on this ·
Signed au	nunce of July July July July July July July July	e Q A Eng Manager	24 Feb., 1994 (Date)
		en er ander des des des la la la la la la la la la la la la la	
	CERTIFICA	ATE OF INSPECTION	
Inspectors and th	e State or Province of Massac	sued by the National Board of Boiler thusetts and employed byFar ected the repair or replacement descr	ctory Mutual
has been made o	2 <u>(</u> ,19 <u>94</u> and state that to the constructed in accordance with	he best of my knowledge and belief, th the applicable section of the ASMI	this repair or replacement Code.
concerning the re	pair or replacement described in	nor his employer makes any warrant, n this report. Furthermore, neither th ury or property damage or a loss of a	e Inspector nor his employe
THE TOURS TRIBLE			
Date2		Factory Mutual :	Systems

PLAN NO. 2-1008 Quain Euch

CROSBY

CROSBY VALVE & GAGE COMPANY WRENTHAM, MASS

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

Q.C.-44C

DATA REPORT Salety and Salety Relief Valves

		1
1. Manufactured By Crosby Valve	e & Gage Co., 43 Kendri	ck St., Wrentham, Mass. 02093
00 00	Name and Address	- 10- 1-0
Model No. FN Order No No. Ele	51726 Contract Date ctric Co., 175 Curtner	Ave., National Board No
2. Manufactured For San Jose, Co	alifornia 95125	Order No. 205-AD148
•		,
3. Owner Northern Indiana Pub		y Generating Station Nuclear I'
	Name and Address	
4. Location of Plant Baileytown, Spare	Indiana	·
Spare Mpt.#R22_rn11	3 N56000-01-0	100 Drawing No. H-56000 Rev. C
5. Valve Identification III II III III	Serial No. 1130000-01-01	Drawing No. 1-30000 Rev. 0
Type Safety Relie	efOnfice SizeI	Pipe Size Inch Inch Inch Inch
	Actuated Inc	ch inch inch inch
6. Set Pressure (PSIG) 1130		575 ⁰ F
	•	
Stamped Capacity 850500#/Hr.	Sat. 2 3 ≈ Overpres	sureBlowdown (PSIG)5Z
,		•
Hydrostatic Test (PSIG) Inlet23	370 Comple	ete Valve 825
7. The material, design, construction and	manhamanahan an-albu mush 4.00400	Cada Cantina III
0.00		
Class 1 Edition 197	1,Addenda DateSumm	ner 1972 ,Case No
Pressure Containing or Pressure Retain	ning Components	
	Serial No.	Material Specification
a. Or Forging	Identification	Including Type or Grade
Body	N90118-35-0031	ASTM A105-71 ASME SA105
200,		ASTM A105-71
Bonnet	N89717-36-0086	ASME SA105
b. Bar Stock and Forgings	•	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
	N89715-36-0107	ASTM A564-71 Type 630 ASME SA564 Type 630
91-a-1-		ASME SA564 Type 630 ASTM A182-71 Type 316
Nozzle	N89713-33-0051	ASME SA564 Type 630 ASTM A182-71 Type 316 ASME SA182 Type 316
Nozzle Disc Holder R55484-39-013	N89713-33-0051 4_N89714-35-0146	ASME SA564 Type 630 ASTM A182-71 Type 316 ASME SA182 Type 316 AMS 5662B
-	N89713-33-0051 4 N89714-35-0146 N89724-36-0111	ASME SA564 Type 630 ASTM A182-71 Type 316 ASME SA182 Type 316 AMS 5662B ASTM A105-71 ASME SA105
Disc Holder K55484-39-013	N89713-33-0051 4 N89714-35-0146 N89724-36-0111	ASME SA564 Type 630 ASTM A182-71 Type 316 ASME SA182 Type 316 AMS 5662B ASTM A105-71 ASME SA105 ASTM A193-71 Gr. B6 ASME SA193 Gr. B6
Disc Holder K55484-39-013 Spring Washers K55466-36-009 Adjusting Bolt	N89713-33-0051 4 N89714-35-0146	ASME SA564 Type 630 ASTM A182-71 Type 316 ASME SA182 Type 316 AMS 5662B ASTM A105-71 ASME SA105 ASTM A193-71 Gr. B6 ASME SA193 Gr. B6 ASTM A564 Type 630
Disc Holder K55484-39-013 Spring Washers K55466-36-009 Adjusting Bolt Spindle K55465-35-0104	N89713-33-0051 4 N89714-35-0146 N89724-36-0111 5 N89723-38-0129 N89726-40-0133 N89720-38-0126	ASME SA564 Type 630 ASTM A182-71 Type 316 ASME SA182 Type 316 AMS 5662B ASTM A105-71 ASME SA105 ASTM A193-71 Gr. B6 ASME SA193 Gr. B6 ASME SA193 Gr. B6 ASTM A564 Type 630 ASME SA564 Type 630
Disc Holder K55484-39-013 Spring Washers K55466-36-009 Adjusting Bolt	N89713-33-0051 4 N89714-35-0146	ASME SA564 Type 630 ASTM A182-71 Type 316 ASME SA182 Type 316 AMS 5662B ASTM A105-71 ASME SA105 ASTM A193-71 Gr. B6 ASME SA193 Gr. B6 ASTM A564 Type 630 ASME SA564 Type 630 Stoody No. 6
Disc Holder K55484-39-013 Spring Washers K55466-36-009 Adjusting Bolt Spindle K55465-35-0104	N89713-33-0051 4 N89714-35-0146 N89724-36-0111 5 N89723-38-0129 N89726-40-0133 N89720-38-0126	ASME SA564 Type 630 ASTM A182-71 Type 316 ASME SA182 Type 316 AMS 5662B ASTM A105-71 ASME SA105 ASTM A193-71 Gr. B6 ASME SA193 Gr. B6 ASME SA193 Gr. B6 ASTM A564 Type 630 ASME SA564 Type 630

. Spring	Identification N89722-0069	Including Type or Grade ASTM A304=66
. Bolting	N89722-0069	ASTM A304-66
•		
		
Other Parts such as Pilot Components		
Inlet Stud	N89727-1215 thru 1226	ASME SA193 Gr. R7
Inlet Nut	N89728-1209 thru 1220	ASME SA194 Gr: 2H
Bonnet Stud	N89718-1234 thru 1245	ASME SA193 Gr. B7
Bonnet Nut	N89719-1228 thru 1239	ASME SA194 Gr. 2H
	· · · · · · · · · · · · · · · · · · ·	
ertificate of Authorization No. 926	Manufacturer	QA Managér
CER	TIFICATE OF SHOP INSPECTION	
Pressure Vessel Inspectors a	valid commission issued by the Na nd the State or Province of Mass stems*, Norwood, Mass,	tional Board of Boiler and SS. and employed by have
state that to the best of my kr	ribed in this Data Report on nowledge and belief, the Manufacture pplicable Subsections of ASME Sect	r has constructed this equip-
pressed or implied, concerning the Inspector nor his employer	neither the Inspector nor his employed is the equipment described in this Da is shall be liable in any manner for ar arising from or connected with this is	ta Report.Furthermore, neither ny personal injury or property
		3
Date (Institution)	Commissions	Uns (205)



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/5/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Standby Uquid 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced relief valve SLC-RV-29A. The replacement work was performed as follows
 - 1) Removed existing relief valve
 - 2) Installed new relief valve
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



•						
	FORM NIS-2 OV	/NER'S REPOR	TFOR REPAIR	S OR REPLACEME	ENTS (Back)	
8 Tests Con		Pneumati re: 1200 to 1300 Psig Design Pressure		l Operating Pressui Test Temperature: Temperature: 150° (80.6 ⁰ F	None
9. Remarks:	See attached NV-1 Cod	e Data Report for new	relief valve Serial N	o 137180 1 1		
	ı		¥			
	-				•	
		CERTIFIC	ATE OF COMP	LIANCE		
	y that the statemen		wner's Report a	re correct and this	replacement confor	ms
	es of the ASME Cod le Symbol Stamp: N					
	e Of Authorization .					
Expiration	n Date: Not Applicable	,,		<i>a</i> .		
Prepared	By V. I Ach	2 15	Signed By	PAMO	e	
Prepared		sterials And Inspection	<i>Signed by</i> n	Manager, Materi	als And Inspection	
Date	7/6/9	4	Date	. 7-6-9	4_	
	,		6			
L	·					
					<u></u>	··
		CERTIFICATE (OF INSERVICE	INSPECTION		
I, the und	ersigned, holding a	valid commissio	on issued by the	National Board of	Boiler and Pressu	ure
Vessel In	spectors and the S	<i>tate of</i> Washingtor	n and employed	by Arkwright Mutual	Insurance Company	
(Factory M	lutual Engineering As In this Owner's Re	sociation) of Norwo	ood, Massachusei	ts have inspected t	he components	
state to the	he best of my know	rpon aunng me p ledge and bellef.	the Owner has	performed examina	tions and taken	
corrective	e measures describ					•
	de, Section XI g this certificate ne	ither the Inches	or nor hie amni	over mekee env we	rents avaraged	
	concerning the exam					
	ore, neither the ins property damage of					ai
2,0	Vhocan A	•	-			
asw-x	Upspector's Signature		Commissioi	National Board, S	tate, and Endorsement	
Date	7/4/94					
	•					į
Ī						1

	FORM NV-1 CERTIFIC	ATE HOLDERS' DAT	TA REPORT	FOR PRESSURE	OR VACUUM KE	Pg. 1 of _2	2
1.	Manufactured and certified by	Vinlel o Industrial of	Too			•	
2.	Manufactured for Washingto	n Public Power Suppl	y System. W	NP_2 OPS LIES Comp	lex, Warehouse 1, Richland, WA	North Power Plan	it Io
3.	Location of installation wash	ington Public Power	Supply Syste	Ineme and address	Isan Richlan	A UA 99357	· Plar
4.	Valve VDSCPS (model no., series no.)	Orifice size394	Nom	. inlet size1"	Outlet size	2"	
	(model no., series no.)	(in.)		(AP			•
5.	ASME Code, Section III, Divisi	on 1: 1974		or 107/	(class)	N/A (Code Case no.)	
		:				_	
٠6.	Type Spring	1400	N/A (blowdown, psi)	faced temp.]	(hydra, test, paig, inlet)	14 33 _{0 min} -	_ °F
7.	Identification 137180-1-1 t	hru -1-2 N/A	A	030766 Rest 0	A\V Lon D6 FJeN3	199/s tyear built)	—
					,		
8.	Control ring settingsN/A	~	C-PV-7	29 A, S/N 13	37180-1-1		
		3 1		- 174, 21201.	3,1,00	4 0 h	•
9.	Pressure retaining items:				Cul	Duff Sure b V/2 Tensile Strength	,
		0.2.141		Mat'l. S		Tensile	4179
	•	Serial No. or Identification		Including Typ	se or Grade	Strength	
	-					70 ksi	
	Body	T3815-1, -2		SA-351 Gr. Cl			
	Bonnet XXXXXX	<u>T3304-3, -4</u>		SA-351 Gr. Cl	75 ksi		
	SYMMONE Stem	94918		SA-479 TY 316 SA-479 TY 316		75 ksi	
	Nozzle	35726				75 ksi	
	Disk	30340		SA-479 TY 310 SA-479 TY 310		75 ksi	
	Spring WillWal Step	31828		SA-479 TY 310			
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	73028		SA-479 TY 310		75 ksi	
	XXXXX Plug	20330		ASTM A-313 T		*	
	Spring	8079541 / N4C		SA-194 Gr. 28		N/A	
	MANUAL MANUAL STUD	8866612	 -	SA-193 Gr. B		125 ksi	
	Continued below **	COOLULY					
10	Relieving capacity63_533_	15 /br (12.7 CPM)	•	10% overnessure as	s certified by the Nation	val Board _01/25/85	<u>. </u>
٠٠.	nelieving capacity	(steem or fluid, lb/hr)	- φ	el)	s cordinately are reason	(deta)	
	4. 6			177 2000 has made	- deelen madimae	oro of NC-2505	
11.		t from material requ	irements or	SA-351 Gr. Cl		70 ksi ·	
	** Cap	700737		SA-479 TY 316		75 ksi	
	Compression Screw	30091		SA-479 TY 310		75 ksi.	
	Gag Plug Screw	30091		Ot 4/2 II 2X		73 .02	
							二,
		CE	RTIFICATION	OF DESIGN .			- 1
Des	ign Specification certified by	David M. Bosi		P.E. State _		no. 20941	
Des	ign Report certified by	N/A		P.E. State _	N/A Reg	. no. <u>N/A</u>	
							
			TIFICATE OF (
We	certify that the statements mad	le in this report are correct	and that this v	aive conforms to the ru	ales for construction of	the ASME Code, Sec	noit:
m, c	Division 1.				•		ļ
					V 1 10	1006	
NV	Certificate of Authorization No.			Expire:	November 18	, 1774	
	1. 2d. 611	Kunkle Industries	•	\mathcal{Z}_{i}	1.11.11.	·	
Dat	e <u> </u>	Lonergan Valve Di		_ Signed	i lauthorized represen	istrel	

^{*}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.

Certificate Holder's Serial No. 137180-1-1 thru -1-2

CERTIFICATE OF INS	PECTION
i, the undersigned, holding a valid commission issued by the National Board of Michigan and employed by HSBI & I Co.	f Boiler and Pressure Vessel Inspectors and the State or Province
of Hartford, CT	have inspected the valve described in this Data Report on
2-24-94, and state that to the best of my knowledge and belief	f, 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 wa	
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.	mich 402
Date 224.94 Signed Fred Wild /r. Visian Con	nmissions AIB 1444 (NI31A), Ind. 840 [Nat'l 8d. Ginct. Endorsements and state or prev. and no.]
(Authorized Inspector)	[Nat'l, Bd. Gncl, andorsements) and state or prov. and no.]
	•



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 7/5/94 Sheet: 1 of 1

Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
 (b) Repair Organization P.O. No. Job No. etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Standby Liquid Control (SLC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced relief valve SLC-RV-29B. The replacement work was performed as follows
 - 1) Removed existing relief valve
 - 2) Installed new relief valve
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

B Tests Conducted: Hydrostatic Pneum Test Pressure: 1200 ৯ 1300 i Component Design Press	Psig 7	Operating Pressure Cest Temperature: 79.2° cemperature: 150° F	
7. Remarks: See attached NV-1 Code Data Report for	new relief valve Serial No	137180 1 2	*
•			
	•		
•		•	•
CERTIL	FICATE OF COMPL	ANCE	
We certify that the statements made in this to the rules of the ASME Code, Section XI	's Owner's Report ar	e correct and this repla	coment conforms
Type Code Symbol Stamp: Not applicable			
Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable	olo		
1	Clamed Bu	OA mon	
Prepared By Lucy Suis Kulip Singh - Materials And Inspe	Signed By ction	Manager, Materials An	nd Inspection
1		7-6-94	
			ı
CERTIFICAT	TE OF INSERVICE II	ISPECTION	
I, the undersigned, holding a valid commi	ssion issued by the	National Board of Boll	er and Pressure
Vessel Inspectors and the State of Washing	gton and employed b	y Arkwright Mutual Insur	rance Company
(Factory Mutual Engineering Association) of No described in this Owner's Report during to	he period <u>3-24</u>	<u>-94</u> to <u>7-1-</u>	94and
state to the best of my knowledge and bel	lef, the Owner has p	erformed examination	s and taken
corrective measures described in this Ow ASME Code, Section XI	mers Report in acco	raance with the requir	ements of the
By signing this certificate neither the insp	ector nor his employ	ver makes any warran	ty, expressed or
implied, concerning the examinations and Furthermore, neither the inspector nor his	i corrective measure s emplover shall be l	s descriped in this Ov lable in anv manner fo	rners Heport. Franv personal
injury or property damage or a loss of any	kind arising from o	r connected with this i	Inspection
Dry Oppracy H	Commissions	9556W	NBI
Visioctor's Signature		National Board, State, a	and Endorsements
Date			•
·			

	•	s Required by the Provision	ons or the As	ivie Code, Secti	on III, Division	Pg. 1 of <u>2</u>
1.	Manufactured and certifie	Kurkle Industries, d by Lonergan Valve Divi	sion. 8222 B	luffton Road. Fo	ort Vayne, TN 40	5319
2.	Manufactured for Washin	ngton Public Power Supply	System. WNI	2-2 OPS WHS COMP	olex, Warehouse Richland,	1. North Power Plant Lox WA 99352
3.	Location of installation	Mashington Public Power S	Supply System	(name and address)	Complex, Ware	
4.	Valve <u>VDSCDS</u> (model no., senes no.	Orifice size394	Nom. i	nlet size1"	Outlet	size
5.	ASME Code, Section III, D	Division 1: 1974 (edition)		- 197 <u>4</u> enda date)	7 (class)	N/A (Code Case no.)
.6.	Type Spring Spring	1400 Hated) (set pressure, psig)	N/A (blowdown, psi)	100° F (rated temp.)	2100 (hydro, test, paig, inl	eu at <u>330 min</u> °F
7.	Identification 137180-1- (Cert. Helde	-1 three -1-2 N/A (CRM)	A95	0746 Rest. 0	N/A (Nat'l. Bd. no.)	199/s (year built)
8.	Control ring settings	I/A				
•			SLC-R	v-29B,8	11/1 13718	30-1-2
9.	Pressure retaining items:		3 ,.	, , , ,	Qued	Specific Spe
	•	Serial No. or Identification	*	Mat'l. S Including Ty	Spec., pe or Grade	6)2114 Tensile Strength
	Body	T3815-1, -2		SA-351 Gr. C	F8M	70 ksi
1	Bonnet XXXXXX	T3304-3 -4		SA-351 Gr. C	F8M	70 ksi
3	5666666 Sten	94918		SA-479 TY 31		75 ksi
ı	Nozzie	35726		SA-479 TY 31		75_ksi
1	Disk	30340		SA-479 TY 31		
	Spring WOOD Step	31828		SA-479 TY 31		
	ASDSUGGESSON DE P	in Screws 30091		SA-479 TY 31		75_ksi
3	\$2000K; Plug	73028		SA-479 TY 31	6	75 ksi
:	Spring	20330		ASTM A-313 T	Y 316	
)	SODORK Nut	8079541 / N4C		SA-194 Gr. 2	£	
• 3	0000000066 Stud	8866612		SA-193 Gr. B	7:	125 ksi
10. f		33 1h /hr (12.7 (CPM) (steem or fluid, fo/hr)				ational Board <u>01/25/85</u>
-4	AL 0	empt from material requi	rements of N		A	
_	Camprocoton Come	H8506-10, -13		SA-351 Gr. Cl		70 ksi ·
	Compression Screw Sag Plug Screw	700737		SA-479 TY 316		75 ksi
2	ex ring Screw	30091		SA-479 TY 316)	75 ksi
				<u> </u>		
Desig	n Specification certified b		TIFICATION OF	DESIGN	WA	Reg. no. 20941 `
	n Report certified by	N/A		P.E. State _	37/4	Reg. no. N/A
		•				neg. no.
	ertify that the statements a	CERTII	FICATE OF CO		les for construction	of the ASME Code, Section
NV C	ertificate of Authorization		7	Expires	November	18, 1994
Date .	2-24-94 Na	Kunkle Industries, me <u>Lonergan Valve Divi</u>	ision s	Signed Bizzan	S. S. C.C.	negative)

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES.

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

Certificate Holder's Serial No. 137180-1-1 thru -1-2

CERTIFICATE OF	INSPECTION
I, the undersigned, holding a valid commission issued by the National Boar	
of Michigan and employed by HSBI & I Co	•
of Hartford, CT	have inspected the valve described in this Data Report on
2-24-74, and state that to the best of my knowledge and be	olief, 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	t be liable in any manner for any personal injury or property damage or
a loss of any kind arising from or connected with this inspection:	mich 402
Date 2 2 4.94 Signed & Jacker / Lucy	Commissions N/B 1444 (NIBIA), Ind. 840
(Authorized Insopritor)	[Nat'l, Bd. (incl. endorsements) end state or prov. and no.)



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/15/94 Sheet: 1 of 1

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

Unit: WNP-2

 Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNI Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001D	WPPSS	B22-G001D-P1	N/A .	N/A	1983	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-1D. The replacement work was performed as follows
 - 1) Removed existing relief valve MS-RV-1D, Serial No N63790-00-0050 with set pressure of 1175 Psig at rated temperature of 575° F
 - 2) Installed replacement relief valve with Serial No N63790-00-0047 with set pressure of 1175 Psig at rated temperature of 575° F
 - 3) Replaced four (4) nuts for the relief valve inlet joint
 - 4) Replaced two (2) bolts for the relief valve outlet joint
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES -

- 1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system
- 2) ASME Section III Code Class 1, 1971 Edition with no Addenda for the relief valve



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

Te	st Temperature: 200.7/	
for replacement relief valve S aged joint - test pressure of 1 ot joint, nozzie ring and adjus	021 Psig and test temperate ting ring set screw joints - to	est pressure of 6.7 Psig a
FICATE OF COMPLIA	ANCE	
i DSigned By ection	Q Mar	
TE OF INSERVICE IN	SPECTION	
ngton and employed by orwood, Massachusetts the period 4/28/lilef, the Owner has perviced according to the control of the corrective measures a employer shall be lie	Arkwright Mutual Insur have inspected the conference of the confer	rance Company components 3 - 94 and s and taken rements of the ty, expressed or uner's Report. or any personal
Commissions	9556 W National Board, State, a	NBI and Endorsements
	for replacement relief valve Songed joint - test pressure of 1 det joint, nozzie ring and adjusting at 575° F for relief valve in the sign at 575° F for relief valve in the sign at 575° F for relief valve in the sign at 575° F for relief valve in the sign at 575° F for relief valve in the sign and employed by the North and employed by the North and employed by the period 4/28/ sign and employed by the period 4/28/ sign and employed by the owner's Report in according to the sign and employed by the owner's Report in according to the sign and employer shall be like the sign and employer shall be sign and employer shall be like the sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall be sign and employer shall shall shall shall shall shall shall shall shall shall shall sh	for replacement relief valve Serial No N63790-00-0047 reged joint - test pressure of 1021 Paig and test temperate et joint, nozzie ring and adjusting ring set screw joints - te sig at 575° F for relief valve inlet piping and 500 Paig at - sig at 57

the sales from the second responsible which was

CROSBY VALVE & GAGE COMPANY.

WRENTHAM, MASS PLAN NO. 2-1013

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

DATA REPORT

Quality Sups

Safety	and Safety Relief Valves	6/26/94
1. Manufactured By Crosby Valve & G.		•
	Name and Address	
Model No. HB-65-BP-FN Order No.	N94275 Contract Date_ ric Company, 175 Curtn	4/24/79 National Board No. N/A
2. Manufactured For San Jose CA		
Name	and Address	
3. Owner Washington Public Powe	r Supply System, Richl Name and Address	and, Washington 99352
4. Location of Plant Hanford Reser		incton 99352
	· · · · · · · · · · · · · · · · · · ·	
5. Valve Identification MPL #B22-F0	<u>13</u> Serial No. <u>N63790-00-0</u>	047Drawing No. <u>DS-A-63790 Rev</u> .C
Type Safety Relief		pe Size Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated	Inch	Inch Inch Inch
6. Set Pressure (psig) 1175		575° F
		Rated Temperature
Stamped Capacity 884,314	<u> </u>	loudoun (psig) 2% to 11%
Hydrostatic Test (psig) Inlet	97. 2370 Outlet 110	5 psig (Assembled Valve) 0 psig (Body Only)
		to Valves for Closed Systems Only)
Pressure Retaining Pieces	•	
	Serial No.	Material Specification
Rar Stock & Forgings	Identification	Including Type or Grade
Body	N93183-35-0066	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet		ASTM Al05-71 Gr. II ASME SAl05 Gr. II
p. secreconnectelization —	<u> N93407-35-0029</u>	ASNE SAIOS GE. II
ECHOCKER Disc Insert	N93185-34-0078	ASME SA637 Gr. 718
Nozzle	N93184-32-0049	ASME SA182 Gr. F316
Disc Holder*K55484-35-0098	*N89714-34-0136	AMS 5662B
Spring WashersK62858-35-0029	K62856-35-8888	ASTM A105-71 Gr. II ASME SA105 Gr. II
391118 #43H618X02030-33-0029	<u> </u>	
Adjusting Bolt	N93410-33-0054	ASME SA193 Gr. B6 ·
Spindle Point K62873-37-0148_		ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0029	*N89722-0003	ASTM A304-66 Gr. 4161 H
d. Bolting		ZX00380110
e. Spindle Ball K62873-37-0148	N93213-0215	Stoody #6
Thrust Bearing Adapter	N93409-32-0049	ASME SA193 Gr. B6
Bonnet Stud (BW5, I17)	N93207-0561 thru 0572	ASIM A193-/1 Gr. B/ ASME SA193 Gr. B7
Bonnet Stud Nut (J87)	N93210-0781 thru 0792	ASME SA194 Gr. 2H
	N93216-0563 thru 0574	ASTY 1103-71 Gr. B7 ASNE SA193 Gr. B7
Inlet Stud Nut (BW8)	N93218-0567 thru 0578	ASTM A194-71 Gr. 2H .
		ASME SA194 Gr. 2H

CERTIFICATION OF DESIGN CERTIFICATION OF DESI	justing Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Sonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Sorialization is required unless indicated by an asterisk.
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 6 1711 Class 1 (Date) Date //-5-80 Signed Crosby Valve 6 Gage Co. by A.C. Casawal (N Certificate Holder) Our ASME Certificate of Authorization No. 1878 to use the NV symbol expires September 30, 1983 (Date) CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN CERTIFICATION OF DESIGN ASSOCIATED AND ASSOCIATED ASSOCIATED ASSOCIATED AND ASSOCIATED AND ASSOCIATED ASSOCIATED AND ASSOCIATED AND ASSOCIATED ASSOCIATED ASSOCIATED AND ASSOCIATED ASSOCIATED ASSOCIATED AND ASSOCIATED ASSOCIATED ASSOCIATED ASSOCIATED AS	
to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section IIII, Div. 1, 1971 Edition, Addenda No Addenda, Code Case No. 1567 6 1711 Class (Date) Date //-5-80 Signed Crosby Valve & Gage Co. No. 1567 6 1711 Court 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 I only) on file at Crosby Valve & Gage Company 43 Kendrick Street, Wrentham, Massachusetts 02093 Design specifications certified by Bowd P. Brooks Stress report certified by W.D. Greenlaw PE State California Reg. No. 13655 Stress report certified by W.D. Greenlaw FE State Massachusetts Reg. No. 14784 Signature not required - list name only. CERTIFICATE OF SHOP INSPECTION I., the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts have inspected the pump, or valve, described in this Data Report on 19 XI had 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 watrant, expressed or implied, concerning the equipment described in this Data Report. Furtherwore, neither the Inspector nor his employer makes any watrant, expressed or implied, concerning the equipment described in this Data Report. Furtherwore, neither the Inspector nor his employer makes any watrant, expressed or implied, concerning the equipment described in this Data Report. Furtherwore, neither the Inspector nor his employer shall be Italia in any manner for any expressed or implied, concerning the equipment described in this Data Report. Furtherwore, neither the Inspector nor his employer shall be Italia in any manner for any watrant, in the state of the formation of the property demans o	
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CERTIFICATE OF SHOP INSPECTION CERTIFICATE OF SHOP INSPECTION In the undersigned, holding a valid commission issued by the National Board of Boiler and employed by Factory Mutual Systems* of Norwood, Massachusetts are 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 Inspection or any kind arising from or connected with this inspection. Commissions MASS 126 6	symbol expires_September 30, 1983
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Design specifications certified by Bovd P. Brooks Reg. No. 13655 Stress report certified by W.D. Greenlaw Reg. No. 14784 PE State Massachusetts Reg. No. 14784 CERTIFICATE OF SHOP INSPECTION I., the undersigned, holding a valid cormission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts are inspected the pump, or valve, described in this Data Report on 1957 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. Furtherwore, neither the Inspector nor his employer shall be liable in any manner for any bearsonal injury or property damage or a loss of any kind arising from or connected with this inspection. Date 1981	
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CERTIFICATE OF SHOP INSPECTION CERTIFICATE OF SHOP INSPECTION Certificate of Province of Massachusetts And employed by Factory Mutual Systems* of Norwood, Massachusetts 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, 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 makes any warrant, expressed or implied, concerning the equipment described in this Data Report. Furthermore, 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 beersonal injury or property damage or a loss of any kind arising from or connected with this inspection. Commissions MASS 126 9	
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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 Massachusetts and employed by Factory Mutual Systems* of Norwood, Massachusetts are inspected the pump, or valve, described in this Data Report on	Signature not required - list name only.
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(Nat'1. Bd., State, Prov. and No.)	
	(Nat'1. Bd., State, Prov. and No.)



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/15/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001B	WPPSS	B22-G001B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-5B. The replacement work was performed as follows
 - 1) Removed existing relief valve MS-RV-5B, Serial No N63790-00-0061 with set pressure of 1205 Psig at rated temperature of 575° F
 - 2) Installed replacement relief valve with Serial No N56000-02-0043° with set pressure of 1205 Psig at rated temperature of 575° F
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES -

- 1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system
- 2) ASME Section III Code Class 1, 1971 Edition with Summer 1972 Addenda for the "Bailly" relief valve
- 3) * "Bailly" relief valve Serial No N56000-02-0043 was modified by Crosby to Serial No N63790-00-0136



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

8 Tests Conducted: Hydrostatic Pneumat Test Pressure: 1021/6.8 Psig Component Design Pressure	,	Test Temperature: 20	0.7/82 ⁰ F
9. Remarks: 1) See attached NV-1 (Pre - Modification) Cox 2) See attached "Repair And Replacement To Nuclear Compx documenting the modification (upgrade) work performed by C 3) Nominal operating pressure test on relief valve inlet flanged 4) Pneumatic test on relief valve outlet joint, body to bonnet joint test temperature of 82° F 5) Component design pressure and temperature - 1250 Psig appining	onents And Systems I rosby for "Bailly" relief I joint - test pressure o int, nozzle ring and ac	n Nuclear Power Plants* C valve If 1021 Psig and test tempe ljusting ring set screw joints	ertification Report (QC 292A) erature of 200.7 [©] F s - test pressure of 6.8 Psig ar
CERTIFIC	CATE OF COMP	LIANCE	
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 Prepared By Kuldip Singh - Materials And Inspection Date 1 (5)4	Slaned By	RAM oe Managor, Materials	s And Inspection
		`	
CERTIFICATE	OF INSERVICE	INSPECTION	
I, the undersigned, holding a valid commission Vessel inspectors and the State of Washington (Factory Mutual Engineering Association) of Norw 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 inspecting implied, concerning the examinations and confirm the inspector of the injury or property damage or a loss of any kind of the state of the injury of the state of the injury of the state of the injury of the state of the injury of the state of the injury of the state of the injury of the state	in and employed rood, Massachuset period 4/2; the Owner has pr's Report in accuracy nor his employer shall be	by Arkwright Mutual Ints have Inspected the 7/94 tototo	surance Company components /3- 94 and ons and taken ulrements of the anty, expressed or Owner's Report. for any personal
hispoctor's Signature	Commission		e, and Endorsements
Dato	·		

C R O S B Y

CROSBY VALVE & GAGE COMPANY WRENTHAM, MA

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

SHEET TOP 2

PLAN NO. 2-1012

REPAIR AND REPLACEMENT

TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

HIPPIRE		TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS	
THIRTIE.	1.	Work performed by <u>Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093</u> (Name and Address) (Repair organization's P.O. No., Job No., etc.). NV4000020	
	2.	Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968 (Name and Address)	
	3.	Name and Identification of Nuclear Power Plant HANFORD #2	
	4.	Address of Nuclear Power Plant RICHLAND ,WA	
	5.	a. Identifying Nos. N63790-00-0136 —	
		Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi Identification of System MAIN STEAM	
₹	8.	Applicable Section(s) III of ASME Code, 19 71 Edition	E
=	٠.	The state of the s	E
		Addenda NO Code Case —	
	9.	9 · · · · · · · · · · · · · · · · · · ·	
	9.	Addenda NO Code Case — Description of work N56000-02-0043 WAS MODIFIED TO N63790-00-0136 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO.	
	9.	Addenda NO Code Case — Description of work N56000-02-0043 WAS MODIFIED TO N63790-00-0136 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-42-0125 BONNET N89717 N93407-43-0054	
	9.	Addenda_NO	
	9.	Description of work N56000-02-0043 WAS MODIFIED TO N63790-00-0136 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA.	
	9.	Description of work N56000-02-0043 WAS MODIFIED TO N63790-00-0136 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA.	
	9.	Description of work	
	9.	Description of work	

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

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19		经目
	CERTIFICATE OF COMPLIANCE	EN CONTRACTOR
	We certify that the statements made in this report are correct and all design, material, and workmanship on this	25.45X
4	MOD. conforms to the applicable section of the ASME Code. (repair/replacement)	意目
	(repair/replacement)	器 昌
10	•	新目
述		題目
	1 1 1 01 6 M 11 04 Feb 1994	
	Signed Causence of Repair Organization) (Title) (Date)	凝目
	(Authorized Rep. of Repair Organization)	
		3
-		
		THE STATE OF
1		
23	CERTIFICATE OF INSPECTION	
	· ·	
7	to the state of Boiler and Pressure Vessel	٠
	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>Massachusetts</u> and employed by <u>Factory Mutual</u> Inspectors and the State or Province of Massachusetts and employed by the Province of Massachusetts and employed by the Province of Massachusetts and employed by the Province of Massachusetts and Employed by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and Employed by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and Employed by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and Employed by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and Employed by the National Board of Boiler and Pressure Vessel Inspectors and Pr	
		- 47
	101 40.6/ state that to the hest of my knowledge and belief, this repair of replacement	
	has been made or constructed in accordance with the applicable section of the Admic Court	題目
	By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied,	
	By signing this certificate, neither the inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the inspector nor his employ concerning the repair or replacement described in this report.	
	shall be liable in any manner for any personal injury of property sames	. =
	connected with this inspection. Factory Mutual Systems	
	$p_{\text{ato}} = \frac{2}{2} \frac{19\hat{j} \cdot 1}{1} \cdot \frac{19\hat{j} \cdot 1}{1}$	
歐	Commissions M4.1455	
EX	Signed (Nat'l. Bd., State, Prov. and No.)	
	(Inspector)	
	(Inspector)	



CROSBY VALVE & GAGE COMPANY 6/20194 WRENTHAM, MASS

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

Q.C.-44A

DATA REPORT Safety and Safety Relief Valves

1. Manufactured By Crosby Valve	& Gage Co. 43 Ker	drick St.	. Wrentham. Mass. 02093
1. Manufactured By Orosby Varve	Name and Addres	SS	1
Model No. HB=65-BP-FN	Order No. N=1052	.86	Contract Date 6/28/71
Model No. <u>HB-65-BP-FN</u> General Elec	tric Company		1
2. Manufactured For San Jose, Ca	lifornia		Order No 205-AD148
N2	me and Address		•
3. Owner Northern Indiana Pub	lic Service Co., B	ailly Ger	nerating Station Nuclear I. ·
	Name and Address		Baileytown, Indiana
4. Location of Plant Baileytown,	Indiana [/]		
4. Location of Plant			
5. Valve [dentification MPL #B-22-F	013 Serial No. <u>N56000-</u>	02-0043 p	rawing No. H-56000 Rev. C
mus Coform Delief	Online Si	R 19	on Size Inlet 6 Outlet 10
Safety Safety Relief Pilot Power	Actuated	Inch	ipe Size —— Inlet 6 Outlet 10 Inch Inch Inch
6. Set Pressure (PSIG) 1205			575° Rated Temperature
906250	3		5 7
Stamped Capacity 900230	Lbs. Hr. : 7 O	erpressure	Blowdown 15500 5%
Hydrostatic Test (PSIG) Inlet 2:	370	Complete Val	ve
7. The material, design, construction and	weekmanahin anmalu with	LEUE Code	Section III
			•
Class 1 Edition	1971	Addenda [Date Summer 1972
XXX			
Pressure Containing or Pressure Retain	ning Components		
			Managia I Canadian Man
1.XXXXXX Forgings	Serial No. Identification		Material Specification Including Type or Grade
and the foldings			ASTM A-105-71 Gr. II
Body	N89711-32-0025	-	ASME SA-105 Gr.II
- 300000	N89717-32-0019		ASTM A-105-71 Gr. II ASME SA-105 Gr. II
Bonne VOLXXXX	_103717=32=0013	•	ASIME SECTION
b. Bar Stock and Forgings	,	· -	
XXXXXXXXX Disc Insert	N89715-31-0029	_	ASTM A-461-65 Type 630
	N89713-32-0027		ASTM A-182-71 F316 ASME SA-182 F316
Nozzle		-	
Disc Holder man	N89714-32-0043 N89724-32-0046	_	AMS 5662 B ASTM A-105-71 Gr. II
Top Spring Washers Bottom	N89723-31-0002		ASME SA-105 Gr. II
	N89726-34-0047	_	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
AdjustingXXXXX Bolt		-	
Spindle Point	N89720-32-0035	-	ASTM A-564-72 Type 630
• •	•		.00.

Serial No. or Material Specification Identification Including Type or Grade NX2689-0048 ASTM A-304-66 Gr. 4161H c. Spring d. Bolting e. MISTONGGOOGSCHOOCHMOOGGHANGGOCK Inlet Stud N89727-0505 thru 0516 ASTM Inlet Stud Nut N89728-0509 thru 0520 Bonnet Stud N89718-0509 thru 0520 N89719-0511 thru 0522 Bonnet Stud Nut OTHER PARTS Spindle Ball N89721-0035 Stellite 6 BARS & FORGINGS Thrust Bearing Adapter N89725-32-0032 We certify that the statements made in this report are correct. Date /0-3/ 19 73 Signed Crosby Valve & Gage Co. By Manufacturer QA Manager 331 expires November 9, 1974 Certificate of Authorization No. _

CERTIFICATE OF SHOP INSPECTION

I. the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Mutual Boiler & Machinery Insurance Co.*. Waltham, Mass. have Mass. __ have inspected the equipment described in this Data Report on Codolic in all 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 *Factory Mutual Group of Insurance Co. damage or a loss of any kind arising from or connected with this inspection.

- Commissions N.B. 6065 17055. 1090 (Inspector) National Board, State. Province and No.1



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/15/94 Sheet: 1 of 1 Unit: WNP-2

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

 Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
 (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
, B22-G001B	WPPSS	B22-G001B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-2B. The replacement work was performed as follows
 - 1) Removed existing relief valve MS-RV-2B, Serial No N63790-00-0049 with set pressure of 1175 Psig at rated temperature of 575° F
 - 2) Installed replacement relief valve with Serial No N56000-01-0037° with set pressure of 1175 Psig at rated temperature of 575° F

3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES

- 1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system
- 2) ASME Section III Code Class 1, 1971 Edition with Summer 1972 Addenda for the "Bailly" relief valve
- 3) * "Bailly" relief valve Serial No N56000-01-0037 was modified by Crosby to Serial No N63790-00-0134



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

		Operating Pressure X Other None
Test Pressure: 1021/6.7 Psig		Test Temperature: 200.7/79.60 F
Component Design Pressure: 12	250/500 Psig	Temperature: 575/470° F
2. Remarks: 1) See attached NV-1 (Pre - Modification) Code D 3 See attached "Repair And Replacement To Nuclear Component ocumenting the modification (upgrade) work performed by Crosb 3 Nominal operating pressure test on relief valve inlet flanged join 4 Preumatic test on relief valve outlet joint, body to bonnet joint, rest temperature of 79.6° F 4 Component design pressure and temperature - 1250 Psig at 57 6 ping	nts And Systems II by for "Bailly" relief nt - test pressure o nozzle ring and ad	n Nuclear Power Plants" Certification Report (QC 292A) valve f 1021 Psig and test temperature of 200.7 ⁰ F ljusting ring set screw joints - test pressure of 6.9 Psig ar
CERTIFICAT	TE OF COMP	LIANCE
We certify that the statements made in this Owi	naria Banari a	re correct and this replacement conforms
to the rules of the ASME Code, Section XI	uer a neport a	re correct and this replacement contorms
Type Code Symbol Stamp: Not applicable		
Certificate Of Authorization No.: Not applicable		
· ·		
Expiration Date: Not Applicable		0.4
Dunnand Du No Latoh Carola	C(extru a
Prepared By Yudih Such Kuldip Singh - Materials And Inspection	Signed By	Manager, Materials And Inspection
		• • • • • • • • • • • • • • • • • • • •
Date7 5 94	Date	7-15-94
,		
CERTIFICATE OF	INSERVICE	INSPECTION
		Mada - 18 1 - 18 - 18 - 18 - 18 - 18 -
I, the undersigned, holding a valid commission		
Vessel Inspectors and the State of Washington a		
(Factory Mutual Engineering Association) of Norwood		
described in this Owner's Report during the per		
state to the best of my knowledge and belief, th		
corrective measures described in this Owner's	Report in acc	ordance with the requirements of the
ASME Code, Section XI		<u>,</u> .
By signing this certificate neither the inspector		
implied, concerning the examinations and corre		
Furthermore, neither the inspector nor his emplinity or property damage or a loss of any kind		
D. Charinett	Commission	18 9556 W NBI
Helman Stranger	_ commission	National Board, State, and Endorsements
(raspector's Signature		reautiful post of pratte, and Endorsements
Date 7-15-94		•

C R O S B Y

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MA

PUAN NO. 2-1013

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

Puldip Sup 5 6/26/94

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

1.	Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093	1					
	(Name and Address) (Repair organization's P.O. No., Job No., etc.). NV4000020						
-	(Repair organization 5 r.o. No., 300 No., etc.). NATOVOLO	쁥					
2.	Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968						
1	(Name and Address)	冟					
		=					
з.	Name and Identification of Nuclear Power Plant HANFORD #2						
		╧					
4.	Address of Nuclear Power Plant RICHLAND .WA	上					
		丰					
5.	a. Identifying Nos. N63790-00-0134 1973						
	(Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)						
	b. Identification of component repaired or replacement component	-≣					
	c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY	<u>.</u>					
-	7						
6	sts conducted: Hydrostatic (X.) Pneumatic () Design Pressure () Pressure2370.0 psi	E					
		E					
7.	dentification of SystemMAIN_STEAM	.厓					
		킅					
8. /	Applicable Section(s) III of ASME Code, 19 <u>.71</u> Edition						
	,						
	4 4 4 - 4 - 110 Ond- One						
	Addenda NO Code Case =	星					
9. 1							
9. 1	Description of workN56000-01-0037 WAS MODIFIED TO N63790-00-0134 <						
	Description of workN56000-01-0037 WAS MODIFIED TO N63790-00-0134						

	CERTIFICATE OF COMPLIANCE -	
	We certify that the statements made in this report are correct and all design, material, and workmanship on this <u>MOD.</u> conforms to the applicable section of the ASME Code. (repair/replacement)	Kedikana Hummin
	Signed Laurence of Sepair Organization) (Title) (Date)	
	(Authorized Rep. of Repair Organization) V (Fille) P (Date)	
	CERTIFICATE OF INSPECTION	
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Massachusetts</u> and employed by <u>Factory Mutual</u> of <u>Norwood, Massachusetts</u> have inspected the repair or replacement described in this report on <u>Feb 29</u> , 19 79 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.	mun Juman
3	By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or	
ń.	connected with this inspection. Factory Mutual Systems Date 2/24 19 94.	
, .	Signed M. Il Polli Commissions M4 1455	
	(Inspector) (Nat'l. Bd., State, Prov. and No.)	
		V



CROSBY VALVE & GAGE COMPANY

WRENTHAM, MASS

Quaip Eurs

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

Q.C:-44A 6/26/5

•	DATA REPORT Safety and Safety Relief Va	lves	
1. Manufactured By Crosby Valve	S. Gage Co., 43 Kendri	ck St., Wrentham, Ma	nss. 02093
TID OF DD DV		_	6/29/71
Model No. HB-65-BP-FN General Elect	Order No. N-103286	Contract Date	0/20//1
General Electi	fic Company		205-AD1/c8
2. Manufactured For San Jose, Cal	ne and Address	Order No.	20J-RD140
t .		. G	. W 1
3. Owner Northern Indiana Publ:		y Generating Station	Nuclear 1,
	Name and Address	Baileytown	i, Indiana
4. Location of Plant Baileytown,	Indiana		
5. Valve Identification MPL #B-22-FO	13 Serial No. <u>N56000-01-</u>	0037 Drawing No. H-56	000 Rev. C
mus Safety Relief	Orifica Siza	R Dine Size = Inle	, 6 Outlet 10
Type Safety Relief Safety.Safety Relief.Pilot.Power	Actuated I	nch Inch	Inch Inch
2 Con Processor (1992) 11.75		5759	r
6. Set Pressure (PSIG) 1175	· · · · · · · · · · · · · · · · · · ·	Rated Temper	rature
	T .	-	
Stamped Capacity 883950 Sat. Steam	_ Lbs. Hr. &3 ~ Overpre	essure Blowdown (PSIG)
Hydrostatic Test (PSIG) Inlet	2370 Comp	lete Valve825	
7. The material, design, construction and	workmanship comply with ASME	Code, Section III.	
Olean I Edition	1971	ddanda Dara Summer	1,972
Class 1 Edition	12/1	ddelida Date,	
Pressure Containing or Pressure Retain	ning Components		
	Serial No.	Material Spe	cification
a.XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Identification	Including Typ	
•		ASTM A-105-7	
Body	N90118-32-0008	ASME SA-105 G	
Bonnet TOXXXXXX	N89717-32-0021	ASTM A-105-7 ASME SA-105 G	r. II
Boilliet A. A. A. A. A. A. A. A. A. A. A. A. A.			
b. Bar Stock and Forgings	7.23	1	· · · · · · · · · · · · · · · · · · ·
XXXXXXXXXXXX Disc Insert	N89715-31-0028 ·	<u> ASTM A-461-6</u>	5 Type 630
	N90712-22-0020	ASTM A-182-7 ASME SA-182 F	1,F316
Nozzle	N89713-32-0039		
Disc Holder _	N89714-32-0037 N89724-32-0037	AMS 5662 B ASIM A-105-7	1 C= TT
Top Spring Washers Bottom	N89724-32-0037 N89723-31-0008	ASTM A-105-7 ASME SA-105 G	r. II
Adjusting XXXX Bolt	N89726-33-0046	ASTM A-193-7 ASME SA-193-6	
Spindle Point	N89720-32-0046		2 Type 630
•		•	"WRD.

A STATE OF THE STA

3.3.75

Serial No. or Material Specification Identification Including Type or Grade ASTM A-304-66 Gr. 4161H NX2689-0042 c. Spring d. Bolting e. SIMULECTRADESCHOLED VIEW TOXOLED CONTRADAS C ASTM A-193-71 Gr. B7 N89727-0433 thru 0444 SA-193 Gr. Inlet Stud ASME **B7** A-194-71 ASTM Inlet Stud Nut N89728-0437 thru 0448 A-193-71 Gr. SA-193 Gr. B7 N89718-0437 thru 0448 Bonnet Stud ASME A-194-71 Cl. ASTM Bonnet Stud Nut N89719-0439 thru 0450 SA-194 C1 OTHER PARTS Spindle Ball N89721-0046 Stellite 6 BARS & FORGINGS Thrust Bearing Adapter N89725-32-0035 We certify that the statements made in this report are correct. Date 10-31 1973 Signed Crosby Valve & Gage Co. By Manufacturer OA Manager

CERTIFICATE OF SHOP INSPECTION

Certificate of Authorization No. 331 expires November 9, 1974

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

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

*Factory Mutual Group of Insurance Co.

Date Cotaber 31: 19 73

Horald f. Chimuna Commissions M.S. 6665, Mass. 1096.

(Inspector)

National Board: State. Province and No.)





Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/15/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Main Steam (MS) System

- (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-4C. The replacement work was performed as follows
 - 1) Removed existing relief valve MS-RV-4C, Serial No N63790-00-0058 with set pressure of 1195 Psig at rated temperature of 575° F
 - 2) Installed replacement relief valve with Serial No N63790-00-0055 with set pressure of 1195 Psig at rated temperature of 575° F
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES -

- 1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system
- 2) ASME Section III Code Class 1, 1971 Edition with no Addenda for the relief valve



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

8 Tests Conducted: Hydrostatic Pneumatic Test Pressure: 1021/6.8 Psig Component Design Pressure: 1		Test Tem	g Pressure perature: 20 ure: 575/470 ⁰	0.7/78.4° F	er None
9. Remarks: 1) See attached NV-1 Code Data Report for replay Nominal operating pressure test on relief valve inlet flanged joint. Preumatic test on relief valve outlet joint, body to bonnet joint, est temperature of 78.4° F 1) Component design pressure and temperature - 1250 Psig at 57 piping	nt - test pressure o nozzle ring and ad	f 1021 Psig (ljusting ring :	and test tempe et screw joints	rature of 200 s - test pressu	re of 6.8 Psig an
CERTIFICA	TE OF COMPL	LIANCE			
We certify that the statements made in this Ow to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable	ner's Report a	re correct	and this re	placement Co	onforms
Expiration Date: Not Applicable					
Prepared By Judy Luck Suit b Kuldip Singh - Materials And Inspection	Signed By		Moe. agor, Materials	And Inspecti	on.
Date	Date	7-1	5-94-		
CERTIFICATE OF	INSERVICE I	INSPECTI	ION		
I, the undersigned, holding a valid commission Vessel inspectors and the State of Washington a (Factory Mutual Engineering Association) of Norwood described in this Owner's Report during the pestate to the best of my knowledge and belief, the corrective measures described in this Owner's ASME Code, Section XI By signing this certificate neither the inspector implied, concerning the examinations and corrective measures described in this Owner's ASME Code, Section XI By signing this certificate neither the inspector implied, concerning the examinations and corrective more, neither the inspector nor his emplingury or property damage or a loss of any kind	and employed of Massachuset or iod 4/2 or iod 4/2 or iod of the massachuset of the massachuset of the measure o	by Arkwig ts have in: 7 / 94- performed ordance w byer make es describ ilable in a	ht Mutual Inspected the to 7-/ examination with the request any warranced in this (only manner	surance Co compone 3- 94- ons and ta uirements anty, expre Owner's Re for any pe	mpany ents and ken of the essed or eport.
Dan Obecano H	_ Commission		9556W	NE	32
Urspector's Signature Date 7-15-94-			el Board, State		

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MASS, Culcup Gupb

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

6/26/94 Q.C.

ASME SA193 Gr. 36

DATA REPORT Safety and Safety Relief Valves

1. Manufactured By Crosby Val-	ve & Gage Company, 43 Kendrick Name and Address	St., Wrentham, MA 02093
Model No. HB-65-BP-FN Orde	er No. N94275 Contract Dat	e 4/24/79 National Board No. N/A
Gener	al Electric Company, 175	Curtner Ave.,
2. Manufactured For San J	Name and Address	Order No. 205-AJ986
3. Owner Washington Public	· · · · · · · · · · · · · · · · · · ·	obland Washington 99352
3. Owner wasnington rubile	Name and Address	chiand, washington 37552
. 4. Location of Plant Hanfo	ord Reservation, Richland,	Washington 99352
5. Valve Identification MPL#B	22-F013 Serial No. N63790-00	-0055 Drawing No. DS-A-63790 Rev. C
Type Safety Relief	Orifice Size R	Pipe Size Inlet 6 Outlet 10
Safety, Safety Relief, Power Actuated	Pilot, Inch	Inch Inch Inch
6. Set Pressure (psig) 1	.195	5750 F
		Rated Temperature
Stamped Capacity 899,185		Slowdown (psig)2% to 11%
Hydrostatic Test (psig) Inle		975 psig (Assembled Valve) 1100 psig (Body Only)
Pressure Retaining Pieces	(Applicab.	le to Valves for Closed Systems Only)
	Serial No.	Material Specification
Bar Stock & Forgings	Identification	Including Type or Grade
a. Cornings		ASTM A105-71 Gr. II
Body	<u>N93183-35-0074</u>	ASME SA105 Gr. II
Bonnet	N93407-35-0037	ASTM A105-71 Gr. II ASME SA105 Gr. II
p.xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	ø•	the first the second of the second
respective Disc Insert	N93185-34-0087	ASME SA637 Gr. 718
Nozzle	N93184-33-0059	ASME SA182 Gr. F316
Disc Holder K55484-45-019		AMS 5662B
Spring Washers K62858-35-00	K62856-35-0093	ASTM A105-71 Gr. II
. Spring wasners 202030-33-00	037 <u>K62857-35-0058</u>	ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0062	ASME SA193 Gr. B6
Spindle PointK62873-35-005	55 *N89720-34-0063	ASTM A564-71 Type 630 ASNE SA564 Type 630
c. Spring K62858-35-0037	*N89722-0013	ASTM A304-66 Gr. 4161H
d. Bolting		X00380140
Spindle Ball e. xxxxxxxxxx K62873-35-005	55 N93213-0055	Stellite #6
Thrust Bearing Adapter	N93409-32-0057	ASME SA193 Gr. B6
Bonnet Stud	(BW5) N93207-0657 thru 06	668 ASTM A193-71 Gr. 87
Bonnet Stud Nut	(J87) N93210-0877 thru 08	388 ASME SA194 Gr. 2H
Inlet Stud	(BW6) N93216-0659 thru 06	ASTE AT G 7 - 1 TO 1 - 1 TO 1 - 1 TO 1 - 1 TO 1 - 1 TO 1 TO
Inlet Stud Nut	(BW8) N93218-0663 thru 06	
	,,,,	ASME SA194 Gr. 2H

Vilve originally built against Crosby Order No. N103600, Assembly No. NDOUUU. Valve wodification 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.

	N63790-00-0055
	,
We certify that the statements made in this report are correct and to the rules of construction of the ASME Code for Nuclear Power Plan III, Div. 1, 1971 Edition, Addenda No Addenda , Code Cast Class 1 (Date) Date 1/-5-80 Signed Crosby Valve & Gage Co. by	t Components, Section e No. 1567 & 1711
(N Certificate Holder)	. 1777
Our ASME Certificate of Authorization No. 1878	to use the av
symbol expires September 30, 1983 (Date)	
CERTIFICATION OF DESIGN	1
Design information on file at Crosby Valve & Gage Company	
Stress analysis report (Class 1 only) on file at Crosby Valve & Ga	ice Company
43 Kendrick Street, Wrentham, Massachusetts 02093	
Design specifications certified by Boyd P. Brooks	
PE State California Reg. No. 13655	į
Stress report certified by W.D. Greenlaw	•
PE State Massachusetts Reg. No. 14784	v
1Signature not required - list name only.	•
CERTIFICATE OF SHOP INSPECTION TORK	Stoneshien Usel
I, the undersigned, holding a valid commission issued by the National Pressure Vessel Inspectors and the State or Province of Massachusett and employed by Factory Mutual Systems* of Norwood, Massachuse	S
have inspected the pump, or valve, described in this Data Report on and state that to the best of my knowledge and belief, the N Certific constructed this pump, or valve, in accordance with the ASME Code for Components.	12/5, 1900 ate Holder has
By signing this certificate, neither the Inspector nor his employer mexpressed or implied, concerning the equipment described in this Data more, neither the Inspector nor his employer shall be liable in any mersonal injury or property damage or a loss of any kind arising from this inspection.	Report. Further- anner for any
Date 0/2/5 1980 .	266
Signed Commissions MASS 17	State, Prov. and No.)
(Inspector) (Nat'l. Bd.,	scace, frov. and No.)

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



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

Date: 7/15/94 Sheet: 1 of 1 Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-4A. The replacement work was performed as follows
 - 1) Removed existing relief valve MS-RV-4A, Serial No N63790-00-0059 with set pressure of 1205 Psig at rated temperature of 575° F
 - 2) Installed replacement relief valve with Serial No N56000-01-0099* with set pressure of 1205 Psig at rated temperature of 575° F
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES -

- 1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system
- 2) ASME Section III Code Class 1, 1971 Edition with Summer 1972 Addenda for the "Bailty" relief valve
- 3) * "Bailty" relief valve Serial No N56000-01-0099 was modified by Crosby to Serial No N63790-00-0135



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

B Tests Conducted: Hydrostatic Pneumati Test Pressure: 1021/6.7 Psig Component Design Pressure		<i>Operating Pressure</i> Test Temperature: 200 Temperature: 575/470 ⁰	.7/88° F
9. Remarks: 1) See attached NV-1 (Pre - Modification) Code b) See attached "Repair And Replacement To Nuclear Compo- locumenting the modification (upgrade) work performed by Cr b) Nominal operating pressure test on relief valve inlet flanged b) Pneumatic test on relief valve outlet joint, body to bonnet joinest temperature of 88° F b) Component design pressure and temperature - 1250 Psig a siping	onents And Systems I rosby for "Bailly" relief joint - test pressure o int, nozzle ring and ac	n Nuclear Power Plants* Ce valve f 1021 Psig and test temper justing ring set screw joints	rtification Report (QC 292A) ature of 200.7 [©] F - test pressure of 6.7 Psig an
CERTIFIC	CATE OF COMP	JANCE	
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 Prepared By Kuldip Singh - Materials And Inspection Date 7 (SI 94	Signed By	RAMOS Manager, Materials	And Inspection
	A. 110521.05		
I, the undersigned, holding a valid commission vessel inspectors and the State of Washington (Factory Mutual Engineering Association) of Norw 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 inspecting implied, concerning the examinations and continuity or property damage or a loss of any kinglescotor's Signature	n and employed rood, Massachuset period 4/2/ the Owner has pris Report in accurator nor his employerective measure mployer shall be ind arising from the control of the con	National Board of Boby Arkwright Mutual Instance Inspected the 194 to 1-/	urance Company components 3 - 94 and ins and taken irements of the inty, expressed or owner's Report, for any personal inspection NBT
Date 7-15-94		nauona boeru, Suub	, ,

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MA PLAN NO 2-1015 Lulais Eurs

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

6/27194

REPAIR AND REPLACEMENT TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLA	NTS
1. Work performed by <u>Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093</u> (Name and Address) (Rapair organization's P.O. No., Job No., etc.). NV4000020	
2. Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968 (Name and Address)	
3. Name and Identification of Nuclear Power Plant HANFORD #2	
4. Address of Nuclear Power Plant_RICHLAND .WA	
5. a. Identifying Nos. N63790-00-0135 1973 (Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year B b. Identification of component repaired or replacement component c. Name of Manufacturer_ CROSBY VALVE & GAGE COMPANY	
6. Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi 7. Identification of System MAIN STEAM	
8. Applicable Section(s)III of ASME Code, 19 <u>71</u> Edition Addenda NO Code Case	
9. Description of work N56000-01-0099 WAS MODIFIED TO N63790-00-0135 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA.	
10.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-46-0129	
BONNET N89717 N93407-42-0053 SPINDLE ASSY K55465 K62873-45-0059 SPR.WASHER N89724 K62856-42-0201	
SPR.WASHER N89723 K62857-42-0201 SPRING ASSY K55466 K62858-31-0003 PART PART NO. REPLACED WITH NOZZLE N89713 N93184-51-0155	E
DISC INSERT N89715 N93185-52-0199 SPRING NX2689 N89722-0072 THR.BRG.ADAPT.N89725 N93409-32-0006	
SPR.WASHER N89723 K62856-42-0201 SPR.WASHER N89723 K62857-42-0201 SPRING ASSY K55466 K62858-31-0003 PART PART NO. REPLACED WITH NOZZLE N89713 N93184-51-0155 DISC INSERT N89715 N93185-52-0199 SPRING NX2689 N89722-0072 THR.BRG.ADAPT.N89725 N93409-32-0006 ADJ.BOLT N89726 N93410-32-0005 ADJ.BOLT BUTT. COMMERCIAL N93411-33-0012 ADJ.BOLT ASSY COMMERCIAL K63618-31-0005	(-3/ce
·	1-2/54

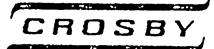
PLAN NO. 2-1015.

Dulant Buy 5

7/15/94

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

ASTM A193-71 Gr. B6 ASME SA193 Gr. B6



VALVE & GAGE COMPANY CROSBY WRENTHAM, MASS Pular Sup's

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

Q.C.-41C 6)27 184

tes required by the frontistants of the fibral section						
DATA REPORT Safety and Safety Relief Valves						
1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093 HB-65-BP- Name and Address Model No. FN Order No N-51726 Contract Date 1/27/75 National Board No. General Electric Co., 175 Curtner Ave.,						
General Elec	tric Co., 175 Curtn	er Ave.,				
2. Manufactured For San Jose, Ca	lifornia 95125 le and Address	Order No. 205-AD148				
3. Owner Northern Indiana Publ	ic Service Co., Bai	lly Generating Station Nuclear I				
	Name/And Address					
4. Location of Plant Baileytown, Spare	Indiana					
5. Valve Identification MPL#B22-F013		-0099 Drawing No. H-56000 Rev. C				
TypeSafety Relie	f Orifice Size	R pipe Size Inch Inch Outlet 10				
6. Set Pressure (PSIG) 1130		575° F				
Stamped Capacity 850500#/Hr.		pressureBlowdown (PSIG)5%				
Hydrostatic Test (PSIG) inlet 23	70 <u> </u>	mplete Valve 825				
7. The material, design, construction and v	vorkmanship comply with ASI	ME Code, Section III.				
•		Summer 1972,Case No				
ClassEdition_=2/-	,Addenda Date	, case no.				
Pressure Containing or Pressure Retain	ing Components					
TRANSPORT TO THE STATE OF THE S	Serial No.	Material Specification				
a. desange Forging	Identification	Including Type or Grade				
Body '	N90118-35-0032	ASTM sA105-71				
Bonnet	N89717-36-0083	ASTM A105-71 ASME SA105				
b. Bar Stock and Forgings		ASTM A564-71 Type 630				
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N89715-36-0106	ASME SA564 Type 630 ASTM A182-71 Type 316				
Nozzle	N89713-36-0106	ASME SA182 Type 316				
Disc Holder K55484-39-0135	N89714-35-0173	AMS 5662B				
Spring Washers K55466-36-0093	N89724-38-8 131	ASTM A105-71				
Adjusting Bolt	N89726-40-0119	ASTM A193-/1 Gr. 86 ASME SA193 Gr. 86				
Spindle K55465-35-0106	N89720-38-0129	ASTM A564 Type 630 ASME SA564 Type 630				
Spindle Ball	N89721-0206	Stoody No. 6				

N89725-34-0116

Thrust Bearing Adapter

	Serial No. or		Material Specifical	11/4!:	
	Identification		Including Type or G		
c. Spring	N89722-0072	ASTM	A304-66		
. •					
d. Bolting	•				
e. Other Parts such as Pilot Components Inlet Stud	V00707 1000!	202/			
	N89727-1203 thru		ASME SA193 Gr.		
Inlet Nut	N89728-1197 thru		ASME SA194 Gr.		
Bonnet Stud	N89718-1222 thru		ASME SA193 Gr.		
Bonnet Nut	N89719-1216 thru	1227	ASME SA194 Gr.	2H	
			·		
					
					
					
		······································			
We certify that the statements made in this Date 6-22 1976 Signed	Crosby Valve & Gag	e Co. _{By}	In Alem	rand	
•	Manufacturer		QA Manag	er	
Certificate of Authorization No. 926	expires Octo	ber 28, 19	777		
CERT	ificate of shop inspi	ECTION			
I. the undersigned, holding a valid commission issued by the Vational Board of Boiler and Pressure Vessel inspectors and the State or Province of Mass, and employed by Factory Mutual Systems*, Norwood, Mass, have inspected the equipment described in this Data Report on 19, and					
state that to the best of my kno ment in accordance with the ap	plicable Subsections of AS	ME Section III.	-	•	
By signing this certificate, no pressed or implied, concerning the Inspector nor his employer damage or a loss of any kind ar	the equipment described in shall be liable in any many ising from or connected wi	i this Data Rep ier for any pers	ort.Furthermore, neith onal injury or property	er :	
i jisheyaya	Commissions Nation	Un 12c	S. Prove e and No.	-	

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



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/15/94 Sheet: 1 of 1 Unit: WNP-2

- 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-2A. The replacement work was performed as follows
 - 1) Removed existing relief valve MS-RV-2A, Serial No N63790-00-0054 with set pressure of 1185 Psig at rated temperature of 575° F
 - 2) Installed replacement relief valve with Serial No N63790-00-0051 with set pressure of 1185 Psig at rated temperature of 575° F
 - 3) Replaced one (1) nut for the relief valve inlet joint
 - 4) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES -

- 1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system
- 2) ASME Section III Code Class 1, 1971 Edition with no Addenda for the relief valve



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

	Hydrostatic Test Pressure: 1021			Operating Pressure X Other The Test Temperature: 200.7/82.6° F
	Component Design	•		Temperature: 575/470° F
ominal operating pre- neumatic test on relic temperature of 82.6 ⁰	ssure test on relief valve If valve outlet joint, body F	inlet flanged jo to bonnet join	oint - tost pressure o t, nozzie ring and ad	e Serial No N63790-00-0051 of 1021 Psig and test temperature of 200.7 ⁰ F lijusting ring set screw joints - test pressure of 6.8 Ps re inlet piping and 500 Psig at 470 ⁰ F for relief valve
		CERTIFICA	ATE OF COMPL	LIANCE
We certify that ti	he statements mad	ie in this O	wner's Report a	re correct and this replacement conforms
	e ASME Code, Sec			
• •	bol Stamp: Not applic			
	thorization No.: No	t applicable		
Expiration Date:	Not Applicable			0.4
Prepared By	Munich R	16	_ Signed By	Amor-
rrepared by Ki	Idip Singh - Materials ?	and inspection	_ Signea by	Manager, Materials And Inspection
	7115194	ara mopouson	Date	7-14-94
Date	1/15/14			
	CERT	IFICATE O	F INSERVICE I	INSPECTION
l Aba sındanalanı	ad balding a solid		laavad bookka	National Second of Bollon and Second
				National Board of Boiler and Pressure by Arkwright Mutual Insurance Company
				ts have inspected the components
described in this	Owner's Report d	uring the p	eriod 4/27	194 to 7/13/94 and
state to the best	of my knowledge	and belief, t	the Owner has p	performed examinations and taken
		his Owner's	s Report in acc	ordance with the requirements of the
ASME Code, Sed				
				oyer makes any warranty, expressed or
				es described in this Owner's Report. liable in any manner for any personal
	ulei lii e ilispectoi v damada or a los:	s of any kin	d arising from o	or connected with this inspection
rurmermore, ne injury or propert	y damage or a root			
injury or propert	-/-		Camminal	- GEGLU LIRT
injury or propert	wh		Commission	
Injury or propert	a-//- octor's Signature 7-/5-94		Commission	National Board, State, and Endorsements

MS RUS

PLAN NO.2-1016 Kuldup Sur's | 6/26/184

CROSBY	CROSBY VALVE WRENTH.	& GAGE COMPANY			
FORM MY-1 FOR SAFETY AND SAFETY RELIEF VALVES Q.C44D As Required by the Frontsions of the ASME Code Rules DATA REPORT					
Sefety and Salety Relief Valves 1. Resulactured by freeby Valve & Gage Company, 4) Kengrick Sc., Vrentham, MA 07797					
1. Manufactores by Class valve s	Hamp and Address	WARREN OF WARRY			
	tric Company, 175 Curtne 95125 a and Address	P. AVE Other be			
3. Owner Washington Public Pou	er Supply System, Richla Home and Address	nd, Washington 99352			
4. Location of Plant Hanford Re		hington 99352			
5. Valve Identification MPL #822-F	013 Sersel No. N63790-00-00	51 Drawing hc. <u>DS-A-63790 Rev.</u> C			
Type <u>Safety Relief</u> Safety, Salety Relief, Pilo Power Actuated	Orifice Sise R Pi	po Sazo Indus f. Outlet 10 Inch Inch Inch			
4. Set Pressure (pels) 1185		- <u>575</u> °r			
format formato - 891 750	A 3 *0	Rates Temperature			
Stamped Capacity 891,750 Necrostatic Test .saig) laigt	975 2370 Outlet 1100	psig (Assembled Valve) psig (Bocv Only)			
Pressure Receining Places	(Apolicable (to Valves for Closed Systems Only)			
Bar Stock & Forgings	Serial No. ' Identification	Material Specification including Type or Grade			
A. testizzi	N93183-35-0070	ASTE \$198578, Critical			
Nonnet _	N93407-35-9033	ASTR A103-71 Gr. II ASRE SA105 Gr. II			
b. Baculatmichchmacum		,			
Montradoux Disc Insert	N93185-34-0083	ASHR SA637 Gr. 71:			
Messle _	N93184-33-0055	ASHE SA182 Gr. F316			
Disc Bolder*K55454-35-0084 _	*N89714-34-0122	AMS 5662B			
Sering Weshers K62358-35-0033_	K62856-35-3089 K62857-35-0054	ASTR A105-71 GE. II ASMY SA105 GF. II			
Adjusting Bolt	N93410-33-0358	ASME SA193 Gt. B6			
Spindle Point K62373-37-0151_	<u> 189720-43-0146</u>	ASHE SAS64 Type 630			
c. Spring K62858-35-0033	XX2689-0119	ASTY A304-66 Gr. 4161H			
4. Polying Spinole Ball					
Thrust Bearing Mapter	N93213-0218 N93409-32-0053	Stoody #6 ASME SA193 Gr. B6			
) K93207-0609 thru 0620	ASS 61765 'L-61478'			
) N93210-0829 thru 0840	ASME SA194 Cr. 2R			
Inlet Stud (BW6) N93216-0611 thru 0622	ASSE 61165'6-5'278'			
Inlet Stud Nut (BW8	N93218-0615 thru 0626	ASTE SAIS4 Gr. 2H			
Adjusting Bolt Surron K63618-13-0059	жээ-11-23-0059 Од- МА	P. SALESALES GE. BG			

FIR LEGENTUR ONLY

N 63792.00-0051 Cucip Emps

Valve originally built against Crosby Order No. N103600, Assembly No. N36000. Valve modification consists of replacement of the Disc Insert, Norsle, Bonnet Stud Nuts.

CERTIFICATE OF COMPLIANCE	7
We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASM Code for Nuclear Power Plant Components, Section III, Div. 1, 1971Edition, Addenda No Addenda, Code Case No1567 & 1711	
Clase 1 (Date)	1 1
Date 1/-5-80 Signed Croeby Valve & Gaze Co. by CO. Calculated	1 1
(N Certificate Holder) Our ASHZ Certificate of Authorization No. 1878 to use the NY	
symbol expites September 70, 1983 . (Date)	
	,
CEXTIFICATION OF DESIGN	1.1
Design information on file at Crosby Valve & Gage Company	.
Stress analysis report (Class 1 only) on file at Crosby Valve 5 Gare Company	
43 Kendrick Street, Wrentham, Massachusette 07093	
Design specifications certified by Boyd F. Brooks	
PE State <u>Galifornia</u> <u>Reg. No. 13655</u> Stress report certified by ^L <u>W. D. Greenlau</u>	'
itress report certified by W. D. Greenlev	
PE State Massachusetts Res. No. 14784	
Signature not required - list name only.	
CERTIFICATE OF SHOP INSPECTION	
• •	
the undersigned, holding a valid commission issued by the harional Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts)
and employed by Factory Mutual Systems of Norwood, Massachusetts	
have inspected the pump, or valve, described in this Data Report on 1/4, 5/ 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 ASPE Code for Nuclear Power Plant components.	· 1
nave inspected the pure, or valve, described in this Data Report on 1/9.51 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ANE Code for Nuclear Power Plant components. The pump of this certificate, matcher the Inspector nor his employer makes any warrant, expressed or implied, concerning the equipment described in this Data Report. Further— hore, neither the Inspector nor his employer shall be liable in any manner for any	
nave inspected the pum, or valve, described in this Data Report on 1/9, 51 and state that to the best of sy knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ANE Code for Nuclear Power Plant Components. By signing this certificate, meither the Inspector nor his employer makes any warrant, expressed or implied, concerning the equipment described in this Data Report., Furthermore, meither the Inspector nor his employer shall be liable in any manner for any versional injury or property damage or a loss of any kind arising from or connected with this inspection.	
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wave inspected the pum, or valve, described in this Data Report on 1/9.51 and state that to the best of sy knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ANE Code for Nuclear Power Plant components. By signing this certificate, beither 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 versonal injury or property damage or a loss of any kind arising from or connected with this inspection. Late 1/9 19 27 Commissions MASS 1266 (Inspector) (Nat'l. Bd., State, Prov. and No.)	A JOAN
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ZX0038Q612



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 7/15/94

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001B	WPPSS	B22-G001B-P1	N/A	, N/A	1983	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-4B. The replacement work was performed as follows
 - 1) Removed existing relief valve MS-RV-4B, Serial No N63790-00-0056 with set pressure of 1195 Psig at rated temperature of 575° F
 - 2) Installed replacement relief valve with Serial No N56000-02-0042* with set pressure of 1195 Psig at rated temperature of 575° F
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES

- 1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system
- 2) ASME Section III Code Class 1, 1971 Edition with Summer 1972 Addenda for the "Bailly" relief valve
- 3) * *Bailly* relief valve Serial No N56000-02-0042 was modified by Crosby to Serial No N63790-00-0137



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

Fests Conduct e	ed: Hydrostatic Pn	eumatic X Nomina	ol Operating Pressure X Other
	Test Pressure: 1021/6.8		Test Temperature: 200.7/82.2° F
	Component Design Pr	•	•
	ounpained addigners	,	· · · · · · · · · · · · · · · · · · ·
Remarks: 1) See	attached NV-1 (Pre - Modificat	tion) Code Data Report for N	ISRV, Serial No N56000-02-0042
			In Nuclear Power Plants* Certification Report (QC 2
	fication (upgrade) work perform		
			of 1021 Psig and test temperature of 200.70 F
rneumanc test on re t temperature of 82.		onnet joint, nozzie ning and a	adjusting ring set screw joints - test pressure of 6.8 P
		io Psig at 575 ⁰ F for relief ve	lve inlet piping and 500 Psig at 470 ⁰ F for relief valve
ing	•	•	
			
	CEI	RTIFICATE OF COM	PLIANCE
			are correct and this replacement conforms
	the ASME Code, Section		
• • • • •	mbol Stamp: Not applicable		
	Authorization No.: Not app	plicable	
Expiration Date	ie: Not Applicable		_
	11,191,0	,	PANIO
Prepared By _	Kuldip Singh - Materials And I	_ Signed By	Manager, Materials And Inspection
Date	7/15/94	Date	7-15-94
	ı		
			
*			
	CERTIFIC	CATE OF INSERVICE	INSPECTION
	CERTIFIC	CATE OF INSERVICE	INSPECTION
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	ned, holding a valid con	nmission issued by th	
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Vessel Inspec (Factory Mutual	ned, holding a valid con tors and the State of Was Engineering Association) o	nmission issued by th shington and employed of Norwood, Massachuse	e National Board of Boiler and Pressure I by Arkwright Mutual Insurance Company
Vessel Inspect (Factory Mutual described in ti	ned, holding a valid con tors and the State of Was Engineering Association) o his Owner's Report durin	nmission issued by the shington and employed of Norwood, Massachuseng the period 4-2	e National Board of Boiler and Pressure I by Arkwright Mutual Insurance Company ets have inspected the components
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Vessel Inspect (Factory Mutual described in the state to the be corrective med	nned, holding a valid contors and the State of Was Engineering Association) of this Owner's Report during the of my knowledge and asures described in this	nmission issued by the shington and employed of Norwood, Massachuse and the period	e National Board of Boller and Pressure I by Arkwright Mutual Insurance Company etts have inspected the components 28 - 94 to 1 - /3 - 94 and
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Vessel inspectifications Mutual described in the state to the becorrective med ASME Code, SBy signing this implied, concerns.	ned, holding a valid contors and the State of Was Engineering Association) of his Owner's Report durings ast of my knowledge and asures described in this Section XI s certificate neither the lighter	nmission issued by the shington and employed of Norwood, Massachuseng the period 4.2 I belief, the Owner has Owner's Report in actions and corrective measures.	te National Board of Boiler and Pressure If by Arkwright Mutual Insurance Company etts have inspected the components 18-94—to 1-/3-94—and is performed examinations and taken cordance with the requirements of the loyer makes any warranty, expressed or ares described in this Owner's Report.
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Vessel Inspect (Factory Mutual described in the state to the be corrective med ASME Code, S By signing this implied, conce Furthermore, in injury or proper	ned, holding a valid contors and the State of Wastors and the State of Wastors and the State of Wastors and the Report durings tof my knowledge and asures described in this Section XI is certificate neither the light of the examinations neither the inspector not	mmission issued by the shington and employed of Norwood, Massachuseng the period	te National Board of Boiler and Pressure of by Arkwright Mutual Insurance Company etts have inspected the components 12.5.74 to 1.7.3.74 and a performed examinations and taken cordance with the requirements of the loyer makes any warranty, expressed or tres described in this Owner's Report. The liable in any manner for any personal or connected with this inspection

C R O S B Y

CROSBY VALVE & GAGE COMPANY.

PLAN NO. 2-1017

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

Culoup Emph 11 CEMENT 6/27/94

REPAIR AND REPLACEMENT 6/27 174 TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1		
1.	Work performed by <u>Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093</u> (Name and Address) (Repair organization's P.O. No., Job No., etc.). NV4000020	
2.	Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968 (Name and Address)	
3.	Name and Identification of Nuclear Power Plant HANFORD #2	
4.	Address of Nuclear Power Plant RICHLAND .WA	
5.	a. Identifying Nos. N63790-00-0137 - 1973 (Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built) b. Identification of component repaired or replacement component c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY	
₫ .	Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure 2370.0 psi Identification of System MAIN STEAM	
8.	Applicable Section(s) III of ASME Code, 19_71 Edition	
}	Added NO Code Case -	E
	Addenda NO Code Case —	
9.	Addenda NO Code Case — Description of work N56000-02-0042 WAS MODIFIED TO N63790-00-0137 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA.	
	Description of work N56000-02-0042 WAS MODIFIED TO N63790-00-0137 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. D.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES:	
	Description of work N56000-02-0042 WAS MODIFIED TO N63790-00-0137 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. D.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-41-0124	
	Description of work N56000-02-0042 WAS MODIFIED TO N63790-00-0137 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. D.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-41-0124 BONNET N89717 N93407-44-0055 SPINDLE ASSY K55465 K62873-44-0058 SPR.WASHER N89724 K62856-44-0203	
10	Description of work N56000-02-0042 WAS MODIFIED TO N63790-00-0137 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. D.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-41-0124 BONNET N89717 N93407-44-0055 SPINDLE ASSY K55465 K62873-44-0058 SPR.WASHER N89724 K62856-44-0203 SPR.WASHER N89723 K62857-44-0203 SPR.WASHER N89723 K62857-44-0203 SPR.WASHER N89723 K62857-44-0203 SPRING ASSY K55466 K62858-31-0001	
10	Description of work N56000-02-0042 WAS MODIFIED TO N63790-00-0137 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. D.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-41-0124 BONNET N89717 N93407-44-0055 SPINDLE ASSY K55465 K62873-44-0058 SPR.WASHER N89724 K62856-44-0203 SPR.WASHER N89723 K62857-44-0203 SPR.WASHER N89723 K62857-44-0203 SPRING ASSY K55466 K62858-31-0001 PART PART NO. REPLACED WITH NOZZLE N89713 N93184-51-0157 DISC INSERT N89715 N93185-54-0231	
10	Description of work	
	Description of work N56000-02-0042 WAS MODIFIED TO N63790-00-0137 (Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI.1980 EDITION WINTER 1980 ADDENDA. D.Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO. BODY N90118 N93183-41-0124 BONNET N89717 N93407-44-0055 SPINDLE ASSY K55465 K62873-44-0058 SPR.WASHER N89724 K62856-44-0203 SPR.WASHER N89723 K62857-44-0203 SPR.WASHER N89723 K62857-44-0203 SPRING ASSY K55466 K62858-31-0001 PART PART NO. REPLACED WITH NOZZLE N89713 N93184-51-0157 DISC INSERT N89715 N93185-54-0231 THRUST, BRG, ADAPT N89725 N93409-33-0007 ADJ, BOLT N89726 N93410-32-0006	

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

Certificate Holder's Serial No. N63790.00.0137

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- 32		韓田 目
7	CONMITTAL ME OF COMPLIANCE	
楚	CERTIFICATE OF COMPLIANCE	
9		送 目
器	We certify that the statements made in this report are correct and all design, material, and workmanship on this	延目
	MOD, conforms to the applicable section of the ASME Code.	展 - 目
*	(repair/replacement)	際目
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		(1) Sec. 7
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Κ'	CERTIFICATE OF INSPECTION	
15	,	
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel	
1		
	of Norwood Massachusetts have inspected the repair or replacement described in this report on	
	FC 6 25, 19 74 and state that to the best of my knowledge and belief, this repair or replacement	
	has been made or constructed in accordance with the applicable section of the ASME Code.	
	the state of the s	概题
1	By signing this certificate, neither the inspector nor his employer makes any warrant, expressed or implied,	
35	concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employed	
U.S.	shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or	
	connected with this inspection.	原制
	Factory Mutual Systems	勝目
40	Date 2/25 19 74 .	
10.1		はいませ
	1	
	Signed Circle Commissions 1-4/751	
	Signed (Inspector) Commissions /-4//) (Nat'l. Bd., State, Prov. and No.)	1467
	Signed (Inspector) (Nat'l. Bd., State, Prov. and No.)	

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CROSBY

CROSBY VALVE & GAGE COMPANY WRENTHAM, MASS

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

Q.C.-44A

DATA REPORT					
Safety	and Safet	y Relief	Valves		

	Service Control Control	
1. Manufactured By Crosby Valve	& Gage Co., 43 Kendrick	St., Wrentham, Mass. 02093
48	•	6 (00 /7)
Compand Elega	mia Campanu	Contract Date 6/28/71
9 Manufactured For San Jose, Cal	ifornia	Order No. 205-AD148
		Order No. 205-AD148
3. Owner Northern Indiana Publ	ic Service Co., Bailly G	enerating Station Nuclear I,
	Name and Address	Baileytown, Indiana
4. Location of Plant <u>Baileytown, I</u>	ndiana	
5. Valve [dentification MPL #B-22-FO	13 Serial No. N56000-02-0042	Drawing No. H-56000 Rev. C
Type Safety Relief	Orifice Size R	Pipe Size Inlet _ 6 _ Outlet _ 10
Safety.Safety Relief.Pilot.Power	Actuated Inch	Inch Inch Inch
6. Set Pressure (PSIG) 1195		575° F
		Rated Temperature
Stamped Capacity 898800 Sat. Steam	Lbs. Hr. = 3 Coverpressure	Blowdown XXXXXX 5%
Hydrostatic Test (PSIG) Inlet2	370 Complete V	alve 825
1	•	
7. The material, design, construction and	vorkmanship comply with ASME Code	. Section III.
		,
Class 1 Edition _	1971 Addenda	Date Summer 1972
Pressure Containing or Pressure Retain	'	
Pressure Containing or Pressure Retain	ing Components	
	Serial No.	Material Specification
2.XXXXXX Forgings	[dentification	Including Type or Grade
10181181	-	ASTM A-105-71 Gr. II
Body	N89711-32-0024	ASME SA-105 Gr. II
BonnetXXXXXX	N89717-32-0018	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
b. Bar Stock and Forgings		
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N89715-31-0034	ASTM A-461-65 Type 630
Nozzle	N89713-32-0031	ASTM A-182-71 F316 ASME SA-182 F316
Disc Holder	N89714-32-0042	AMS 5662 R
Top	N89724-32-0042 N89723-31-0003	ASTM A-105-71 Gr. II
Spring Washers Bottom		ASME SA-105 Gr. II ASTM A-193-71 Gr. B6
Adjusting XXIII Bolt	N89726-32-0012	ASME SA-193 Gr. B6
Spindle Point	N89720-32-0034	ASTM A-564-72 Type 630



Serial No. or

Material Specification

	Identification	Including Type or Grade
c. Spring	NX2689-0047	ASTM A-304-66 Gr. 4161H
d. Bolting		
e. MAXIQUAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
Inlet Stud	N89727-0493 thru 0504	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Inlet Stud Nut	N89728-0497 thru 0508	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
Bonnet Stud	N89718-0497 thru 0508	ASTM A-193-/1 Gr. B/ ASME SA-139 Gr. B7
Bonnet Stud Nut	N89719-0499 thru 0510	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
OTHER PARTS		
Spindle Ball	N89721-0034	Stellite 6
BARS & FORGINGS	N89725-31-0009	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
We certify that the statements made in this	•	
Date <u>10-31</u> 19 <u>73</u> Signed	Crosby Valve & Gage Co. Manufacturer	QA Manager
Certificate of Authorization No331	expires November	9. 1974

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Mutual Boiler & Machinery Insurance Co. * Waltham Mass have inspected the equipment described in this Data Report on Control of 1971 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

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

Date Ortober 31 19	73	Mutual	groap	or rusura	nce co.
Amald 1. Chimer	- Commissions	iv.R.GC	45 /	1415.1690	
· (Inspector)	— 001111113310113	National E	nard. Sta	te. Province u	nd No.)





1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/15/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001D	WPPSS	B22,G001D-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-2D. The replacement work was performed as follows
 - 1) Removed existing relief valve MS-RV-2D, Serial No N63790-00-0124 with set pressure of 1185 Psig at rated temperature of 575° F
 - 2) Installed replacement relief valve with Serial No N56000-01-0038* with set pressure of 1185 Psig at rated temperature of 575° F
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

NOTES -

- 1) ASME Section III Code Class 1, 1971 Edition with Winter 1973 Addenda for the piping system
- 2) ASME Section III Code Class 1, 1971 Edition with Summer 1972 Addenda for the "Bailly" relief valve
- 3) * "Bailly" relief valve Serial No N56000-01-0038 was modified by Crosby to Serial No N63790-00-0138



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

8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other None Test Pressure: 1021/6.7 Psig Test Temperature: 200.7/79.5° F
	Component Design Pressure: 1250/500 Psig Temperature: 575/470° F
2) do 3) 4) to: 5)	Remarks: 1) See attached NV-1 (Pre - Modification) Code Data Report for MSRV, Serial No N56000-02-0042 See attached "Repair And Replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) cumenting the modification (upgrade) work performed by Crosby for "Bailly" relief valve Nominal operating pressure test on relief valve inlet flanged joint - test pressure of 1021 Psig and test temperature of 200.7° F Pneumatic test on relief valve outlet joint, body to bonnet joint, nozzie ring and adjusting ring set screw joints - test pressure of 6.7 Psig and temperature of 79.5° F Component design pressure and temperature - 1250 Psig at 575° F for relief valve inlet piping and 500 Psig at 470° F for relief valve outleting
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable
	Prepared By Lucip Sup Signed By Amoz Manager, Materials And Inspection
	Date 7 15 94 Date 7-15-94
	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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 4/27/94 to 7-13-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
	2m Voyant Commissions 9556W NEI
	Unspector's Signature National Board, State, and Endorsements Date 7-/5-94

CROSBY

CROSBY VALVE & GAGE COMPANY

WRENTHAM, MA

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

PLAN. NO. 2-1018

Fredit Supt 6/27/94

REPAIR AND REPLACEMENT 6 27 (94 TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

	10 NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS	
1	. Work performed by <u>Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093</u> (Name and Address) (Repair organization's P.O. No., Job No., etc.). NV4000020	
2.	Owner WASHINGTON PUBLIC POWER RICHLAND, WA 99352-0968 (Name and Address)	
3.	Name and Identification of Nuclear Power Plant HANFORD #2	
4.	. Address of Nuclear Power Plant <u>RICHLAND</u> , WA	
5.	a. Identifying Nos. N63790-00-0138 1973 (Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built) b. Identification of component repaired or replacement component c. Name of Manufacturer CROSBY VALVE & GAGE COMPANY	
₹ .	Tests conducted: Hydrostatic (X.) Pneumatic () Design Pressure () Pressure 2370.0 psi	
	Application Continued III at Action Code 40 74 miles	恒
8.	Applicable Section(s) III of ASME Code, 19 <u>71</u> Edition Addenda NO Code Case	
9.		

Q.C.-292, REV. A

	SHEET 2 OF 2	·
F. S. C.	CERTIFICATE OF COMPLIANCE — We certify that the statements made in this report are correct and all design, material, and workmanship on thi	93289888
	MOD conforms to the applicable section of the ASME Code. (repair/replacement)	AN MARKAS
	Signed Jamens of Fine OH En Manager 24 Full 1994 (Authorized Rep. of Repair Organization) (Title) (Date)	
	CERTIFICATE OF INSPECTION	
33	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>Massachusatts</u> and employed by <u>Factory Mutual</u>	
	of Norwood. Massachusetts have inspected the repair or replacement described in this report on Feb 25. 1994 and state that to the best of my knowledge and belief, this repair or replacement has been made or constructed in accordance with the applicable section of the ASME Code.	internetie
	By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the repair or replacement described in this report. Furthermore, neither the Inspector nor his employershall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or	
	connected with this inspection. Factory Mutual Systems Date	
	Signed Mull & Colli: Commissions M4 1455 .	
	(Inspector) (Nat'l. Bd., State, Prov. and No.)	

aviety.

ST CAMPAGE HAT PROPERTY AND INC.

PLAN NO. 2-1018

But out Buy 6 7/15/94

WPPSS S/N	WPPSS Set	Bailly S/N	Bailly Set	
¹⁴ . N63790-00-0134	¹ 1175	N56000-01-0037	1175	
N63790-00-0135	1205	N56000-01-0099	1130	
N63790-00-0136 .	1205	N56000-02-0043	1205	
N63790-00-0137	1195	N56000-02-004 <u>2</u>	1195	
N63790-00-0138	1185	N56000-01-0038	1175	
N63790-00-0139	1165	N56000-01-0100	1130	

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CROSBY VALVE & GAGE COMPANY WRENTHAM, MASS

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

Q.C.-44A

DATA REPORT Safety and Safety Relief Valves 1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093

Name and Address Order No. N-105286 Contract Date 6/28/71 Model No. HB-65-BP-FN General Electric Company Order No. _____205-AD148 2. Manufactured For San Jose, California Name and Address 3. Owner Northern Indiana Public Service Co., Bailly Generating Station Nuclear I, Name and Address Baileytown, Indiana 4. Location of Plant Baileytown, Indiana. 5. Valve Identification MPL #B-22-F013 Serial No. N56000-01-0038 Drawing No. H-56000 Rev. C Orifice Size R Pipe Size - Inlet 6 Outlet 10 Inch Inch Safety Relief Safety.Safety Relief.Pilot.Power Actuated 6. Set Pressure (PSIG) 1175 Rated Temperature Stamped Capacity 883950 Lbs. Hr. c 3 : Overpressure - Blowdown x8310x 5% Hydrostatic Test (PSIG) Inlet 2370 Complete Valve 825 7. The material, design, construction and workmanship comply with ASME Code, Section III. Edition 1971 Addenda Date Summer 1972 Pressure Containing or Pressure Retaining Components Material Specification Serial No. Including Type or Grade Identification 1. WEWE Forgings ASTM A-105-71 Gr. II ASME SA-105 Gr. II N90118-32-0009 Body A-105-71 Gr. II SA-105 Gr. II N89717-32-0022 · Bonnet XXXXXX b. Bar Stock and Forgings A-461-65 Type 630 N89715-32-0018_ MXXXXXXX Disc Insert N89713-32-0028 Nozzle AMS 5662 B N89714-32-0038 Disc Holder A-105-71 Gr. II SA-105 Gr. II Top Bottom - N89724-32-003 N89723-31-002 Spring Washers N89726-32-0015 AdjustingXXXXX Bolt A-564-72 Type 630 N89720-32-0044_ Spindle Point

	Serial No. or .	Material Specification
	[dentification	Including Type or Grade
c. Spring	NX2689-0043	ASTM A-304-66 Gr. 4161H
d. Bolting		
e. XXXIEXCEXHXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	C,	
Inlet Stud	N89727-0445 thru 0456	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Inlet Stud Nut	N89728-0449 thru 0460	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
Bonnet Stud	N89718-0449 thru 0460	ASTE sA-193-G1.G57 B7
Bonnet Stud Nut	N89719-0451 thru 0462	ASTM A-194-71 Cl. 2H ASME SA-194 Cl. 2H
	1 °	
OTHER PARTS		
Spindle Ball	N89721-0044	Stellite 6
BARS & FORGINGS		
Thrust Bearing Adapter	N89725-32-0033	ASTM A-193-/1 Gr. B6 ASME SA-193 Gr. B6
We certify that the statements made in th	s report are correct.	
Date 10-31 19 73 Signed	Crosby Valve & Gage Co.	By he Alman
	Manufacturer	QA Manager
Certificate of Authorization No. 33	1 expires November	9. 1974

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass, and employed by Mutual Boiler & Machinery Insurance Co.*, Waltham, Mass, have inspected the equipment described in this Data Report on Cotto 100 1972 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.





1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 7/15/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980

b) Applicable Edition of ASME Section XI Utilized For Repairs of Replacements. 1900 Editor with William 19
Addenda, Code Case: N-308

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-RV-2Ç	Crosby	N63790-00-0122	N/A	N/A	1980	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced disc insert and nozzle for main steam relief valve MS-RV-2C, Serial No N63790-00-0122. The replacement work was performed as follows
 - 1) Removed existing disc insert and nozzle from the valve
 - 2) Installed new disc insert and nozzle in the valve
 - 3) Reinstalled the valve
 - 4) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

8 Tests Conducte	ed: Hydrostatic Pneu Test Pressure: 1021/6.7 P Component Design Pre	sig	l Operating Pressur Test Temperature: Temperature: 575/47	200.7/80.2 ⁰ F
200.7° F 2) Pneumatic test on r test temperature of 80	ominal operating pressure test on o relief valve outlet joint, body to bor 0.2 ⁰ F pressure and temperature - 1250	nnet joint, nozzie ring and a	djusting ring set screw joir	nts - test pressure of 6.7 Psig and
	CER	TIFICATE OF COMP	LIANCE	
to the rules of Type Code Sy Certificate Of Expiration Da	the statements made in a fine ASME Code, Section mbol Stamp: Not applicable Authorization No.: Not applicable ite: Not Applicable Kuldip Singh - Materials And Insert State S	XI cable	04	Lco
Vessel Inspective Mutual described in the state to the becomed ASME Code, Say signing this implied, conceptive more, in the state of th	gned, holding a valid comp etors and the State of Wash I Engineering Association) of this Owner's Report during est of my knowledge and b asures described in this O	nington and employed Norwood, Massachuse the period 4-2 vellef, the Owner has owner's Report in acceptor nor his employed measuris employer shall be	by National Board of less by Arkwright Mutual I to have inspected to 19-94 to 19-99 performed examinate ordance with the respected in this liable in any manner connected with the respective or connected with the respective in the second sec	nsurance Company ine components 13 ~ 94 and tions and taken quirements of the tranty, expressed or towner's Report. for any personal



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/5/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Bullt	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-V-46A	Anchor Darling	2N1052	N/A	N/A	1977	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Descrivated valve RHR-V-46A by removing valve internals. The work was performed as follows
 - 1) Disassembled valve
 - 2) Removed valve disc and other valve internals
 - 3) Reassembled valve
 - 4) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



		-				
· FO	ORM NIS-2 OWN	IER'S REPOR'	T FOR REPAIR	RS OR REPLACEM	MENTS (Back)	
Tests Conduct	Test Pressure			al Operating Press Test Temperature Temperature: 700	<i>e:</i> 68.8° F	Non
. Remarks: None	•					
			I			
				x.		
	,			6	•	
		CERTIFIC	CATE OF COM	PLIANCE		
		· · · · · · · · · · · · · · · · · · ·	^ :		of a continuous com	· farme
	at the statements of the ASME Code		Owners Hepon	are correct and th	ilS replacement con	10ms
	ymbol Stamp: Not					
Certificate Of	f Authorization N					
Expiration Da	ate: Not Applicable			^		ı
December of But	Durch	O th	Clanad By	De	٠	
Prepared By	Kuldip Singh - Mate	erials And Inspection	Signed By _ on	Manager, Mat	terials And Inspection	
0-4-	715		Date	7-6-90	•	
Date					<u> </u>	
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İ		ERTIFICATE	OF INSERVIC	E INSPECTION		
I the underel	laned holding s	velid commiss	ion issued by t	he National Board	of Boiler and Pre	ssur o
Vessel Inspec	ctors and the Sta	ite of Washingto	on <i>and employe</i>	e d by Arkwright Mutu	ial Insurance Comp	pany
(Factory Mutua	al Fogineering Asso	ociation) of Norw	vood, Massachus	etts <i>have inspecte</i>	d the component	is .
described in	this Owner's Rep	oort during the	period <u>5-5</u>	<u>-94to</u>	1-22-94	and
state to the b	est of my knowle	idge and belief	, the Owner na	s performed exami	inauons and taxe	iN Gibba
ASME Code,		d in this Uwne	rs neport in a	ccordance with the	requirements vi	ure
By signing th	nis certificate neli	ther the inspec	tor nor his em	oloyer makes any v	warranty, express	sed or
implied, cond	ceming the exam	inations and c	orrective meas	ures described in t	this Owner's Rep	xort.
Furthermore.	, neither the insp	ector nor his e	mpioyer shali l	be liable in any mai	nner for any pers	sonai
injury or prop	perty damage or a	a loss of any K	ind arising tron	n or connected wit	ภ เกเร เกรษฐนินาเ	,
Day Of	beraarth		Commissi	ons 9556 D	W NE	5 <u>T</u>
- CWIL THE	Instructor's Signature			National Board	i, State, and Endorsen	nents
Date	7/6/9	4				
			•			



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/22/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(19)-1	WPPSS	RCIC(19)-1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Replaced valve RCIC-V-28. The replacement work was performed as follows
 - 1) Removed existing valve
 - 2) Installed new valve
 - 3) Made required welds
 - 4) Performed PT examination on the final socket welds. PT examination results acceptable
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

Test Pressure: 188 Psig Component Design Pr		Test Temperature: 76.2 ⁰ F Temperature: 267 ⁰ F
Remarks: See attached NPV-1 Code Data Rep	ort for the new valve RCIC-V-	28, Serial No AP766
	•	•
		•
•		
CE	RTIFICATE OF COMPL	LIANCE
We certify that the statements made is	n this Owner's Report s	re correct and this replacement conforms
to the rules of the ASME Code, Section		re correct and and replacement comornio
Type Code Symbol Stamp: Not applicable		
Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable	plicable	
Expiration Date: Not Applicable		04.
Prepared By Wulder Som	Signed By	RAMON
Kuldip Singh - Materials And	•	Manager, Materials And Inspection
Date 6 22 94	Date	6-23-94
CERTIFI	CATE OF INSERVICE	INSPECTION
A Alexander Constitution and Alexander		Alekson Board of Bollon and Branches
Vessel Inspectors and the State of Wa		National Board of Boiler and Pressure by Arkwright Mutual Insurance Company
(Factory Mutual Engineering Association)	of Norwood, Massachuset	ts have inspected the components
described in this Owner's Report duri	ng the period <u>5-6-</u>	94to <i>u-24-94</i> _and
state to the best of my knowledge and corrective measures described in this		
ASME Code, Section XI	owners neport in acc	ordance with the requirements of the
By signing this certificate neither the	Inspector nor his empl	oyer makes any warranty, expressed or
implied, concerning the examinations	and corrective measur	es described in this Owner's Report.
Furthermore, neither the Inspector no	r his employer shall be form kind origina from	liable in any manner for any personal
Injury or property damage or a loss of	i any kina arising irom	or connected with this inspection
Dan Sloggarth	Commissio	
respector's Signature	·	National Board, State, and Endorsements
Date 6-24-94		

essure Retaining Plecas	<u></u>	ROLL - 5, - 1, -1, -1, -1, -1, -1, -1, -1, -1, -					
Merk No.	Material Spec. No.	Manufacturer	Remarks				
Castings "		•	Julaip Sups				
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		BECHT					
Forgings	`						
Bodies 9M433N	SA105	Texas Forge	Republic Mear 5078630				
Covers BM289N	SA105 ·	Texa's Forge	- Armon Heat 83660				
	Mark No. Castings NA Forgings Bodies 9M433N	Marx No. Material Spec. No. Castings NA Forgings Bodies BM433N SA105	Marx No. Material Spec. No. Manufacturer Castings NA Forgings Bodies BM433N SA105 Texas Forge				

(1) For manually operated valves only.

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(4) (5)

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(8) (10)

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This-larm-LECCC371-m Dept., ASME, 545 E. 47 St., New

^{*} Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/21 x 11°, (2) information in items 1, 2 and 5 on this data-report is included on each sheet, and II) each sheet is numbered and number of sheets is recorded at top of this form, and the

Commissions __

INACT BOL State. From and Mo.)



1. Owner: Washington Public Power Supply System (WPPSS) Address: 3000 George Washington Way, Richland, Washington Date: 7/5/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Standby Liquid Control (SLC) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC-V-4B	Conax	N/A	90	N/A	1975	Replacement	Yes, Code Class 1

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



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

		•		•
Tests Conducte	d: Hydrostatic Pneumatic [Nominal Op	perating Pressure	K . Other Non
•	Test Pressure: 1150/1200 to 1300 Ps	· ·	st Temperature: 81.6/7	
	Component Design Pressure: 14		mperature: 150° F	
	-			-
	attached N-2 Code Data Reports for follow	ring new valve parts		
Valve Part	Serial No			
Trigger body asset Inlet fitting	4212			
Nominal operating p	ressure test on the down stream side of the	valve (RPV Side) - t	est pressure of 1150 Psig a	nd test temperature of
.6 ⁰ F				
Nominal operating p nperature of 79.2 ⁰ F	ressure test on the up stream side of the va	11/6 (SLC-P-18 Sl06)	- test pressure or 1200 to 1	oo Lad an mar
inperature of 75.2	•			
	CERTIFICAT	TE OF COMPLIA	NCE	
We certify that	t the statements made in this Owi	ner's Report are	correct and this replace	ement conforms
to the rules of	the ASME Code, Section XI			
	mbol Stamp: Not applicable			
	Authorization No.: Not applicable			
Expiration Dat	e: Not Applicable		_	
	Klach O'	o	Patrice	
Prepared By _	Kuklip Singh - Materials And Inspection	Signed By	Managor, Materials An	d Inspection
			• ,	a mspocom
Date	7 5(94	Date	7-6-94	
	•			
	CERTIFICATE OF	· INSERVICE IN	SPECTION	
I, the undersig	ned, holding a valid commission	issued by the N	ational Board of Boll	er and Pressure
Vessel Inspec	tors and the State of Washington a	and employed by	Arkwright Mutual Insur	ance Company
(Factory Mutual	Engineering Association) of Norwood	d. Massachusetts .	have inspected the c	omponents
described in t	his Owner's Report during the pe	rlod <u>415 -</u>	94_ to	<u>-94</u> and
state to the be	st of my knowledge and belief, th	ie Owner has pei	rformed examination:	s and taken
corrective me	asures described in this Owner's	Report in accord	dance with the requir	ements of the
	Section XI			
ASME Code, S			er makes anv warrani	u avnracead or
By signing thi	s certificate neither the inspector	r nor nis employ		y, expressed or
By signing thi	eming the examinations and corr	ective measures	described in this Ow	mer's Report.
By signing thi implied, conce Furthermore.	erning the examinations and corn neither the inspector nor his emp	rective measures ployer shall be lia	t described in this Ow able in any manner fo	mer's Report. r any personal
By signing thi implied, conce Furthermore.	eming the examinations and corr	rective measures ployer shall be lia	t described in this Ow able in any manner fo	mer's Report. r any personal
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By signing thi implied, conce Furthermore.	erning the examinations and corn neither the inspector nor his emp	ective measures ployer shall be lia i arising from or	described in this Ow able in any manner fo connected with this i 9556 W	mer's Report. r any personal nspection NBI
By signing thi implied, conce Furthermore.	erning the examinations and corn neither the inspector nor his emp	ective measures ployer shall be lia i arising from or	described in this Own able in any manner for connected with this i	mer's Report. r any personal nspection NBI

FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATÁ REPORT FOR IDEN NUCLEAR PARTS AND APPURTENANCES*

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

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Quearp	6)30/54
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Not To Exceed One Day's Production

Wachir	ngton Public Power Su	ration, 2300 Walden Ave., (name and address of conflicate holder) pply, Richland, WA	
		free of the thousand or here and the	
ocation of installation	WNP-2, Richland, WA		•
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ype <u>N20000, Rev. F</u>	SA479 304SST	Itensile strengthi (CRN)	
and a second second	77	S77 1	N/A
SME Code, Section III:	(edition) (i	ddenda) (class)	(Code Case no)
abricated in accordance with	Const. Spec. (Div. 2 only)	N/A Revision	Date
emarks: <u>Trigger bod</u>	y subassembly for exp	losive actuated valve rep	tacement kit for
standhy lig	uid control system.	Para. NB2121 (b) is appli	cable to ram.
Scalidoy 114	IId Concrete Systems		
* Pressure tes	sted at 2800 psig for	10 minutes.	
	•		
om. thickness (in.)	Remarks Min. design thickness (in.)	Dia. ID (ft. & in.) Le	ngth overall (ft. & in.)
hen applicable, Certificate h	dolders' data reports are attac	hed for each item of this report:	
	Τ	7	Ţ
	Nethorn	Part or Appurtenance	National
Part or Appurtenance	National Board No.	Serial Number	Board Number
Serial Number		Sena remove	In Numerical Order
	in Numerical Order	11	
4209	4209	(26)	
4210	4210	(27)	
)		(28)	
)		- 1/23/	
)	TRIGGER SIN 4210	(30)	
·	RIGGER SIN 4210	(31)	
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8) 9) 20) 21) 22)	·	(44) (45) (45) (46) (47) (48)	11×12°0× × 1
18)	·	(44) (45) (1.1 0.1 (46) (47) (48) (49)	11×12°0× × 1
17)		(44) (45) (45) (46) (47) (48)	11×12°0× × 1

gs may be used provided (1) area is $8^{1}2 \times 11$, (2) information in items 2 and 3 on this data report is included on each sheet. (3) each

FORM N:2 (back)

CERTIFICATE OF DESIGN
Design specifications certified by Clyde T. Nieh P. E. state CA Reg. no. 15587
Design report* certified by Francis J. Domino P E. state NY Reg. no. 36832
CERTIFICATE OF SHOP COMPLIANCE
Ve certify that the statements made in this report are correct and that this (these) <u>Trigger Body Subassembly</u> conform to the rules of construction of the ASME Code, Section III.
ASME Certificate of Authorization no. N-1850 Expires September 2, 1995
Date 3/1 7/7-3 Name Conax Buffalo Corporation Signed Richard E. Dulski, QA Manager
CERTIFICATE OF SHOP INSPECTION
the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or pro- nce of New York and employed by H.S.B.I. & I. Co.
hartford. CT have inspected these items described in this data report on Market of Mar
Date = 1/2 = 1/2 Signed Commissions LB 9/5 AL (Authorized Inspector) Commissions LB 9/5 AL (Nat'l Bd (Incl endorsements) state or prov and no)

(when applicable)

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

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

arp Burb 6/30194

Not To Exceed One Day's Production

Pg 1 of 1

Manufactured and certified by	Conax Buffalo Corpo	ration, 2300 l	Walden Ave.	Cheektowaga, NY 14
Manufactured for Washi	ngton Public Power Su	pply, Richland	d, WA	······································
Location of installation	WNP-2, Richland, WA	(name and address of pu		•
Type N38017, Rev. F		75 KSI	N/A_	1993
idrawing no a ASME Code, Section III:	77	(tensile strength)	(CRN)	N/A
	ledition) (a in Const. Spec. (Div. 2 only)	odenda) N/A Pour	(class)	(Code Case no +
	ing for explosive act	(40)		
e .	1	dated valve it	epiacement ki	t for standby
	trol system.	••	·	
* Pressure to	ested at 2800 psig for	r 10 minutes.		
• •	Min. design thickness (in.) Holders' data reports are attacl		- '	gth overall (ft. & in.) <u>N/A</u>
Part or Appurtenance Serial Number	National Board No. in Numerical Order	1 6	purtenance Number	National Board Number in Numerical Order
(1) 4211	4211	(26)		
(2) 4212	4212	(27)		
(4)		(29)		
(5) (6)		(30)		
·	NLET FITTING SIN	. (32)		
8) 9)	4212	(33)		
10)		(35)	•	
11)	 	(36)		
12) 13)		(37)		
14)		(39)	1	
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21)		1 1 ' '		
(21)		(47)		
(21)		(47)		
(21)		(47)		

FORM N:2 (back)

CERTIFICATE OF DESIGN
Design specifications certified by <u>Clyde T. Nieh</u> P. E. state <u>CA</u> Reg. no. 15587
Design report* certified by Francis J. Domino P E. state NY Reg. no. 36832
CERTIFICATE OF SHOP COMPLIANCE
We certify that the statements made in this report are correct and that this (these) Inlet Fitting conform to the rules of construction of the ASME Code. Section III.
ASME Certificate of Authorization no. N-1850 Expires September 2, 1995
Date 3/193 Name Conax Buffalo Corporation Signed Fauthorized representatives Richard E. Dulski, QA Manager
CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or proince of New York and employed by H.S.B.I. & I. Co. of Hartford, CT have inspected these items described in this data report on
Section III. Each part listed has been authorized for stamping on the date shown above. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injuries.
Date 3/53/97 Signed Commissions (Nat'l Bd (Incl. endorsements) state or prov. and no.)



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/25/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

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

4. Identification Of System: Containment Electrical Penetration No X-104A

5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment Electrical Penetration No X-104A	PDM	Containment Vessel	790	N/A	1982	Replacement	Yes, Code Class MC
					;	·· ·	
]		}		; _* ,		

- 7. Description Of Work Performed: Installed blank (plug) module for Electrical Penetration No X-104A, Position No 1. The replacement work was performed as follows
 - 1) Removed the existing module from Electrical Penetration No X-104A, Position No 1
 - 2) Installed new blank (plug) module in Electrical Penetration No X-104A, Position No 1
 - 3) Performed pressure test on the Electrical Penetration No X-104A to blank (plug) module "O" ring joint One (1) outboard joint for Position No 1 to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

FORM NIS-2 OWNER S REPORT FO		TIME ENGLINEIVIO (E	Juony
Tests Conducted: Hydrostatic Pneumatic Test Pressure: 38.9 Psig Component Design Pressure: 45	Tes	erating Pressure st Temperature: 79.6° F mperature: 340° F	Other X LLR
, Remarks: See attached N-2 Code Data Report for the Electric	ical Penetration asse	mbly Serial No 780703, Natio	nal Board No W16800
otes - 1) The new blank (plug) module for WNP-2 Electrical Penetrati Penetration assembly Serial No 780703, National Board No W 2) Component design pressure of 45 Psig and design temperative Containment Vessel	16800		-
CERTIFICATE	E OF COMPLIA	NCE	
We certify that the statements made in this Own to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable	er's Report are o	correct and this replacem	ent conforms
Kuldip Singh - Materials And Inspection	Signed By	Manager, Materials And In	spection
Date 6/27194 D	Date	7-4-94	
CERTIFICATE OF I	NSERVICE INS	PECTION	
I, the undersigned, holding a valid commission is Vessel Inspectors and the State of Washington and (Factory Mutual Engineering Association) of Norwood, described in this Owner's Report during the peristate to the best of my knowledge and belief, the corrective measures described in this Owner's RASME Code, Section XI By signing this certificate neither the Inspector of implied, concerning the examinations and corrective measures, neither the Inspector nor his employing the property damage or a loss of any kind and correcting the property damage or a loss of any kind and correcting the property damage or a loss of any kind and corrections.	d employed by a Massachusetts hod <u>6-/6-9</u> . Owner has performent in accordance his employed tive measures oper shall be liab	Arkwright Mutual Insurance ave Inspected the come ave Inspected the come are to a sure and a sure and a sure are with the requirements of the sure and any warranty, and a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure any manner for a sure and a sure a sure and a sure and a sure and a sure and a sure and a sure a sure and a sure and a sure and a sure and a sure and a sure and a sure a sure and a sure and a sure and a sure and a sure and a sure and a sure and a sure and a sure and a sure and a sure a sure a sure and a sure a sure a sure and a sure a sure a sure a s	ee Company ponents 94- and nd taken eents of the expressed or r's Report. ny personal
	Commissions _		NBI
Date 7/5/94		National Board, State, and	Endorsements

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provisions of the ASME Code Rules

Bueauf	Sweb
	6/20194

(Name and address of Manufactured by Westinghouse Electric Corp., Westinghouse Eircle, Horseheads, NY 1484
Washington Public Power Supply System, Hanford, Wash.
(b) Manufactured for (Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part 780703 Nat'l Bd. No. W16800
(a) Constructed According to Drawing No. E40106 Drawing Prepared by R. L. Korner
(b) Description of Part Inspected Electrical Penetration Assembly
2 GIRNET.
(c) Applicable ASME Code: Section III, Edition 1974, Addenda date 75, Case No. N/A Class H. C.
3. Remarks: This device when welded to the containment nozzle provides 3 sockets (Brief description of service for which component was designed)
for the penetration modules. Together these parts complete the pressure
boundary of the containment.
boundary of the containment. 5/27/84
The certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.) Date July 25, 19 78 Signed Westinghouse Elec. Corp. By J. B. Kessing (Manufacturer) Certificate of Authorization Expires August 4, 1978 Certificate of Authorization No. 1190
CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)
Washington Public Power Supply System, Hanford, Wash. Design information on file at
Scress analysis report on file at Westinghouse Electric Corp., Westinghouse Circle, Horseheads, N'
Design specifications certified by Burton Hemroff Prof. Eng. State Wash. Reg. No. 15344
Stress analysis report certified by Hi chael Yonko Prof. Eng. State H.Y. Reg. No. 44063
CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of New York and employed by Lumbermens Mutual Casualty Co. of Long Grove, illinois have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on July 27. By signing this certificate, neither the Inspector nor his employer makes my warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Date July 27,) 19 78
Commissions NB 6786 PAWC 1907
inspector's Signature Nettonal Board, State, Province and No.

[&]quot;Supplemental sheets in form of lists, sketches or drawings may be used previded (1) size is 490" x 11", (2) information in items 1-2 on thic data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3, "Remarks",

FORM N-2 (back) S/N 780703 Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers. तत ठ ial SA333 T.S60,000 Nominal 406 Corrosion (Kind & Spec. No.) (Min. of Range Specified) in. Allowance in. Dia. ft. 12 in. Length 4. Shell: Material SA333 5. Seams: Long Seamless H.T. R.T.__ __ Efficiency___ Girth. No. of Courses. 6. Heads: (a) Material SA240-Type 304 75000 T.S. T.S. _ (b) Material Side to Press. Location Flat Kanckie Elliptical Contral **Hemispherical** (Top, bottom, ende) (Conv. or Conc.) Thickness Radius Ratio Radios Diameter Redius Apex Angle 12.2" END (A)_ (b) NONE Other fascening SAI93-87 If removable, bolts used SA193-87 1/2-13 6 Red. 5/8-11 - 1 Req. (Material, Spec. No., T.S., Size, Number) (Describe or attach sketch) 7. Jacket Closure:
(Describe as egee and weld, bar, etc. If bar give dimensions, if boiled, describe er sketch)
Or Otop Weight. 52 pei et_ Charpy Impact_ INTERNAL 8. Design prossure1. at temp. of_ Items 9 and 10 to be completed for tube sections 9. Tube Sheets: Starionary. Material Dis. Thickness in. Attachment (Welded, Bolted) Thickness___in. Attachment. inches or gage. Number 10. Tuber: Material _ _ O.D. ____ in Thickness__ (5tr. or U) Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers. Nominal Corrosion 11. Shell: Material. in. Allowance __in. Dia.__it.__in. Length__ft._ Thickness. (Kind & Spec. No.) (Min. of Range Specified) 12 Seamer Long_ _H.T. __R.T. _____Efficiency_ Girth_ _ H.T.'_ _R.T. _ .. No. of Courses .. 13. Heads (a) Material_ T.S. .T.S._ (b) Material_ Flat Kauckie Zliptical Contest Hemispherical Thickness Radius Redius Retio Radbes (Conv. or Conc.) Asex Angle (a) Top, bottom, ends_ (b) Channel Other fastening (Describe or attach sketch) If removable, boits used (a)_____ _(b)_ (c) _ Drop Veight. Charpy impact_ 14. Design pressure at cemp. of_ Items below to be completed for all vessels where applicable. 15. Safety Valve Outlets: Number ____ Size_ _____ Location _ 16. Nozzles: Zeinfarteme

Purpose (Inlet, Dis. or Size Hew Atteched Outlet, Drain) Type Meterial Thickness Material INLET SA213 **TYPE 304** 17. Inspection Manholes, No._ Size Location _ Size_ Openings: Handholes, No.__ Threaded, No. Location _ Other (Describe) _Amached_ 18. Supports: Skirt_ (Yee or No) (Number) (Number)

If Postweld Heat-Treated.

List other internal or external pressure with coincident temperature when applicable.



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

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

Unit: WNP-2

Date: 7/27/94

Sheet: 1 of 1

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
 (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Residual Heat Removal (RHR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: None
- (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-V-8	Velan	,	N/A	N/A	1978	Repair	Yes, Code Class 1
		•					

7. Description Of Work Performed: Drilled hole in the wedge for valve RHR-V-8. Machined/ground/lapped the hardfaced seating surfaces of the valve wedge. The work was performed as follows

Drilled Hole

1) Drilled hole in the reactor side of the valve wedge

Valve Wedge - Upstream Side

- 1) Unacceptable linear indications were observed during visual examination on the upstream side of the hardfaced seating surfaces of the wedge
- 2) Unacceptable linear indications observed during visual examination were dispositioned by fracture mechanics using ASME Section XI, Article IWB-3600 requirements

Valve Wedge - Downstream Side

- 1) Unacceptable linear indications were observed during visual examination on the downstream side of the hardfaced seating surfaces of the wedge
- 2) Machined/ground/lapped the hardfaced seating surfaces of the valve wedge
- 3) Performed PT examination on the final hardfaced seating surfaces. PT examination results not acceptable
- 4) Unacceptable linear indications were observed during PT examination on the final hardfaced seating surfaces. The linear indications were dispositioned by fracture mechanics using ASME Section XI, Article IWB-3600 requirements

Pressure Test

1) Performed pressure test to confirm pressure boundary integrity of the valve body to bonnet bolted joint. No evidence of leakage during the pressure test



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

	FURM NIS-2 UWNER'S RE	PUR y FUR REPAIRS	OR REPLACEMENTS (Back)	
8 Tests Condu	ncted: Hydrostatic Pnet Test Pressure: 180 Psig Component Design Pre		Operating Pressure X Other Test Temperature: 147.8° F Temperature: 575° F	Nor
9. Remarks: N	one			
			•	
	•			
		•		
-	, CER	TIFICATE OF COMP	LIANCE	
We cortifue	that the statements made in	thic Owner's Penert	are correct and this repair conforms	
	onal the Statements made in of the ASME Code, Section		ire correct and this repair comornis	
	Symbol Stamp: Not applicable			
	Of Authorization No.: Not appli Date: Not Applicable	icable		
Expiration	Date: Not Applicable	, ,	Oh.,	
Prepared B	y bulait Eng	Signed By	KATMO	
-	Kuldip Singh Materials And Ih	•	Manager, Materials And Inspection	
Date	7/27/94	Date	7-27-94	
<u> </u>				
		·- <u>. · · · · · · · · · · · · · · · · · · ·</u>		
	CERTIFIC	ATE OF INSERVICE	INSPECTION	
	OLITIN 10.	ATE OF MOLITIOE	Mor Editor	
			National Board of Boiler and Pressu	
			by Arkwright Mutual Insurance Company tts have inspected the components	1
described i	in this Owner's Report durin	a the period 4-28	3-94 to 1-27-94 and	d .
state to the	best of my knowledge and	belief, the Owner has	performed examinations and taken	•
		Owner's Report in acc	ordance with the requirements of the	ł
	e, Section XI this cortificate neither the in	renactor nor hie amni	oyer makes any warranty, expressed	~
			res described in this Owner's Report.	
Furthermo	re, neither the Inspector nor	his employer shall be	liable in any manner for any persona	
		•	or connected with this inspection	
Pan V	Voyanth Vispector's Signature 7-27-94	Commissio	ns 9556W NBI	
	hapector's Signature		National Board, State, and Endorsements	 s
Date	7-27-94			
	ı			



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/25/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(1)-2UG	WPPSS	SW(1)-2UG-P1	N/A	N/A	1983	Repair	Yes, Code Class 3

- 7. Description Of Work Performed: Repaired by welding pits on the inside (ID) surfaces of the piping (spacer ring, flange and elbow) down stream side of valve SW-V-2A. The repair work was performed as follows
 - 1) Weld repaired (weld built up) pits on the inside (ID) surfaces of the piping flange and elbow
 - 2) Ground/blended the weld repaired areas on the inside (ID) surfaces of the piping flange and elbow flush with the adjacent base metal to match the contour of the inside surfaces
 - 3) Performed MT examination on the final ground/blended surfaces of the piping flange and elbow. MT examination results acceptable
 - 4) Performed RT examination on the final ground/blended surfaces of the piping flange and elbow. RT examination results were evaluated to be unacceptable
 - 5) Removed unacceptable RT indications by grinding
 - 6) Weld repaired (weld built up) the ground out areas on the inside (ID) surfaces of the piping flange and elbow
 - 7) Ground/blended the weld repaired areas on the inside (ID) surfaces of the piping flange and elbow flush with the adjacent base metal to match the contour of the inside surfaces
 - 8) Performed MT examination on the final ground/blended surfaces of the piping flange and elbow. MT examination results acceptable
 - 9) Performed RT examination on the final ground/blended surfaces of the piping flange and elbow. RT examination results were acceptable
 - 10) Weld repaired (weld built up) pits on the inside (ID) surfaces of the spacer ring
 - 11) Ground/blended the weld repaired areas on the inside (ID) surfaces of the spacer ring flush with the adjacent base metal to match the contour of the inside surfaces
 - 12) Performed MT examination on the final ground/blended surfaces of the spacer ring. MT examination results acceptable
 - 13) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
3	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other None Test Pressure: 215 Psig Test Temperature: 63° 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 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 - Materials And Inspection Manager, Materials And Inspection
	Date 7 25 94 Date 7-25-94
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-8-94 to 1-26-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
	Commissions 956 W NBT Inspector's Signature National Board, State, and Endorsements Date 7-26-94-



1. Owner: Washington Public Power Supply System (WPPSS) Address: 3000 George Washington Way, Richland, Washington Date: 7/5/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(1)-2UG	WPPSS	SW(1)-2UG-P1	N/A	N/A	1983	Repair	Yes, Code Class 3
					!		

- 7. Description Of Work Performed: Repaired by weld depositing on the inside (ID) surfaces of the piping (flange and elbow) down stream side of valve SW-V-2A. The repair work was performed as follows
 - 1) Performed weld deposit on the inside (ID) surfaces of the piping flange
 - 2) Prepped the weld deposited areas on the inside (ID) surfaces of the piping flange
 - 3) Performed weld deposit on the inside (ID) surfaces of the piping elbow
 - 4) Prepped the weld deposited areas on the inside (ID) surfaces of the piping elbow
 - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other None Test Pressure: 215 Psig Test Temperature: 63° F Component Design Pressure: 309 Psig Temperature: 150° F
9.	Remarks: None
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this 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 Rudin Signed By Ranger, Materials And Inspection Rudin Singh - Materials And Inspection
	Date 7-6-94
	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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-10-94- to 6-72-94- and state to the best of my knowledge and belief, the Owner has performed examinations and taken
	corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
	Tan Bugarth Commissions 9556W NBT National Board, State, and Endorsements Date 7/6/94



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/5/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Residual Heat Removal (RHR) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1977 Edition with Winter 1977 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-HX-2A	Ametek	79283	598	2	1980	Replacement	Yes, Code Class 3

- 7. Description Of Work Performed: Replaced botting material for shell side of seal cooler RHR-HX-2A. The replacement work was performed as follows
 - 1) Installed new nuts for the shell side of seal cooler RHR-HX-2A
 - 2) Installed new studs for the shell side of seal cooler RHR-HX-2A
 - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



•	FC	ORM NIS-2 O	WNER'S REPO	ORT FOR REPAI	RS OF	R REPLACEMENTS	S (Back)
8 Tests C	Conducte		tic Pneun ure: 140 Psig nt Design Press		Tes	erating Pressure [t Temperature: 68.8° nperature: 200° F	
9. Remai	rks: None					¥	
				•		•	
			•			•	•
		 					
			CERTI	FICATE OF CON	IPLIAI	NCE	
					t are c	correct and this repla	cement conforms
		the ASME C mbol Stamp:	iode, Section XI : Not applicable	I			
			n No.: Not applicat	bie			
Expir	ration Da	te: Not Applicab	io		4	\mathcal{O}_{A}	
Prens	ared By_	Quai	16 Quel	Signed By		KXMoe	
1700	., <u>.</u> ,	Kuldip Singh -	Materials And Inspe	ection		Manager, Materials A	nd Inspection
Date		71519	4	Date		7-5-94	
L							
			CERTIFICA	TE OF INSERVIC	E INS	PECTION	
I, the	undersig	gned, holding	g a valid commi State of WASH.	ission issued by: IN6Tb√ and	the Na emplo	tional Board of Boil yed by <u>ARKWRIGA</u>	ier and Pressure Muival Ins .
(FACTI	THE MUST	ial Engine	GENG ASSOC) C	P NUCLUOUD,	<u> 1855 </u>	have inspected	the components
desci	ribed in t	his Owner's	Report during t	the period5	/12/	94tot	22/44 and
state	to the be	est of my kno)Wiedge and be sibed in this Ou	ilet, the Owner Ri vner's Report in s	es pen ecord	formed examination ance with the requi	rements of the
ASMI	E Code.	Section XI					٩
By si	lanina thi	is certificate	neither the ins	pector nor his em	ploye	r makes any warran	ty, expressed or
impli	ed, conc	erning the ex	caminations and	d corrective mea: 's employer shall	sures (described in this Or ble in any manner fo	wners Heport. or any personal
inium	iemior e , v or prop	neimer me ii ertv damage	or a loss of an	y kind arising fro	m or c	onnected with this	inspection
	\ \//.	, OLL				955W	NRI
-67	un XIV	monoctor's Signal	hira	Commiss	ions _	National Board, State,	
Date	O.	7/5/94	<u></u>				•
							
1							



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/28/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-V-73A	Borg Warner	75606	N/A	N/A	1982	Repair	Yes, Code Class 2
					,	y	

- 7. Description Of Work Performed: Made body to bonnet seal weld for valve RHR-V-73A. The work was performed as follows
 - 1) Cut valve bonnet to yoke tack welds
 - 2) Cut valve body to bonnet seal weld
 - 3) Removed valve internals for troubleshooting
 - 4) Machined the valve disc seating surface to remove scratches
 - 5) Performed PT examination on the final machined valve disc seating surface. PT examination results acceptable
 - 6) Prepped cut/ground areas on the valve body and the bonnet
 - 7) Reinstalled valve internals and the bonnet
 - 8) Made valve bonnet to yoke tack welds
 - 9) Made valve body to bonnet seal weld
 - 10) Performed PT examination on the final seal weld. PT examination results acceptable
 - 11) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FO	ORM NIS-2 OWNER'S REPO	RT FOR REPAIR	S OR REPLACEME	NTS (Back)	
8 Tests Conduct	ted: Hydrostatic Pneum Test Pressure: 140 Psig Component Design Pressu		l Operating Pressure Test Temperature: 6 Temperature: 100° F	68.8 ⁰ F	None
9. Remarks: None	, D				
				•	
	CERTIF	TCATE OF COMP	LIANCE		
We certify the	at the statements made in this	s Owner's Report s	ere correct and this	rensis conforme	-
	f the ASME Code, Section XI	o Onliei a nepoli i	ne conect and uns i	epair comorms	j
	ymbol Stamp: Not applicable				ŀ
	' Authorization No.: Not applicabl Ite: Not Applicable	lo			ļ
			PA		1
Prepared By_	Rulaip Sups	Signed By	KNINOS		
	Kuldip Singh - Materials And Inspec		₩ '	ils And Inspection	i
Date	6/28/94	Date	7-4-94		
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				•	 1
	CERTIFICATI	E OF INSERVICE	INSPECTION		
	OLIIII IOAII		2011011		,
	gned, holding a valid commis				
	ctors and the State of Washing Il Engineering Association) of No.				ny
	this Owner's Report during th				nd -
state to the be	est of my knowledge and bell	ef, the Owner has	performed examinat	tions and taken	
	easures described in this Own	ner's Report in acc	ordance with the rec	quir e ments of ti	he į
ASME Code, S	Section XI is certificate neither the inspe	octor nor hie empl	ovor makoe any war	ranti avnesas	
	erning the examinations and				
Furthermore,	neither the inspector nor his	employer shall be	liable in any manne	er for any persoi	
injury or prop	erty damage or a loss of any	kind arising from	or connected with th	his inspection	
And lo	gaarth.	Commission	15 9556 W	NB:	τ
lg	perfector's Signature			ate, and Endorseme	i
Date	15/94			•	ļ
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1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/15/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Main Steam (MS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None

(b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980

Addenda, Code Case: N-308

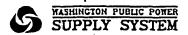
6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001B	WPPSS	822-G001B-P1	N/A	N/A	1983	Repair	Yes, Code Class 1

- 7. Description Of Work Performed: Removed gouges in the "U" groove seal area of the piping flange for relief valve MS-RV-2B. The work was performed as follows
 - 1) Machined to remove gouges in the "U" groove seal area of the piping flange
 - 2) Machined the raised face of the piping flange to maintain the "U" groove depth
 - 4) Surface finished the "U" groove seal area of the piping flange
 - 5) Surface finished the raised face of the piping flange
 - 6) Performed PT examination on the final surfaces. PT examination results acceptable
 - 7) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNER'S RE	EPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic Pne Test Pressure: 1021 Psig Component Design Pre	Test Temperature: 200.7° F
Remarks: None	
CEF	RTIFICATE OF COMPLIANCE
We could that the statements made in	n this Owner's Banact are correct and this was conforms
to the rules of the ASME Code, Section	n this Owner's Report are correct and this repair conforms n XI
Type Code Symbol Stamp: Not applicable	
Certificate Of Authorization No.: Not app Expiration Date: Not Applicable	plicable
1.84.00	21 PANICO
Prepared By Kulduly Suu Kuldip Singh - Materials And In	Inspection Manager, Materials And Inspection
nl no 4	7 - 01
Date 1(15) 44	Date
CERTIFIC	CATE OF INSERVICE INSPECTION
i, the undersigned, holding a valid con	mmission issued by the National Board of Boiler and Pressure
Vessel Inspectors and the State of Was	shington and employed by Arkwright Mutual Insurance Company
(Factory Mutual Engineering Association) o described in this Owner's Report durin	of Norwood, Massachusetts have inspected the components and the period 5-16-94 to 7-13-94 and
state to the best of my knowledge and	I belief, the Owner has performed examinations and taken
	Owner's Report in accordance with the requirements of the
ASME Code, Section XI	inspector nor his employer makes any warranty, expressed or
implied, concerning the examinations	and corrective measures described in this Owner's Report.
Furthermore, neither the Inspector nor	r his employer shall be liable in any manner for any personal
injury or property damage or a loss of	any kind arising from or connected with this inspection
Day Stogrands	Commissions 9556 W NBI
V/spoctor's Signature	National Board, State, and Endorsements
Date	<u> </u>



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/15/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
 (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other. I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001D	WPPSS	B22-G001 D-P1	N/A	N/A	1983	Repair	Yes, Code Class 1

- 7. Description Of Work Performed: Removed gouges in the "U" groove seal area of the piping flange for relief valve MS-RV-2D. The work was performed as follows
 - 1) Machined to remove gouges in the "U" groove seal area of the piping flange
 - 2) Machined the raised face of the piping flange to maintain the "U" groove depth
 - 4) Surface finished the "U" groove seal area of the piping flange
 - 5) Surface finished the raised face of the piping flange
 - 6) Performed PT examination on the final surfaces. PT examination results acceptable
 - 7) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other None Test Pressure: 1021 Psig Test Temperature: 200.7° F Component Design Pressure: 1250 Psig Temperature: 575° F
9.	Remarks: None
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this 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 Signed By Manager, Materials And Inspection Date 715 14 Date 7-14-94
l	
	CERTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-16-94 to 1-13-94 and state to the best of my knowledge and belief, the Owner's performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
•	Date 7-15-94 Commissions 9556W NST National Board, State, and Endorsements



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 7/7/94 Sheet: 1 of 1 Unit: WNP-2

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Bechtel Construction, Inc, PO Box 600, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: C20069
- 4. Identification Of System: Containment Electrical Penetration No X-101A
- 5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980
- Addenda, Code Case: N-308
 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment Electrical Penetration No X-101A	PDM .	Containment Vessel	790	N/A	1982	Replacement	Yes, Code Class MC

- 7. Description Of Work Performed: Installed module for Electrical Penetration No X-101A, Position No 1. The replacement work was performed as follows
 - 1) Removed the existing module from Electrical Penetration No X-101A, Position No 1
 - 2) Installed new module in Electrical Penetration No X-101A, Position No 1
 - 3) Performed pressure test on the Electrical Penetration No X-101A to modules "O" ring joint One (1) outboard joint for Position No 1 to confirm pressure boundary integrity. No evidence of leakage during the pressure test



		G J.S	OPPLI SISIE	·W , . •
	FORM NIS-2	DWNER'S REPOR	TFOR REPAIRS	OR REPLACEMENTS (Back)
8 Tests C	Test Press	itic Pneumat sure: 38.8 Psig nt Design Pressure		Operating Pressure Other X LI Test Temperature: 80.8° F Temperature: 340° F
9. Remar	'ks: None			
		CERTIFIC	ATE OF COMPL	JANCE
Wess	artifu that the etatom	ante mada in this (Sumar'a Banart a	re correct and this replacement conforms
	rules of the ASME (owner s neport ar	e correct and uns repassement comornis
	Code Symbol Stamp			
	icate Of Authorizatio ation Date: Not Applical			•
1 '	_			Blue.
Prepa	red By Queou	Materials And Inspection	Signed By	RAMORI
Date_		Materials And Inspection	n <i>Date</i>	Manager, Materials And Inspection 7-7-84
Date_		11.75	Date	7-7-
L	,			
		CERTIFICATE	OF INCERVICE I	NEDECTION
ĺ		CENTIFICATE	OF INSERVICE I	ASPECTION
				National Board of Boller and Pressure
				by Arkwright Mutual Insurance Company is have inspected the components
	ibed in this Owner's			
state t	to the best of my kno	wiedge and bellef	the Owner has p	erformed examinations and taken
1		ribed in this Owne	r's Report in acco	ordance with the requirements of the
	ECode, Section XI Uning this certificate	neither the Inspec	tor nor his emplo	yer makes any warranty, expressed or
implie	ed, concerning the ex	caminations and co	orrective measure	es described in this Owner's Report.
				liable in any manner for any personal r connected with this inspection
"July	Or property damage	or a loss of ally ki	_	
	n Laggarla		Commission:	9556W NBI
Dota	Marioctor's Signa			National Board, State, and Endorsements
Date_	7-110			4
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1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 6/22/94 Sheet: 1 of 1 Unit: WNP-2

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

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Bechtel Construction, Inc, PO Box 600, Richland, WA
 - (b) Repair Organization P.O. No, Job No, etc.: C20069
- 4. Identification Of System: Containment Electrical Penetration No X-105B
- 5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
 - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment Electrical Penetration No X-105B	PDM	Containment Vessel	790	N/A	1982	Replacement	Yes, Code Class MC

- 7. Description Of Work Performed: Replaced module for Electrical Penetration No X-105B, Position No 1. The replacement work was performed as follows
 - 1) Removed the existing module from Electrical Penetration No X-105B, Position No 1
 - 2) Installed new module in Electrical Penetration No X-105B, Position No 1
 - 3) Performed pressure test on the Electrical Penetration No X-105B to module "O" ring joint One (1) outboard joint for Position No 1 to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

8 Tests Conducted: Hydrostatic Pneumatic Test Pressure: 38.7 Psig Component Design Pressure: 45	Test Temperature: 73.40 F
9. Remarks: See attached N-2 Code Data Report for the Electr	ical Penetration assembly Serial No 791101, National Board No W16978
assembly Serial No 791101, National Board No W16978	was from WNP-1 ASME NPT Code Stamped Electrical Penetration ature of 340 ⁰ F is based on the N-1 Code Data Report issued by PDM for
CERTIFICAT	E OF COMPLIANCE
Kuldip Singh - Materials And Inspection	Signed By RANCE Manager, Materials And Inspection Date 6-23-94
I, the undersigned, holding a valid commission in Vessel Inspectors and the State of Washington and (Factory Mutual Engineering Association) of Norwood described in this Owner's Report during the perstate to the best of my knowledge and belief, the corrective measures described in this Owner's I ASME Code, Section XI By signing this certificate neither the Inspector implied, concerning the examinations and corre	lod <u>U-12-94</u> to <u>G-24-94</u> and e Owner has performed examinations and taken Report in accordance with the requirements of the nor his employer makes any warranty, expressed or ctive measures described in this Owner's Report. oyer shall be liable in any manner for any personal
Date 6-24-94	ranona board, sante, and encorsements

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPUI	RTENANCES*
As required by the Provisions of the ASME Code Rules	Buch Bugbs
1. (a) Manufactured by Westinghouse Electric Corp., Westinghouse Circle, Hor	rseheads, NY 14845
(b) Manufactured for Washington Public Power Supply System, Hanford, Wash.	
2. Identification-Manuscourer's Serial No. of Patt 791101 Nat'l Bd. No. W16	
(a) Constituted According to Drawing No. E40106 Drawing Prepared by R. L. Ko	rner .
(b) Description of Part Inspected Electrical Penetration Assembly	,
Summer: (c) Applicable ASME Code: Section III, Edition 1975, Addenda date 75, Case No. N/A	Class H. C. 17
This device when welded to the containment nozzle provides (Birlet description of service for which component was designed)	3 sockets
for the penetration modules. Together these parts complete the pr	essure •
boundary of the containment. This device has been pneumatically pr	ressure · ·
tested in conformance with design requirements.	· · · · · · · · · · · · · · · · · · ·
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 Manufact Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurt in the component Design Specification and Stress Report.) Dec. 10, 19 Signed Westinghouse Elec. Corp. By J. B. Kessir (Manufacturer) Certificate of Authorization Expires August 4, 1981 Certificate of Authorization No.	enance is not included
CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) Washington Public Power Supply System, Hanford,	Wash.
Design information on file st	- Versebende WY
Stress analysis report on file as Westinghouse Electric Corp., Westinghouse Circl	e, norseneads, NY
f ender the second of the seco	_Reg_No15344
Stress analysis report certified by Michael Yonko Prof. Eng. State N.Y.	Reg. No. 44063
CERTIFICATE OF SHOP INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure and/or the State or Province of New York and employed by Lumbermens Mutual C. of Long Grove, Illinois have inspected the part of a pressure vessel. Manufacturer's Partial Data Report on December 10, 19, 79, and state that to the best 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 ing the part described in this Manufacturer's Pattial Data Report. Furthermore, neither the Inspector shall be liable in any manner for any personal injury or property damagn or a loss of any kind arising	described in this t of my knowledge implied, concern-
with this inspection. December 10. 79	DOCUMENT REVIEWED
Date	By: C.3. WESTON
Inspector's Signature C 1 Thomas Notional Board, State, Provi	U.E. & C.

"Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is \$\pi^* \times 11", (2) information in items \$12 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is reverted in item 3, "Remarks".

FORM N-2 (back)

5/N 791101 Buearp 1/194

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		Girth_			H.T. ¹		R.T.		No. of Courses		
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				oleted for					s of heat exchan	gers.	
		faterial_		oleted for	N	ominal hickness				gers.	
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s	hells M	freerial_ (Kind	i & Spec.	T.S	N T of Range S	ominal hickness_ pectited)	Como in. Allow	sion vencein.		a. Length_	(cin.
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·s	hell: M	fererial_ (Kind Long	1 & Spec	T.SH	N Tolkange S .T.1	ominal hickness_ pectited)	Corro	vencein.	Diaici Efficiency	a. Length_	(cia. _%
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S:	hell: Mesme: 1	firerial_ (Kind Lung, Girth Hateri	i à Spec	T.SH	N T T T T T T T T T T T T T T T T T T T	ominal hickness _ pestited)  T.S Knuckie Radius	R.T	(b) Material Centeal Apex Angle	Diaici Efficiency No. of Courses_	a. Leagth_	(cin.
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1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/4/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

- 3. (a) Work Performed By: Bochtel Construction Company, PO Box 600, Richland, WA
  - (b) Repair Organization P.O. No, Job No, etc.: C30236
- 4. Identification Of System: Process Instrumentation (PI)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Class: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-ST-(IR-64)-9	JCI	PI(1)-ST-(IR-64)-9	N/A	N/A	1983	Ropair	Yes, Code Class 2

- 7. Description Of Work Performed: Modified instrument tubing for line PI(1)-ST-(IR-64)-9. The work was performed as follows
  - 1) Removed section of the existing tubing material
  - 2) Installed new tubing material
  - 3) Made required socket welds
  - 4) Performed PT examination on the final socket wekls. PT examination results acceptable



F	ORM NIS-2 OWNER'S REF	PORT FOR REPAIR	S OR REPLACEMEN	NTS (Back)
Tests Conduct	ed: Hydrostatic Pneu Test Pressure: Psig Component Design Pres		l Operating Pressure Test Temperature:° Temperature:°F	
. Remarks: None	3			
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				•
	CERT	TIFICATE OF COMP	LIANCE	
]				_
	at the statements made in t f the ASME Code, Section 2		are correct and this n	epair conforms
	r the ASME Code, Section . ymbol Stamp: Not applicable	AI .		
Certificate Of	Authorization No.: Not applic	able		
Expiration Da	ite: Not Applicable		<i>^</i>	
Prepared By	Kulaib Sur 5	Signed By	KXMOZ	
	Kuldip Singh - Materials And Ins	pection	Manager, Material	s And Inspection
Date	8 3 94	Date	8-4-94	
ſ <del></del>				
	CERTIFICA	ATE OF INSERVICE	INSPECTION	1
1 4b	gned, holding a valid comn	wingian ingread his th	• National Board of F	Tailer and Pressure
Vessel Inspec	ctors and the State of Wash	ington <i>and employed</i>	<i>by</i> Arkwright Mutual Ir	surance Company
(Factory Mutua	I Engineering Association) of	Norwood, Massachuse	tts have inspected th	e components
state to the bi	this Owner's Report during est of my knowledge and b	tne period <u> </u>	performed examinat	ions and taken
corrective me	easures described in this O	wner's Report in acc	ordance with the req	quirements of the
ASME Code,	Section XI is certificate neither the Ins	enactor nor hie amni	over makes any wan	ranty, expressed or
implied, conc	erning the examinations ar	nd corrective measu	res described in this	Owner's Report.
Furthermore.	neither the Inspector nor I	nis employer shall be	e liable in any manne	r for any personal
injury or prop	perty damage or a loss of a	ny kind arising trom	or connected with th	us inspection
Don Sto	gearth	Commissio	ns <u>9556</u> W	NBI
1 .	nspector's Signature	,	National Board, Sta	tte, and Endorsements
Date	3-4-94	<del></del>		



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/4/94 Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington

Unit: WNP-2

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

Address: Hanford Reservation, Benton County, Washington

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

(b) Repair Organization P.O. No, Job No, etc.: C30236

4. Identification Of System: Process Instrumentation (PI)

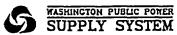
5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X82b	JCI	PI(1)-4S-X82b	NVA	N/A	1983	Ropair	Yes, Code Class 2

- 7. Description Of Work Performed: Rotated the existing valve PI-V-X82B2 in instrument line PI(1)-4S-X82b. The work was performed as follows
  - 1) Cut/ground existing pipe to valve socket weld
  - 2) Rotated the existing valve
  - 3) Made required socket weld
  - 4) Performed PT examination on the final socket weld. PT examination results acceptable



<u> </u>	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: Psig Test Temperature: F  Component Design Pressure: Psig Temperature: F	× Non
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	1
Certificate Of Authorization No.: Not applicable	Ī
Expiration Date: Not Applicable	I
Prepared By Julaib Swot Signed By RXMsian	I
Kuldip Singh - Materials And Inspection Manager, Materials And Inspection	<b>-</b> [
Date 913194 Date 8-4-94	1
Julio	_
CERTIFICATE OF INSERVICE INSPECTION	ĺ
I she understand helding a write commission to use he Matieval Board of Ballon and Bresse	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressi Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company	
(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components	<i>'</i>
described in this Owner's Report during the period 5-18-94 to 8-4-94 an	d
state to the best of my knowledge and belief, the Owner has performed examinations and taken	- 1
corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI	*
ASME Code, Section XI   By signing this certificate neither the inspector nor his employer makes any warranty, expressed	or
implied, concerning the examinations and corrective measures described in this Owner's Report	
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal	al
injury or property damage or a loss of any kind arising from or connected with this inspection	1
Dan Hoggant Commissions 9556W NBI	
Uterpoctor's Signature National Board, State, and Endorsement	<u> </u>
Date 8-4-94	1



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/4/94

Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

(b) Repair Organization P.O. No, Job No, etc.: C30236

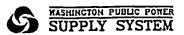
- 4. Identification Of System: Process Sample Radioactive (PSR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X82d	JCI	PI(1)-4S-X82d	N/A	N/A	1983	Ropair	Yes, Code Class 2

- 7. Description Of Work Performed: Rotated the existing valve PSR-V-X82-2 in instrument line PI(1)-4S-X82d. The work was performed as follows
  - 1) Cut/ground existing pipe to valve socket welds
  - 2) Rotated the existing valve
  - 3) Made required socket welds
  - 4) Performed PT examination on the final socket welds, PT examination results acceptable
  - 5) Cut/ground existing support welds
  - 6) Installed new tube steel for the support
  - 7) Made required welds



B Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X No Test Pressure: Psig Test Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psig Temperature: Psi
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 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
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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
to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate of Authorization No.: Not applicable Expiration Date: Not Applicable  Prepared By
Type Code Symbol Stamp: Not applicable  Certificate Of Authorization No.: Not applicable  Expiration Date: Not Applicable  Prepared By Luab Rubb Signed By Materials And Inspection  Date Signed By Materials And Inspection  Date Signed By Materials And Inspection  Date Signed By Materials And Inspection  Date Signed By Materials And Inspection  Li, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 5-18-94 to 8-4-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
Certificate Of Authorization No.: Not applicable  Expiration Date: Not Applicable  Prepared By Lucy Support Signed By Manager, Materials And Inspection  Date Signed By Manager, Materials And Inspection  Date Signed By Manager, Materials And Inspection  Date Signed By Manager, Materials And Inspection  Date Signed By Manager, Materials And Inspection  Li, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler and Signed Boiler an
CERTIFICATE OF INSERVICE INSPECTION   CERTIFICATE OF INSERVICE INSPECTION
Rudip Singh   Materials And Inspection   Manager, Materials And Inspection
Kuldip Singh - Materials And Inspection   Manager, Materials And 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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-18-14 to 8-4-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 5-18-14 to 8-4-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-18-14- to 8-4-54 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-18-14- to 8-4-54 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-18-14- to 8-4-54 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-18-14-10-8-4-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-18-14-10-8-4-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 5-18-94 to 8-4-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 5-18-14- to 8-4-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-18-94 to 8-4-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.
ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the 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 implied, concerning the examinations and corrective measures described in this Owner's Report.
implied, concerning the examinations and corrective measures described in this Owner's Report.
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
injury or property damage or a loss of any kind arising from or connected with this inspection
Any Vhanga to Commissions 955/2 W N/6 I
Commissions 1300 Uni
Visiplicator's Signature National Board, State, and Encorsements  Date 8-4-94-
Value 17 17 17 17 17 17 17 17 17 17 17 17 17



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/1/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

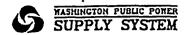
- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW-FLX-1A2	Metal Bellows	010	N/A	N/A	1980	Repair	Yes, Code Class 3
£							

- 7. Description Of Work Performed: Repaired weld between stainless steel bellow and carbon steel flange for SW-FLX-1A2. The repair work was performed as follows
  - 1) Ground out the existing weld between stainless steel bellow and carbon steel flange
  - 2) Prepped the surfaces for rewelding
  - 3) Made required weld between stainless steel bellow and carbon steel flange
  - 4) Performed PT examination on the final weld. PT examination results acceptable
  - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic X Pneumatic Nominal Operating Pressure Other None Test Pressure: 332 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 the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable
	Certificate Of Authorization No.: Not applicable
	Expiration Date: Not Applicable
1	Prepared By Queb Signed By Katerials And Inspection Manager, Materials And Inspection
-	Kuldip Singh? Materials And Inspection  Manager, Materials And Inspection  71194  Date  7-4-94
	Date 7/1/94 Date 7-4-94
Į	
•	<u> </u>
	CERTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
1	Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components
	described in this Owner's Report during the period <u>5-19-94</u> to <u>7-1-94</u> and
1	state to the best of my knowledge and belief, the Owner has performed examinations and taken
	corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI
1	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
-	implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
ļ	injury or property damage or a loss of any kind arising from or connected with this inspection
ĺ	Dan Hoggarth Commissions 9556 W NBI
-	Instructor's Signature National Board, State, and Endorsements
1	Date
1	



1. Owner: Washington Public Power Supply System (WPPSS)
Address: 3000 George Washington Way, Richland, Washington

Date: 7/15/94 Sheet: 1 of 1 Unit: WNP-2

- 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
  Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No. Job No. etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(1)-4CL1	WPPSS	RCIC(1)-4CL1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced bolting material for the RPV head nozzle N-7 flanged joint. The replacement work was performed as follows
  - 1) Removed existing studs and nuts for the flanged joint
  - 2) Installed new studs and nuts for the flanged joint
  - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



Tests Conducte	ed: Hydrostatic Pa Test Pressure: 1021 Pa Component Design F	sig Te	perating Pressure est Temperature: 200 emperature: 570° F	
Remarks: None	*	,		
		•		
	C	ERTIFICATE OF COMPLIA	ANCE	•
		in this Owner's Report are	correct and this re	placement <i>conforms</i>
	the ASME Code, Secti			
	mbol Stamp: Not applicat			٢
	<b>Authorization No.:</b> Not a <b>te:</b> Not Applicable	фрисвою		d
Expiration Da	10. NOT APPROADIO		atra	
Prepared By _	Vuais &	<u>ルーり</u> Signed By	KXIMOE	
	Kuldip Singh - Materials An	d Inspection	Manager, Materials	And Inspection
Date	7/15/24	Date	7-15-94	
	CERTIF	FICATE OF INSERVICE IN	SPECTION	
I the undersit	rned holding a valid c	ommission issued by the N	lational Board of B	oiler and Pressure
Vessel inspec	tors and the State of W	/ashington <i>and employed b</i> j	<b>y</b> Arkwright Mutual In:	surance Company
(Factory Mutual	I Engineering Association	) of Norwood, Massachusetts	have inspected the	o components
described in t	his Owner's Report du	ring the period <u>5-27-</u>	94to	<u>-/3-94-</u> and
state to the be	est of my knowledge ar	nd belief, the Owner has pe	rformed examination	ons and taken
corrective me	asures described in th	is Owner's Report in accor	aance with the req	uirements of the
ASME Code,	DECUON AI le certificate neither th	e inspector nor his employ	ver makes anv warn	anty, expressed or
implied, conc	eming the examination	ns and corrective measures	s described in this (	Owner's Report.
Furthermore.	neither the inspector n	or his employer shall be li	able in any manner	for any personal
injury or prop	erty damage or a loss	of any kind arising from or	connected with thi	is inspection
110.5	=-//			NRT
THE HOOF	garin	Commissions		te, and Endorsements
1 <i>()</i> 11	spector's Signature		IASTICINE DOSIG' 200	a, an incressions
Date	7-15-94			•



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/5/94 Sheet: 1 of 1

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Bullt	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-V-46B	Anchor Darling	2N1010	N/A	N/A	1977	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Deactivated valve RHR-V-46B by removing valve internals. The work was performed as follows
  - 1) Disassembled valve
  - 2) Removed valve disc and other valve internals
  - 3) Reassembled valve
  - 4) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

FC	)RM NIS-2 O	WNER'S REPO	HT FOR HEPAIRS	OH HEPLACEMEN IS	(Back)
3 Tests Conducte	Test Press	tic Pneum sure: 140 Psig nt Design Press,		Operating Pressure X lest Temperature: 66.2° F lemperature: 700° F	
9. Remarks: None	•				
					• *
<del></del>				v	
		CERTIF	FICATE OF COMPLI	ANCE	
We certify tha	it the stateme	ents made in thic	s Owner's Report are	e correct and this replace	oment <i>conforms</i>
to the rules of	f the ASME C	Code, Section XI	•	-	
Type Code Sy		: Not applicable •n No.: Not applicabl	<u>la</u>		
Expiration Date		• • •	Ю.		
'	1 0	A 0. 1	m.	DAMAS.	
Prepared By_	Kuldin Singh .	Materials And Inspec	Signed By	Manager, Materials And	Inenection
		194	Date	7-6-94	Hispocion
Date	<del></del>	<u> </u>	<i>Data</i>	7-6-71	
					• • • • • • • • • • • • • • • • • • • •
		CERTIFICATI	E OF INSERVICE IN	ISPECTION	
				Vational Board of Bollei	
Vessel Inspec	tors and the	State of Washing	ton <b>and employed</b> b	y Arkwright Mutual Insura	nce Company
(Factory Mutual	Engineering /	Association) of No	rwood, Massachusetts	have inspected the co	mponents -94- and
state to the be	nis Omie. 3 . est of my kno	wiedge and beli	ef, the Owner has p	erformed examinations	and taken
corrective mea	asures desci			rdance with the require	
ASME Code, S		***	· · · · · · · · · · · · · · · · · · ·		and ap
By signing uni	is ceruiicate i emina the ex	neimer me inspi ceminations and	scior nor nis employ   corrective measure:	er makes any warranty s described in this Own	', expressed or ter's Report.
Furthermore.	neither the in	nspector nor his	employer shall be il	lable in any manner for	any personal
Injury or prop	erty damage	or a loss of any	kind arising from or	connected with this in	spection
Frankloge	ceula -	-	Commissions	9556 W	NBI
- Con	spector's Signat	bure		National Board, State, an	d Endorsements
Date	7/6/94		·		
	,			<u> </u>	,
				•	



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 7/5/94

Sheet: 1 of 1

Address: 3000 George Washington Way, Hichland, Washington

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-V-46C	Anchor Darling	2N943	N/A	N/A	1977	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Deactivated valve RHR-V-48C by removing valve internals. The work was performed as follows
  - 1) Disassembled valve
  - 2) Removed valve disc and other valve internals
  - 3) Reassembled valve
  - 4) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Cother Nominal Operating Pressure Test Pressure: 300 Psig Test Temperature: 73.2° F Temperature: 700° 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 Guch Sugh Signed By RAMOL  Kuldip Singh - Materials And Inspection  Date
	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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-30-94 to 6-20-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the
	ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
	Commissions 9556 W NBT   National Board, State, and Endorsements     Date



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/1/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW-FLX-1A1	Metal Bellows	009	N/A	N/A	1980	Repair	Yes, Code Class 3

- 7. Description Of Work Performed: Repaired weld between stainless steel beliew and carbon steel flange for SW-FLX-1A1. The repair work was performed as follows
  - 1) Ground out the existing weld between stainless steel bellow and carbon steel flange
  - 2) Propped the surfaces for rewelding
  - 3) Made required weld between stainless steel bellow and carbon steel flange
  - 4) Performed PT examination on the final weld. PT examination results acceptable
  - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNER'S REP	ORT FOR REPAIRS C	)H REPLACEMENTS	S (Васк)
Tests Conducted: Hydrostatic X Pneur Test Pressure: 332 Psig Component Design Press	Te	perating Pressure est Temperature: 65° Femperature: 150° F	Other Nor
. Remarks: None		•	
•			
	p.		
			•
			<u></u>
CERT	IFICATE OF COMPLIA	ANCE	•
			_
We certify that the statements made in the		correct and this repair	conforms
to the rules of the ASME Code, Section X Type Code Symbol Stamp: Not applicable	1		
Certificate Of Authorization No.: Not applica	ıble		
Expiration Date: Not Applicable	<b>.</b>	_	
0.000	L	PANIA	
Prepared By Wuldup Sun	Signed By	Manager, Materials Ar	d lacaction
Kuldip Singh - Materials And Insp		7-4-94	id inspection
Date 7 194	Date	1-4-14	<del></del>
CERTIEICA	TE OF INSERVICE IN	COECTION	•
CERTIFICA	ie op inservice in	SPECTION	•
i, the undersigned, holding a valid comm	ission issued by the N	lational Board of Boil	er and Pressure
Vessel Inspectors and the State of Washin	ngton <i>and employed b</i> y	Arkwright Mutual Insur	rance Company
(Factory Mutual Engineering Association) of N	lorwood, Massachusetts	have inspected the c	omponents
described in this Owner's Report during state to the best of my knowledge and be	the period <u>5-20-7</u>	formed exemination	94 and
state to the best of my knowledge and be   corrective measures described in this Or	uiei, uie Owner nas pe voer's Renort in accor	dance with the requir	s and taken rements of the
ASME Code, Section XI	mer 3 neport m accor	aanoo mararo requir	
By signing this certificate neither the ins	pector nor his employ	er makes any warran:	ty, expressed or
implied, concerning the examinations an	d corrective measures	s described in this Ov	vner's Report.
Furthermore, neither the inspector nor hi	is employer shall be lit	able in any manner fo	r any personal
injury or property damage or a loss of an	y kina arising trom or	connectea with this i	пѕресиоп
Any (Y/reganta	Commissions	9556W	NBI
inspector's Signature		National Board, State,	and Endorsements
Date 7/5/94		,	<u>-</u>
	<del></del>		



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/11/94 Sheet: 1 of 1 Unit: WNP-2

- 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
  Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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-FLX-2A1	Metal Bellows	013	N/A	N/A	1980	Repair	Yes, Code Class 3
		1				,	

- 7. Description Of Work Performed: Repaired weld between stainless steel bellow and carbon steel flange for SW-FLX-2A1. The repair work was performed as follows
  - 1) Ground out the existing weld between stainless steel bellow and carbon steel flange
  - 2) Prepped the surfaces for rewelding
  - 3) Made required weld between stainless steel bellow and carbon steel flange
  - 4) Performed PT examination on the final weld, PT examination results were unacceptable
  - 5) Removed unacceptable PT indications
  - 6) Weld repaired the cavity
  - 7) Performed PT examination on the final weld repaired area. PT examination results acceptable
  - 8) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	Test Pressure: 332	Pneumatic Nor Psig In Pressure: 300 Psig	· Tos	erating Pressure at Temperature: 65 ⁰ mperature: 150 ⁰ F	
Remarks: None	•				
	1	CERTIFICATE OF CO	OMPLIA	NCE	
		de in this Owner's Rep	ort are	correct and this rep	eir conforms
	he ASME Code, Se				
	ibol Stamp: Not appli uthorization No.: N				
Expiration Date		от офрименто			
	12. 34 (	7 - 1	_	DAnce	
Prepared By	uklip Singh - Materials	Signed L	3 <b>y</b>	Manager, Materials	And Inspection
	7/4/94	Date		7-12-94	
Date		Date		7-70 77	
		<del></del>			
		·			
	CER	TIFICATE OF INSERV	ICE INS	PECTION	
			40 40 -		
		d commission issued b If Washington and emplo			
(Factory Mutual E	ingineering Associati	ion) of Norwood, Massac	husetts h	nave inspected the	components
described in thi	s Owner's Report	during the period <u>5</u>	21-94	to 7-1.	3 - 9 4 and
		and belief, the Owner			
corrective meas ASME Code, Se		this Owner's Report in	1 accord	ance with the requ	iirements of the
Bv sianina this	caon xa certificate neither	the inspector nor his e	emplove	r makes anv warra	ntv. expressed or
implied, concen	ning the examinati	ions and corrective me	asures (	described in this C	wner's Report.
Furthermore, ne	ither the inspecto	r nor his employer shi	ıil be lial	ble in any manner	for any personal
injury or proper	ty aamage or a los	ss of any kind arising f	rom or c	onnected with this	s inspecuon
Han Hos	gark	Commi	ssions_	9556W	NBI
	ector's Signature		_		, and Endorsements
A lake					



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/11/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW-FLX-2A2	Metal Bellows	<b>014</b>	N/A	N/A	1960	Repair	Yes, Code Class 3
				,			

- 7. Description Of Work Performed: Repaired weld between stainless steel beliew and carbon steel flange for SW-FLX-2A2. The repair work was performed as follows
  - 1) Ground out the existing weld between stainless steel bellow and carbon steel flange
  - 2) Prepped the surfaces for rewelding
  - 3) Made required weld between stainless steel bellow and carbon steel flange
  - 4) Performed PT examination on the final weld, PT examination results acceptable
  - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
87	Tests Conducted: Hydrostatic X Pneumatic Nominal Operating Pressure Other None  Test Pressure: 332 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 the rules of the ASME Code, Section XI  Type Code Symbol Stamp: Not applicable  Certificate Of Authorization No.: Not applicable  Expiration Date: Not Applicable
	Prepared By View Signed By Signed By Manager, Materials And Inspection
	Dato 7/11/94 Dato .7-12-94
	CERTIFICATE OF INSERVICE INSPECTION
•	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5.20-94 to 7-14-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
	Inspector's Signature Commissions 9556W NBI National Board, State, and Endorsements
	Inspector's Signature National Board, State, and Endorsements  Date 1-14-94.



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/22/94

Address: 3000 George Washington Way, Richland, Washington

. Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Containment Vacuum Breaker (CVB) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1CD	Anderson Greenwood	VB 7892	N/A	N/A	1983	Replacement	Yes, Code Class 2

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

- 1) Removed existing front and rear snubbers from the valve
- 2) Installed new front and rear snubbers for the valve



	SUPPLI SISIEM
	FORM NIS-2 OWNER'S REPORT-FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X Nor Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9.	Remarks: None
	· ·
	•
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	· CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable
	Prepared By Julan Suigh Signed By Amou
	Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
-	Date 622(94 Date 6-23-94
	· ·
L	
Г	
	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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-25-94 to 6-24-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
	Ean Waganth Commissions 9556W NBI
1	Unspector's Signature National Board, State, and Endorsements  Date 6/24/94
f	



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/25/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

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

- 4. Identification Of System: Containment Electrical Penetration No X-105C
- 5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment Electrical Penetration No X-105C	PDM	Containment Vessel	790	N/A	1982	Replacement	Yes, Code Class MC

- 7. Description Of Work Performed: Replaced module for Electrical Penetration No X-105C, Position No 3. The replacement work was performed as follows
  - 1) Removed the existing module from Electrical Penetration No X-105C, Position No 3
  - 2) Installed new module in Electrical Penetration No X-105C, Position No 3

3) Performed pressure test on the Electrical Penetration No X-105C to module "O" ring joint - One (1) outboard joint for Position No X to confirm pressure boundary integrity. Leakage was observed during the pressure test. Leakage was evaluated to be acceptable



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

FORM NIS-2 OWNER S RE	FUNT FUN NEFAMS U	n nereaction (back)
B Tests Conducted: Hydrostatic Pne Test Pressure: 38.8 Psig Component Design Pre	Tes	perating Pressure Other X LLF st Temperature: 80.6° F mperature: 340° F
9. Remarks: See attached N-2 Code Data Report fo	or the Electrical Penetration asse	embly Serial No 791101, National Board No W1697
Notes -  1) The new module for WNP-2 Electrical Penetrations assembly Serial No 791101, National Board No W  2) Component design pressure of 45 Psig and destruction the Containment Vessel	16978	•
CER	TIFICATE OF COMPLIA	NCE
We certify that the statements made in to the rules of the ASME Code, Section Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not application Date: Not Applicable  Prepared By  Kuldip Singh - Materials And Institute  Date  6 25194	XI.	04
CERTIFIC	ATE OF INSERVICE INS	SPECTION
I, the undersigned, holding a valid come Vessel Inspectors and the State of Wast (Factory Mutual Engineering Association) of described in this Owner's Report during state to the best of my knowledge and it corrective measures described in this CASME Code, Section XI By signing this certificate neither the in implied, concerning the examinations a Furthermore, neither the inspector nor injury or property damage or a loss of a supplied with the inspector of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section	nington and employed by Norwood, Massachusetts I the period 6-7-9- pellef, the Owner has per Dwner's Report in accordance to rector nor his employed in accordance to the corrective measures this employer shall be liab	Arkwright Mutual Insurance Company have inspected the components  1
Date 7/5/94.		National Board, State, and Endorsements
<del></del>		

# FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provisions of the Asias Code Rules	Zur g	6121
(a) Manufactured by Westinghouse Electric Corp., Westinghouse Circle, Ho	rseheads,	NY 1484
Washington Public Power Supply System, Hanford, Wash		
(Name and address of Manufacturer of completed nuclear components)  2. Identification-Manufacturer's Serial No. of Part 79'1101': Nat'l Bd. No. Williams		
(a) Constructed According to Drawing No. E40106 Drawing Prepared by R. L. Ko		•
(b) Description of Pers Inspected Electrical Penetration Assembly	•	
(c) Applicable ASME Code: Section III, Edition 53974 Addenda date 75 Case No. N/		Chair
This device when welded to the containment nozzle provides	•	
(Brief description of service for which component was designed)		<del></del>
for the penetration modules. Together these parts complete the pr	'essure	<del></del>
boundary of the containment. This device has been pneumatically p	ressure	<del></del>
tested in conformance with design requirements.	• •	
We certify that the statements made in this report are correct and this vessel part or appurtenance as d 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 is responsible for turnishing a separate Design Specification and Stress Report in the compouent Design Specification and Stress Report.)  Dec. 10, 19 Signed Westinghouse Elec. Corp. By S. B. Kessing Manufacturer.	cturer. An apputement	included
(Manufacturer)		
Certificate of Authorization Expires August 4, 1981 Certificate of Authorization No.	1190	
CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)		
Washington Public Power Supply System, Hanford, Design information on file at	Wash.	
Westinghouse Electric Corp., Westinghouse Circles Stress analysis report on file as	le, Horseh	eads, NY
Design specifications certified by Burton Hemroff Prof. Eng. State Wash.	Reg. No. 1	5344
Stress saalysis report certified by Hi chael Yonko Prof. Eag. State H.Y.		4063
· CERTIFICATE OF SHOP INSPECTION		
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure and/or the State or Province of New York and employed by Lumbermens Mutual C	Vessel Inspectasualty Co	tors
of Long Grove, Illinois have inspected the past of a pressure vessel		
Manufacturer's Partial Data Report on <u>December 10.</u> 19. 79, and state that to the best 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		- (
ing the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector shall be liable in any manner for any personal injury or property damage or a loss of any kind arising with this inspection.	<u>e one his emplo</u>	red
December 10, 79	· <b>E</b> 1473 (	3-3. VECTOR
HB 3605	By: U.E. &	C.
Inspector's Signature S. A. Thomas Netland Board, State, Provi	ace and No.	

[&]quot;Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size to \$\psi^* \times 21", (2) information in itums 1-2 on this data report is included on each sheet, and (3) each sheet is numbered and sumber of sheets is recorded in lists 2, "Remarks".

S/N 791101 Buldúp Buás 6/1/94

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Date: 7/25/94

Sheet: 1 of 1

Unit: WNP-2



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

1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Bochtel Construction, Inc, PO Box 600, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: C20069

4. Identification Of System: Containment Electrical Penetration No X-105A

- 5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
  (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980
  Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment Electrical Penetration No X-105A	PDM -	Containment Vessel	790 ,	N/A	1982	Replacement	Yes, Code Class MC

- 7. Description Of Work Performed: Replaced module for Electrical Penetration No X-105A, Position No 1. The replacement work was performed as follows
  - 1) Removed the existing module from Electrical Penetration No X-105A, Position No 1
  - 2) Installed new module in Electrical Penetration No X-105A, Position No 1
  - 3) Performed pressure test on the Electrical Penetration No X-105A to module *O* ring joint One (1) outboard joint for Position No 1 to confirm pressure boundary integrity. Leakage was observed during the pressure test. Leakage was evaluated to be acceptable



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

Tests Conducted: Hydrostatic Pneum Test Pressure: 38.95 Psig Component Design Press		I Operating Pressure Other X Test Temperature: 77.4° F Temperature: 340° F	LLR
	the Electrical Penetration s	assembly Serial No 791101, National Board No Wi	6978
otes -  1) The new module for WNP-2 Electrical Penetration assembly Serial No 791101, National Board No W16:  2) Component design pressure of 45 Psig and design the Containment Vessel	978		
CERTI	IFICATE OF COMPL	PLIANCE	
We certify that the statements made in the to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicate Expiration Date: Not Applicable  Prepared By Victor Singh - Materials And Insper	7 uble		•
Date 7/23/94	Date	7-26-94	•
,			_
I, the undersigned, holding a valid comm. Vessel Inspectors and the State of Washir (Factory Mutual Engineering Association) of N described in this Owner's Report during state to the best of my knowledge and be corrective measures described in this Ow ASME Code, Section XI By signing this certificate neither the Insignabled, concerning the examinations and Furthermore, neither the Inspector nor his injury or property damage or a loss of an analysis.	ngton and employed lorwood, Massachuset the period 6-9 elief, the Owner has pwner's Report in acceptor nor his employed corrective measuris employer shall be by kind arising from the lorwood of the corrective measuris employer shall be by kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lory kind arising from the lor	The National Board of Boiler and Pressure of by Arkwright Mutual Insurance Company etts have inspected the components of the speriormed examinations and taken cordance with the requirements of the loyer makes any warranty, expressed oures described in this Owner's Report. The liable in any manner for any personal	
Vyspector's Signature  Date 7-26-94	Commission	National Board, State, and Endorsements	-
Date 1 Cop 100			

#### FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provisions of the ASME Code Rules	Rudif Sur 5
(a) Manufactured by Westinghouse Electric Corp., Westinghouse Circle, (Name and address of Manufacturer of part)	7)26[74 Horseheads, NY 14845
Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Power Supply System, Hanford, Washington Public Public Power Supply System, Hanford, Washington Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public Public P	
(Name and address of Manufecturer of completed nuclear com	
2. Identification-Manuscruter's Serial No. of Part 791101 Nat'l Bd. No	
(4) Constituting According to Drawing No. E40106 Drawing Prepared by R. L.	•
(b) Description of Pert Inspected Electrical Penetration Assembly  Summer	,
(c) Applicable ASME Code: Section III, Edition 1974, Addenda date 75, Case No.	N/A Class H.C.
3. Remarks: This device when welded to the containment nozzle provi	des 3 sockets
(Brief description of service for which component was designed) for the penetration modules. Together these parts complete the	: pressure
boundary of the containment. This device has been pneumatically	
·	• •
tested in conformance with design requirements.	
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a in the component Design Specification and Stress Report.)  The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsibility of the part Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the a manufacturer is responsible for furnishing a separate Design Specification and Stress Report is responsible for furnishing a separate Design Specification and Stress Report is responsible for furnishing a separate position and Stress Report is responsible for furnishing a separate position and Stress Repor	SSING
CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable Washington Public Power Supply System, Hanfor	1
Design information on file 4t	
Stress analysis report on file at Westinghouse Electric Corp., Westinghouse Ci	rcie, norseneads, NY
Design specifications certified by Burton Nemroff Prof. Eng. State Wa	15344 Reg. No. 15344
Stress analysis report certified by Hi chae 1 Yonko Prof. Eng. State H.	Y. Reg. No. 44063
CERTIFICATE OF SHOP INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Press and/or the State or Province of New York and employed by Lumbermens Mutua of Long Grove, 111015 have inspected the part of a pressure ver Manufacturer's Partial Data Report on December 10. 19.79, and state that to the and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section II By signing this certificate, neither the Inspector nor his employer makes any warranty, expresses ing the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspection shall be liable in any manner for any personal injury or property damage or a loss of any kind activity this inspection.	ssel described in this best of my knowledge L ed or implied, concern-
December 10, 19 79	· 12:4-3 0.3.WESTA
HR 3605	By: U.E. & C.
Inspector's Signature C ) Thomas Netional Board, State,	Province and No.

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

FORM N-2 (back)

S/N 791101 Buearp c/1/94

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		Location , bottom, end	e) Thickness	Crown Radius	Knuckie Radius	Elliptical Ratio	Conical Apez Angle		Flat Diameter	Elde to Press. (Conv. or Conc.)
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	<b>~</b> ,	Floati	ing. Heterial		Di	·	Thic	enessin. At	tachment	
J	r apcs:	Material		_ O.D	ia. Th	ickness	Of Eage.	Number	Iype	(Str. or U)
cæs	11-14	incl. to be	completed for i	nner chem	bers of jac	keted vesse	is, or channel	s of heat exchan	gers.	
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	(	Girth		T.1		R.T		Na. of Courses _		
3. H										
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Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/5/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

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

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addende, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Repaired by welding pits on the inside (ID) surfaces of the piping (spacer ring and flange) down stream side of valve SW-V-2B. The repair work was performed as follows

1) Weld repaired (weld built up) pits on the inside (ID) surfaces of the piping flange

- 2) Ground/blended the weld repaired areas on the inside (ID) surfaces of the piping flange flush with the adjacent base metal to match the contour of the inside surfaces
- 3) Performed MT examination on the final ground/blended surfaces of the piping flange. MT examination results acceptable

4) Wold repaired (wold built up) pits on the inside (ID) surfaces of the spacer ring

- 5) Ground/blended the weld repaired areas on the inside (ID) surfaces of the spacer ring flush with the adjacent base metal to match the contour of the inside surfaces
- 6) Performed MT examination on the final ground/blended surfaces of the spacer ring. MT examination results acceptable
- 7) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other  Test Pressure: 205 Psig Test Temperature: 65° F  Component Design Pressure: 309 Psig Temperature: 150° F
9. Remarks: None
•
- ·
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this 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 - Materials And Inspection Manager, Materials And Inspection
Date 7 5 94 Date 7-6-94
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company
(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 5-29-94 to 6-22-94 and
state to the best of my knowledge and belief, the Owner has performed examinations and taken
corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI
By signing this certificate neither the inspector nor his employer makes any warranty, expressed o
implied, concerning the examinations and corrective measures described in this Owner's Report.  Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
injury or property damage or a loss of any kind arising from or connected with this inspection
Dom Haygarff Commissions 9556W NBI
Inspector's Signature National Board, State, and Endorsements
Date



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/5/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  - (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

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

- 7. Description Of Work Performed: Replaced valve SW-V-2B. The replacement work was performed as follows
  - 1) Removed existing valve
  - 2) Installed new valve
  - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNER'S RE	PORT FOR REPAIR	S OR REPLACEMENTS	S (Back)
B Tests Conducted: Hydrostatic Pne Test Pressure: 205 Psig Component Design Pre		l Operating Pressure [ Test Temperature: 65°   Temperature: 150° F	
9. Remarks: See attached NPV-1 Code Data Repo	rt for the new valve SW-V-	2B, Serial No E-Z073-1-1	
			_
CER	TIFICATE OF COMP	PLIANCE	
We certify that the statements made in	thie Owner's Penort	are comect and this wal	and conforme
to the rules of the ASME Code, Section		are correct and uns repa	cement Comorms
Type Code Symbol Stamp: Not applicable			
Certificate Of Authorization No.: Not appli Expiration Date: Not Applicable	cable .		
		01	
Prepared By Kuldip Singh - Materials And In:	ပြု Signed By	_ KXMoen_	
Kuldip Singh - Materials And In:	pection	Manager, Materials A	nd Inspection
Date7 5 94	Date	<del></del>	<del></del>
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CERTIFICA	ATE OF INSERVICE	INSPECTION .	
I Also sometimes of traditions a scalled assessment		- Al-Al-w-l Dw-l - 1 D-1	/ / D
I, the undersigned, holding a valid coming Vessel inspectors and the State of Wash			
(Factory Mutual Engineering Association) of			
described in this Owner's Report during	the period <u>5-29</u>	1-94 to 6-22-9	7 <u>4</u> and
state to the best of my knowledge and b			
corrective measures described in this C ASME Code, Section XI	wner's Report in acc	ordance with the requil	rements of the
By signing this certificate neither the in			
implied, concerning the examinations a	nd corrective measu	res described in this Ov	vner's Report.
Furthermore, neither the inspector nor injury or property damage or a loss of a	ns employer snall be nv kind arisina from	) liable in any manner to or connected with this i	r any personai Inspection
	•	_	poouoii
Jan Sloggar 1	Commissio	ns 9556W	NBI
Inspector's Signature		National Board, State, a	and Endorsements
Date	<del></del>		•
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Quedip Sur

As	Required by the Prov	isions of the ASME C	ode, Section III, Divis	sion 1 Pg of	6)2019
1. Manufactured and o	certified by Anchor/Da	arling Valve Co.	, 701 First Stree	et, Williamsport,	PA 17701
2. Manufactured for _	Washington Publi	c Power Supply St	ystem, P.O. Box (	968, Richland, WA	99352-0968
3. Location of installat	Washington Pul	(name	end eddress) WA 993	Power Plant Loop. 352	Richland,
4. Model No., Series N	lo., or Type BF	Drawing 94-159	986 Rev. E	CRN	1
5. ASME Code, Section		974 Winter		(Code Case no.)	
6. Pump or valve	Valve Nomina	l inlet size 20"	Outlet size	20"	
7. Material: Body S	A516-70 Bonnet		k SA240-316 B	olting N/A	•
( <b>a</b> )	(b)	(c)	(d)	(e)	
Cert.	Nat'l	Body	Bonnet	Disk	
Holder's	Board	Serial	Serial	Serial	
Serial No.	No.,	No.	No.	No.	
E-2073-1-1	N/A	T/C V-09	N/A	T/C VO8A	
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FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

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

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

(12/86)

4.28.93

#### FORM NPV-1 (back)

8. Remarks
9. Design conditions 710 psi 150 of valve pressure class 300 (temperature)
10. Cold working pressure 720 psi at 100°F
11. Hydrostatic test 1100 psl. Disk differential test pressure 792 psi
CERTIFICATION OF DESIGN
Design Specification certified by Jack R. Cole P.E. State WA Reg. no. 0020653
Design Report certified by N/A P.E. State N/A Reg. no. N/A
CERTIFICATE OF SHOP COMPLIANCE
We cartify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.
N Certificate of Authorization No. N1712 Expires 4/15/95
Date 4/29/93 Name Anchor/Darling Valve Company Signed & Sannet
(N Certificate Holder) Signed (authorized representative)
CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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 departs of shall be say kind arising from or connected with this inspection.
Date 4-79-93 Signed Signed Commissions Pennsylvania 2392
Character (hardres) (Net'l. Bd. (Incl. endorsements) state or prov. and no.)

(1) For manually operated valves only.

£9-28-93 •



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/11/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW-FLX-1B1	Metal Bollows	011,	N/A	N/A	1980	Repair	Yes, Code Class 3

- 7. Description Of Work Performed: Repaired weld between stainless steel beliew and carbon steel flange for SW-FLX-1B1. The repair work was performed as follows
  - 1) Ground out the existing weld between stainless steel bellow and carbon steel flange
  - 2) Prepped the surfaces for rewelding
  - 3) Made required weld between stainless steel bellow and carbon steel flange
  - 4) Performed PT examination on the final weld. PT examination results acceptable
  - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic X Pneumatic Nominal Operating Pressure Other Nominal Operating Pressure Other Test Pressure: 332 Psig Test Temperature: 71.4° 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 the rules of the ASME Code, Section XI
Type Code Symbol Stamp: Not applicable  Certificate Of Authorization No.: Not applicable
Expiration Date: Not Applicable
Prepared By Quidib Luigh Signed By RAnice
Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
Date 7 11 194 Date 7-12-94
<u> </u>
CERTIFICATE OF INSERVICE INSPECTION
I show the desired to talk a sould assemble to the standard back a Mark and Board of Bottom on I Brown
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 Arkwright Mutual Insurance Company
(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
described in this Owner's Report during the period <u>5-30-94</u> to <u>7-14-94</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
Day Hogga H Commissions 9556W NBI
// / / / / / / / / / / / / / / / / / /
Date



1. Owner: Washington Public Power Supply System (WPPSS) Address: 3000 George Washington Way, Richland, Washington Date: 7/11/94 Sheet: 1 of 1

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP) Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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-FLX-1B2	Metal Bellows	012	N/A	N/A	1980	Repair	Yes, Code Class 3

- 7. Description Of Work Performed: Repaired weld between stainless steel bellow and carbon steel flange for SW-FLX-1B2. The repair work was performed as follows
  - 1) Ground out the existing weld between stainless steel bellow and carbon steel flange
  - 2) Prepped the surfaces for rewelding
  - '3) Made required weld between stainless steel bellow and carbon steel flange
  - 4) Performed PT examination on the final weld. PT examination results acceptable
  - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FO	PRM NIS-2 OWNER'S REF	PORT FOR REPAIRS O	R REPLACEMEN	TS (Back)
Tests Conducte	ed: Hydrostatic X Pneu Test Pressure: 332 Psig Component Design Pres	Te:	perating Pressure st Temperature: 71. mperature: 150° F	Other None
Remarks: None			_	
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		•		,
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		¥		
	CERT	TIFICATE OF COMPLIA	NCE	1
We certify that	t the statements made in t	his Owner's Report are	correct and this re	pair conforms
to the rules of	the ASME Code, Section 2			
	mbol Stamp: Not applicable			
Expiration Date	Authorization No.: Not applic	able		
Expiration Dat	e. Not Applicable		11	
Prepared By_	Ruch Lang	り Signed By	KXMoe	
	Kuldip Singh - Materials And Ins	pection	Manager, Materials	And Inspection
Date	7/11/94	Date	7-12-94	
	· · · · · · · · · · · · · · · · · · ·	\$		
	CERTIFICA	NTE OF INSERVICE INS	SPECTION	
I the condension	ned, holding a valid comn	niceion icquad by the N	etional Roard of R	oller and Pressure
Vessel inspec	<i>tors and the State of</i> Wash	instan <i>and employed by</i> instan <i>and employed by</i>	Arkwright Mutual In:	surance Company
(Factory Mutual	Engineering Association) of	Norwood, Massachusetts	have inspected the	components
described in t	his Owner's Report during	the period <u>5-30-9</u>	4 to	4-94 and
state to the be	st of my knowledge and b	ellef, the Owner has per	formed examination	ons and taken
	sures described in this O	wner's Report in accord	lance with the req	uirements of the
ASME Code, S	Section XI	ton non bla omnlove	n makee enu wer	ontic everges and ar
By Signing this	s certificate neither the inseming the examinations ar	ppodor nor massures nd corrective messures	described in this	Owner's Report.
Furthermore.	neither the inspector nor h	iis employer shali be ila	ble in any manner	for any personal
injury or prop	erty damage or a loss of a	ny kind arising from or o	connected with thi	s Inspection
			100	4000
THE ALLE	garys	Commissions		e, and Endorsements
1 46	spector's Signature		(VEUCHEL DOEIG, STEE	o, and endorsoments
Date	1-19-14			*



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/6/94 Sheet: 1 of 1

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

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Containment Instrument Air (CIA) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CIA(5)-2B	WPPSS	CIA(5)-2B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
		,				i In	

- 7. Description Of Work Performed: Replaced botting material for the flanged joint shown on Dwg CIA-4133-1. The replacement work was performed as follows
  - 1) Installed new stud for the flanged joint
  - 2) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNE	R'S REPORT FOR REPAI	RS OR REPLACEMEN	TS (Back)
8 Tests Conducted: Hydrostatic Test Pressure: 1 Component Des		al Operating Pressure Test Temperature: 78 Temperature: 340° F	X Other
9. Remarks: None			
	le .		
			-
<del></del>			
,	CERTIFICATE OF COM	PLIANCE	
We certify that the statements n to the rules of the ASME Code, S		t are correct and this re	placement <i>conforms</i>
Type Code Symbol Stamp: Not ap			
Certificate Of Authorization No.: Expiration Date: Not Applicable	Not applicable		
1 5 M 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		PAnia.	
Prepared By Villain Singif - Materia	Mp 5 Signed By sis And Inspection	Managor, Matorials	And Inspection
Date7) 6   9 4	Date	7-6-94	<u>_</u>
	•		
CF	RTIFICATE OF INSERVIC	E INSDECTION	
	THE TOTAL OF INSERTION	. M3FL071011	
I, the undersigned, holding a val			
Vessel Inspectors and the State (Factory Mutual Engineering Associated)			
described in this Owner's Repor	t during the period	1-94 to 1	-/-94-and
state to the best of my knowledge corrective measures described in			
ASME Code, Section XI	n una Omner a neport in ac	cordance mui are requ	mements of the
By signing this certificate neither			
implied, concerning the examination furthermore, neither the inspect			
Injury or property damage or a le			
Dan Hospan H	Commission	ons 9556 W	NBI
Myloctor's Signature			, and Endorsements
Date 7-6-94			•
		•	



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/5/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: High Pressure Core Spray (HPCS) System

- (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1971 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980
   Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS-V-23	Anchor Darling	2N 236	N/A	N/A	1974	Repair	Yes, Code Class 2

- 7. Description Of Work Performed: Made filet weld around disc to disc nut joint for valve HPCS-V-23. The work was performed as follows
  - 1) Made fillet weld around disc to disc nut joint
  - 2) Performed PT examination on the final fillet wold. PT examination results acceptable
  - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Nominal Operating Pressure: 390 Psig Test Temperature: 71° F Component Design Pressure: 1410 Psig Temperature: 700° F
9.	Remarks: None
Г	
	CERTIFICATE OF COMPLIANCE
- 1	We certify that the statements made in this Owner's Report are correct and this repair conforms
İ	to the rules of the ASME Code, Section XI
	Type Code Symbol Stamp: Not applicable  Certificate Of Authorization No.: Not applicable
- {	Expiration Date: Not Applicable
j	0. 0. 0 11 Rm
1	Prepared By Wuldip Singh - Materials And Inspection  Kuldip Singh - Materials And Inspection  Manager, Materials And Inspection
1	71-104
	Date 7 5 94 Date 7-6-94
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_	· · · · · · · · · · · · · · · · · · ·
	CERTIFICATE OF INSERVICE INSPECTION
-	I Also conductative at the following could assume the following beautiful Depart of Deltan and Decourse
-	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure  Vessei inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company
	(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
-	described in this Owner's Report during the period 6-1 94 to 6-22-94 and
-	state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the
1	ASME Code, Section XI
1	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
ł	Implied, concerning the examinations and corrective measures described in this Owner's Report.
	Furthermore, neither the inspector nor his employer shall be 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	
	Commissions 9556 W WBT
	Date 7-6-94
-	



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/6/94 Sheet: 1 of 1

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW-V-165B	Allis Chalmers	73912-2	N/A	N/A	1978	Replacement	Yes, Code Class 3
	,					• •	

- 7. Description Of Work Performed: Replaced end cover plate for valve SW-V-165B. The replacement work was performed as follows
  - 1) Fabricated new end cover plate
  - 2) Installed fabricated end cover plate on the valve
  - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

3 Tests Conduct	ed: Hydrostatic Pneumatic [ Test Pressure: 205 Pslg Component Design Pressure: 30	7	Operating Pressure [ Test Temperature: 65°   Temperature: 150° F	X Other
9. Remarks: None	•			
		•		
			•	
		· · · · · · · · · · · · · · · · · · ·		
	CERTIFICAT	E OF COMPL	IANCE	
We certify the	nt the statements made in this Own	ner's Report ai	e correct and this repla	acement conforms
to the rules o	f the ASME Code, Section XI	•	•	
	/mbol Stamp: Not applicable  Authorization No.: Not applicable			
	te: Not Applicable		_	
Prepared By	Durach Rush	Signed By	RAME	
Frepared by	Kuldip Singh Materials And Inspection	oigilea by	Managor, Materials A	nd Inspection
Date	7/6/94	Date	7-6-94	
	<i>(</i>	\ <u></u>		_
L				<del></del>
	CERTIFICATE OF	INSERVICE II	NSPECTION	
	gned, holding a valid commission i ctors and the State of Washington at			
(Factory Mutua	Engineering Association) of Norwood	, Massachusett	have inspected the c	components
described in t	his Owner's Report during the per	iod <u>6 - 6</u>	-94- to 6-2	22 · 94 and
	est of my knowledge and belief, the asures described in this Owner's l			
ASME Code,	<u> </u>	neport in acco	raance with the requi	rements of the
By signing th	is certificate neither the inspector :	nor his emplo	yer makes any warran	ty, expressed or
Implied, conc	erning the examinations and corre	ctive measure	s described in this Ov	vner's Report.
Furthermore,	neither the inspector nor his empl erty damage or a loss of any kind :	oyer snall be l arising from o	iable in any manner to r connected with this :	er any personai Inspection
11/			2001	
_ con xlo	ygaiff	Commission	9556 W National Board, State,	NBI
Date	Spector's Signature		икооны воаго, э <u>шв</u> , а	Maria Estado Somentos
Date	1017			



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 7/6/94 Sheet: 1 of 1

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

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

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

- 7. Description Of Work Performed: Replaced bolting material for the flanged joint shown on Dwg ED-SW-1. The replacement work was performed as follows
  - 1) Installed new nuts for valve SW-V-165B flanged joint
  - 2) Performed pressure test to confirm pressure boundary integrity. No evidence of lookage during the pressure test



	SUPPLI SISIEM
	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
7	rests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Test Pressure: 205 Psig Test Temperature: 65° F  Component Design Pressure: 300 Psig Temperature: 150° F
. <i>F</i>	Remarks: None
	,
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms
1	to the rules of the ASME Code, Section XI
	Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable
	Expiration Date: Not Applicable
	Delich & to in Delice
4	Prepared By Vulcin Sup Signed By Manager, Materials And Inspection
	Date 7/6/94 Date ·7-6-94
•	
_	
	CERTIFICATE OF INSERVICE INSPECTION
	l, 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 Arkwright Mutual Insurance Company
(	(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
(	described in this Owner's Report during the period 6-8-94 to 6-22-94 and
	state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the
	ASME Code, Section XI _
	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
	implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
	injury or property damage or a loss of any kind arising from or connected with this inspection
	DM Vogate St. Commissions 9556W NBI
-	When the Commissions 9556 W NBT National Board, State, and Endorsoments
ı	Dato 7-6-94



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 7/11/94 Sheet: 1 of 1 Unit: WNP-2

- Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
   Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Service Water (SW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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-FLX-1B2	Metal Bellows	012	N/A	N/A	1980	Repair	Yes, Code Class 3

- 7. Description Of Work Performed: Repaired weld between stainless steel beliew and carbon steel flange for SW-FLX-1B2. The repair work was performed as follows
  - 1) Ground out the existing weld between stainless steel bellow and carbon steel flange
  - 2) Propped the surfaces for rewelding
  - 3) Made required weld between stainless steel bellow and carbon steel flange
  - 4) Performed PT examination on the final weld. PT examination results acceptable
  - 5) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test

Note - This ASME Section XI Plan documents the repair on flex hose SW-FLX-1B2 for the second time. Flex hose SW-FLX-1B2 was previously repaired in accordance with ASME Section XI Plan No 2-1074



FC	ORM NIS-2 OWNER'S F	REPORT FOR REPA	IRS OI	R REPLACEME	NTS (Back)
8 Tests Conducte	ed: Hydrostatic X Pi Test Pressure: 332 Psi Component Design P	ig	Tos	erating Pressure et Temperature: 7 nperature: 150° F	
9. Remarks: None					
					•
		•			
<del></del>					
,	CE	ERTIFICATE OF CO	MPLIA	NCE	
We certify that	t the statements made i	in this Owner's Repo	rt are d	correct and this i	opair <i>conforms</i>
	the ASME Code, Section				
	<i>mbol Stamp:</i> Not applicabl Authorization No.: Not ap				
Expiration Date	•	FF			
Duamana d Dia	Qual &	The Company		Amo	
Prepared by _	Kuldip Singh - Materials And	ر کر کے Signed By Inspection		Managor, Matoria	s And Inspection
Date	7/11/94	Date		7-12-94	•
	<del></del>		<del>-</del>		
	<u>-</u>	<u> </u>			
1	CERTIF	CATE OF INSERVIC	E INS	PECTION	
		•			
	ned, holding a valid co				
	tors and the State of Wa Engineering Association)				
described in ti	his Owner's Report duri	ring the period <u>6-</u>	<u>9-94</u>	to7-/	4-94 and
	st of my knowledge and asures described in this				
ASME Code, S		s Owner s nepon in a	ccora	ance with the rec	juirements of the
	s certificate neither the				
	erning the examinations neither the inspector no				
	erty damage or a loss o				
Day Vlason			1-m-	0651.111	112-
Aun XIOGGI	spector's Signature	Commiss	10N <b>5</b> _	National Board, Sta	to, and Endorsements
Date	7-14-94			.,	•
,					
I					



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 6/22/94

Address: 3000 George Washington Way, Richland, Washington

. Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS) 4. Identification Of System: Reactor Pressure Vessel (RPV)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RPV	CBI Nuclear	T45	8	N/A	1974	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced Local Power Range Monitoring (LPRM) incore assembly. The replacement work was performed as follows
  - 1) Removed existing Local Power Range Monitoring (LPRM) incore assembly at Core Location 16-17
  - 2) Installed new Local Power Range Monitoring (LPRM) Incore assembly at Core Location 16-17



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

*	d: Hydrostatic Pneu Test Pressure: Psig Component Design Pres		Operating Pressure Other _X est Temperature: ° F emperature: ° F	Nor .
Remarks: See atte Core Location 16-17	ached N-2 Code Data Report for <u>LPRM Serial No</u> K8619	the following new Local Powe	rer Range Monitoring (LPRM) incore assembly	•
1	· v		•	
			•	
<del></del>				
	. CERT	TIFICATE OF COMPLI	IANCE	
to the rules of t Type Code Syn	the ASME Code, Section I nbol Stamp: Not applicable Authorization No.: Not applic	XI	e correct and this replacement conform	ns
Prepared By	Vualh Sup Kuldip Singh - Materials And Ins	Signed By	Manager, Materials And Inspection	_
Date	6/22/94	•	6-23-94	-
				Þ
	CERTIFICA	ATE OF INSERVICE IN	VSPECTION	
Vessel Inspecto (Factory Mutual E described in the state to the bes corrective mean	ors and the State of Wash Engineering Association) of Is Owner's Report during St of my knowledge and b sures described in this O	nington and employed b Norwood, Massachusetts of the period <u>6-/2-9</u> pelief, the Owner has pe	National Board of Boller and Pressury Arkwright Mutual Insurance Companys have inspected the components of the components and taken ordance with the requirements of the	/ d
ASME Code, Se By signing this implied, concer Furthermore, n	ection XI certificate neither the ins ming the examinations as either the inspector nor i	spector nor his employ nd corrective measure his employer shall be li	yer makes any warranty, expressed es described in this Owner's Report. lable in any manner for any persona r connected with this inspection	or
Dry Xlorg	SA	Commissions	S 9556W NB I  National Board, State, and Endorsement:	
U./W. 1-4-/FA	pector's Signature			_

192. 15. 1994 5.200m CL alice 1

WORK ORDER NUMBER: 4529

PLAN NO. 2-1085 Ruedif Eurés

## FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

E5 6/20194

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by GE REUTER-STOKES, INC. 8499 DARROW ROAD, TWINSBURG, OHIO 44087
(b) Masulactured for WNP-2 WASHINGTON PUBLIC POWER SUPPLY SYSTEM. RICHLAND WA 99352  (Name and address of Manufacture of completed nucleon component)
(Name and address of Manufacturer of completed invelope component)
2. Identification-Manufacturer's Serial No. of Part K8619 Nat'l Bd. No. N/A
(a) Constructed According to Drawing No. RS-C6-1315-201 Drawing Propaged by GE REUTER-STOKES
(b) Description of Part Inspected NA-300 POWER RANGE DETECTOR
SUMMER  (c) Applicable ASME Code: Section III, Edition 1977, Addenda dete 1977, Case No. N/A Class 45.3
3. Remarks: DESIGN: PRESSURE 1250 PSIG, TEMPERATURE - VESSEL 575°F, SEAL 300°F
HYDROSTATIC TEST PRESSURE: 1925 PSIG
·
We certify that the statements made in this report are correct and this vessel part or appurtenance as defiaed in the Code conforms to the rules of construction of the ASME Code Section III.  The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)
Date C/10 19 94 Signed GE REUTER-STOKES By QUALITY ASSURANCE
(Manufacturer) • QUALITY ASSURANCE  Certificate of Authorization Expires . SEPTEMBER 16, 1994 Certificate of Authorization No. N-2703
CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)
Design information on file at GE REUTER-STOKES, INC. TWINSBURG, OH DC24A1257AK
Suress analysis report on file, at GE REUTER-STOKES, INC. TWINSBURG, OH CDR-C-5320-117
Design specifications semified by SURINDER L. KAMPANI Prof. Eng. State OH Reg. No. E-034113
Stress analysis report certified by DOUGLAS E. BACSO Prof. Eng. State OH Reg. NoF-044071
CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Soiler and Pressure Vessel Inspectors and/or the State as Province of OHIO and employed by H.S.B.I. & I. Co.
of HARTFORD, CT have inspected the part of a pressure vessel described in this
Manufacturer's Partial Data Report on 1994, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.  By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Date 6-10 19 94
Jacas C. Sellall Commissions NB 7920 AN OHIO PAUX 2454-N



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 6/25/94
Sheet: 1 of 1
Unit: WNP-2

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

  Address: Hanford Reservation, Benton County, Washington
- 3. (a) Work Performed By: Bechtel Construction, Inc, PO Box 600, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: C20069
- 4. Identification Of System: Containment Electrical Penetration No X-105C
- 5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment Electrical Penetration No X-105C	PDM	Containment Vessel	790	N/A	1982	Replacement	Yes, Code Class MC

- 7. Description Of Work Performed: Installed blank (plugs) modules for Electrical Penetration No X-105C, Position No's 1 and 2. The replacement work was performed as follows
  - 1) Removed the existing blank (plugs) modules from Electrical Penetration No X-105C, Position No's 1 and 2
  - 2) Installed new blank (plugs) modules in Electrical Penetration No X-105C, Position No's 1 and 2
  - 3) Performed pressure test on the Electrical Penetration No X-105C to blank (plugs) modules "O" ring joints Two (2) outboard joints for Position No's 1 and 2 to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

3 Tests Conducted: Hydrostatic Pneuma Test Pressure: 38.8 Psig Component Design Pressu	Test Temperature: 80.6° F
<ol> <li>Remarks: See attached N-2 Code Data Reports for the Serial No 780603, National Board No W16791</li> </ol>	the Electrical Penetration assemblies Serial No 780602, National Board No W16790
Penetration assemblies 780602, National Board No Wi	al Penetration X-105C were from WNP-1 ASME NPT Code Stamped Electrical /16790 and Serial No 780603, National Board No W16791 temperature of 340° F is based on the N-1 Code Data Report issued by PDM for
CERTIF	FICATE 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 - Materials And Inspect	Signed By RAMOL
CERTIFICAT	TE OF INSERVICE INSPECTION
Vessel Inspectors and the State of Washing (Factory Mutual Engineering Association) of No described in this Owner's Report during the state to the best of my knowledge and bell corrective measures described in this Own ASME Code, Section XI By signing this certificate neither the Inspector for his Furthermore, neither the Inspector nor his	ssion issued by the National Board of Boiler and Pressure gton and employed by Arkwight Mutual Insurance Company provood, Massachusetts have inspected the components the period 6-/3-94 to 6-29-94 and lief, the Owner has performed examinations and taken where see Report in accordance with the requirements of the elector nor his employer makes any warranty, expressed or accorrective measures described in this Owner's Report. It is employer shall be liable in any manner for any personal by kind arising from or connected with this inspection  Commissions 956W NBT  National Board, State, and Endorsements

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* As required by the Provisions of the ASME Code Rules Westinghouse Electric Corp., Westinghouse Circle, Horseheads, NY 14845 (a) Manufactured by__ (Name and address of Manufacturer of part) Washington Public Power Supply System, Hanford, Wash. (b) Manufactured for (Name and address of Manufacturer of completed nuclear component) 780602 W16790 2. Identification-Manufacturer's Serial No. of Part Nat'l Bd. No. _ E40106 Drawing Prepared by R. L. Korner (a) Constructed According to Drawing No. Electrical Penetration Assembly (b) Description of Part Inspected. Summer 1974 ·75 N/A Class H.C. (c) Applicable ASME Code: Section III, Edition_ . Addenda date_ ... Case No. This device when welded to the containment nozzle provides 3 sockets 3. Remarks: (Brief description of service for which component was designed) for the penetration modules. Together these parts complete the pressure boundary of the containment. We certify that the statements made in this report are correct and this vessel part or appartenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.) Signed Westinghouse Ele July 25. August 49 1978 entificate of Authorization Expires. Certificate of Authorization No. . CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) Washington Public Power Supply System, Hanford, Wash.

Design information on file at Westinghouse Electric Corp., Westinghouse Circle, Horseheads, NY Stress analysis report on file at Burton Nemroff Wash. Reg. No. 15344 Design specifications certified by Hichael Yonko Prof. Eag. State H.Y. 44063 Stress analysis report certified by

### CERTIFICATE OF SHOP INSPECTION :

I, the undersigned, holding a valid commission issue and/or the State or Province of New York of Long Grove, Illinois  Manufacturer's Partial Data Report on July 2 and belief, the Manufacturer has constructed this part in By signing this certificate, neither the Inspector not ing the part described in this Manufacturer's Partial shall be liable in any manner for any personal injury with this inspection.	7. 19 secordance with this employer ma	78 and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distributed and single distribu	care that to Code Secrit	o the best of interest or in	f my knowie nlied, conc	edge ern-
Date July 27,				•;		

National Board, State, Province and No.

NB 6786 PAWC 1907

Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is \$W" x 11", (2) information in items 1-2 on this data report is included on each sheet, and (3) each sheet is at ede lo tedatus bas bereda

FORM N-2 (back) S/N 780602

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Items 4-8 Incl. to be con	pleted for si	ugic wall '	Acamera) l			at or auctra o		crs.
4. Shell: Material SA3		·						
(vma a :	beg. vo.) (mm	or at warden 3	ibactitadi	•				
					*		·	
Girth6. Heads: (a) Material_	H	T.1					iės	
6. Heads: (a) Material	AZ4U-TYP	e 304	_ T.S	75000	(b) Materi	ــــــــــــــــــــــــــــــــــــــ	T.S	
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(b) NONE		,	<del></del>	<del></del>				<del> </del>
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		rial, Spec. N					(Describe or atta	ich sketch)
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Shell: Material (Kind & Spe (Kind & Spe Seams: Long Girth Heads (a) Material Lecution	T.SH.T.H.T	Crown.	T.S.  Zenetie Redius	R.T.  Elliptical Ratio	is, or channel ion ancein. (b) Material. Content Apex Angle	s of heat exc.  Diafc  Efficiency  No. of Course  Heatspherica	in. Length	_7/2
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Girth  Leostien  (a) Top, bottom, ends	T.S.  e. No.) (Min. o  H.)  H.)  Thickness,	Crown.	T.S.  Keuckie Redius	R.T.  Elliptical Ratio	is, or channel ion ancein.  (b) Material.  Control Apex Angle	s of heat exc.  Diafc  Efficiency  No. of Course  Hemispherica  Radius	In. Length	Side to Press. (Coev. or Cope.)
Girth Leastien  (a) Top, bottom, ends	T.S.  e. No.) (Min. o  H.)  H.)  Thickness,	Crown.	T.S.  Keuckie Redius	R.T.  Elliptical Ratio	is, or channel ion ancein.  (b) Material.  Control Apex Angle	s of heat exc.  Diafc  Efficiency  No. of Course  Homisphorica  Radius  er fastening	T.S. Dismotor	Side to Press. (Comv. or Cons.)
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Girth  Girth  Leomiso  (a) Top, bottom, ends  (b) Channel  If removable, bolts use	T.S.  e. No.) (Min. o  H.)  H.)  Thickness,	Crown. Radius (b)	T.S.  Keuckie Redius	R.T.  Elliptical Ratio	is, for chandel ion ion in. (b) Material Control Apox Angle	s of heat exciples of heat exciples of Course Redus er fastening.  Drop Chart	In. Length  T.S.  Plat Diameter  (Describe er at Veight	Side to Press. (Comv. or Coom.)
Shell: Material (Kind & Special Canal)  Girth Girth Leastien  Leastien  (a) Top, bottom, ends (b) Channel  If removable, bolts used	T.S.  e. No.) (Min. o  H.)  Thickness.	Crown. Radius (b)	T.S	R.T.  Elliptical Ratio	is, for chandel ion ion in. (b) Material Control Apox Angle	s of heat exciples of heat exciples of Course Redus er fastening.  Drop Chart	In. Length  T.S.  Plat Diameter  (Describe er at Veight	Side to Press. (Conv. or Cons.)
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¹ If Postweid Heat-Treated.
² List other internal or external pressure with coincident temperature when applicable.

## FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provisions of the ASME Code Rules

Yudip &	Zue 5

	6/28
1. (a) Manufactured by Westinghouse Electric Corp., Westing	ghouse Circle, Horseheads, NY 1484
Washington Public Power Supply System	em, Hanford, Wash.
(b) Manufactured for (Neme and address of Menufacturer o	
2. Identification-Manufacturer's Serial No. of Part	Nat'l 8d. NoW16791
(a) Constructed According to Drawing No. E40106 Drawing Pr	repared by R. L. Korner
(b) Description of Part Inspected Electrical Penetration	n Assembly
31	immer
(c) Applicable ASME Code: Section III, Edition 1974, Addenda date	75 , Case No. N/A Class M.C.
3. Remarks: This device when welded to the containmen	nt nozzie provides 3 sockets
(Brief description of service for which con	mponent was designed)
for the penetration modules. Together these part	s complete the pressure
boundary of the containment.	Rulant .
	512194
We certify that the statements made in this report are correct and this vessel forms to the rules of construction of the ASME Code Section IIL.	•
(The applicable Design Specification and Stress Report are not the responsion Manufacturer is responsible for furnishing a separate Design Specification and	bility of the part Monufacturer. An appurtenance Stress Report if the appurtenance is not included
in the component Design Specification and Stress Report.)	Cellina
Date July 25, 19 78 Signed Westinghouse Elec. Corp.  (Manufacturer)	. J. B. Kessiπά
Date 19 Signed (Manufacturer)	Ву
Certificate of Authorization Expires August 4, 1978 Certificate	of Authorization No. 1190
·	
CERTIFICATION OF DESIGN FOR APPURTENAN	
Washington Public Power Supply Design information on file at	System, Hanford, Wash.
Westinghouse Electric Corp., W	Mestinghouse Circle, Horseheads, NY
Stress analysis report on the ar	,
Design specifications certified by Burton Nemroff	Prof. Eng. State Wash. Reg. No. 15344
Michael Yooko	Bert For Sever H.Y. Ban No. 44063
Stress analysis report certified by	Prof. Eng. State N.Y. Reg. No. 44063
CERTIFICATE OF SHOP INSPEC	TION .
I, the undersigned, holding a valid commission issued by the National Boar	rd of Boiler and Pressure Vessel Inspectors
l long Grove Illinois	mbermens Mutual Casualty Co.
or market market and per	art of a pressure vessel described in this
and helief, the Manufacturer has constructed this part in accordance with the A	and state that to the best of my knowledge-
By signing this certificate, neither the Inspector nor his employer makes at ing the part described in this Manufacturer's Partial Data Report. Furthern	nore, neither the inspector nor his employer
shall be liable in any manner for any personal injury or property damage or a with this inspection.	loss of any kind arising from or connected
July 37. 78	
Date	
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inspector's Signature	National Board, State, Province and No.

[&]quot;Supplemental sheets in form of lists, sketches or drawings may be used previded (1) size is \$\footnote{W}^2 \times 1 \times 1", (2) information in items 1-2 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 1, "Remarks".

# FORM N-2 (back) S/N 780603 Rulaip 6/1/94

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List other internal or external procesure with estacid



1. Owner: Washington Public Power Supply System (WPPSS)*

Date: 7/7/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1 Unit: WNP-2

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

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

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

4. Identification Of System: Containment Electrical Penetration No X-101C

5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment Electrical Penetration No X-101C	PDM .	Containment Vessel	790	N/A	1982	Replacement	Yes, Code Class MC

- 7. Description Of Work Performed: Installed module for Electrical Penetration No X-101C, Position No 3. The replacement work was performed as follows
  - 1) Removed the existing module from Electrical Penetration No X-101C, Position No 3
  - 2) Installed new module in Electrical Penetration No X-101C, Position No 3
  - 3) Performed pressure test on the Electrical Penetration No X-101C to modules "O" ring joint One (1) outboard joint for Position No 3 to confirm pressure boundary integrity. No evidence of leakage during the pressure test



	FORM NIS-2 C	WNER'S REPC	ORT FOR REPAIRS	OR REPLACEMENT	S (Back)
ests Cond	Test Press	tic Pneum sure: 38.9 Psig nt Design Pressi		Operating Pressure Test Temperature: 83.2 Temperature: 340° F	
Remarks:	None				
				4	
		CERTII	FICATE OF COMPL	LIANCE	
	that the statements of the ASME C			re correct and this repl	acement conforms
	e Symbol Stamp				
	Of Authorization		io		
	Date: Not Applicab	• • • • • • • • • • • • • • • • • • • •			
	_ 11.04	0 1		PArress	
Prepared i	By Wully	Materials And Inspec	Signed By	Manager, Materials A	
	•	•		<b>₹</b> , *	na inspection
Date	<u> </u>	14	Date	7-7-94	<del></del>
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		CERTIFICAT	E OF INSERVICE I	NSPECTION	•
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				by Arkwright Mutual Insu	
(Factory Mu	utual Engineering A	Association) of No	rwood, Massachusett	s have inspected the d	components
described	in this Owner's	Report during th	ne period <u>6-23</u>	-94_ to <u>7-11</u>	<u>- 94</u> and
state to th	e best of my kno	wledge and bell	ief, the Owner has p	performed examination	s and taken
		ibed in this Ow	ner's Report in acco	ordance with the requi	rements of the
ASHECW	de, Section XI				
				yer makes any warran es described in this O	
By signing	anceming the ev	ammadone and	emplover shall be	ilable in anv manner f	or anv personal
By signing implied, co	oncerning the ex ore, neither the in	ispector nor his			, p
By signing implied, co Furthermo	ore, neither the in	ispector nor his or a loss of anv	kind arisina from c	or connected with this	inspection
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By signing implied, confurthermoning injury or p	pre, neither the in property damage	or a loss of any —	kind arising from c	s 9556W	NBI
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Date: 7/7/94



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

1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

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

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

Address: Hanford Reservation, Benton County, Washington

4. Identification Of System: Containment Electrical Penetration No X-101D

5. (a) Applicable Construction Code: ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Containment Electrical . Penetration No X-101D	PDM	Containment Vessel	790	N/A	1982	Replacement	Yes, Code Class MC

- 7. Description Of Work Performed: Installed module for Electrical Penetration No X-101D, Position No 3. The replacement work was performed as follows
  - 1) Removed the existing module from Electrical Penetration No X-101D, Position No 3
  - 2) Installed new module in Electrical Penetration No X-101D, Position No 3
  - 3) Performed pressure test on the Electrical Penetration No X-101D to modules "O" ring joint One (1) outboard joint for Position No 3 to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)  8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: 38.9 Psig Test Temperature: 81° F Component Design Pressure: 45 Psig Temperature: 340° F  9. Remarks: None
Test Pressure: 38.9 Psig  Test Temperature: 81° F  Component Design Pressure: 45 Psig  Temperature: 340° F
7. 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
Deprisation Date: Not represent
Prepared By Julan Such Signed By KAMEE
Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
Date 7-7-94
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company
(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
described in this Owner's Report during the period 6-23-94 to 7-//- 94 and
state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the
ASME Code, Section XI
By signing this certificate neither the inspector nor his employer makes any warranty, expressed of
implied, concerning the examinations and corrective measures described in this Owner's Report.
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
injury or property damage or a loss of any kind arising from or connected with this inspection
Dun Klagga-1/2 Commissions 9556W NBI
Inspector's Signature Commissions / Section / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions / Commissions
Date 7-11-94



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/14/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

**Unit: WNP-2** 

Address: Hanford Reservation, Benton County, Washington

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

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

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda, Code Case: None

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

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

- 7. Description Of Work Performed: Replaced bolting material for the flanged joints for flex hoses SW-FLX-2A1 and SW-FLX-2A2. The replacement work was performed as follows
  - 1) Installed new studs and nuts for flex hose SW-FLX-2A1 flanged joint
  - 2) Installed new studs and nuts for flex hose SW-FLX-2A2 flanged joint
  - 3) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2	OWNER'S R	EPORT_FOR	REPAIRS OF	RREPLACEMEN	TS (Bac	:k)
		—	Al I al O			146

8 Tests Conducted		nal Operating Pressure X Other	None
	Test Pressure: 332 Psig Component Design Pressure: 309 Psig	<i>Test Temperature:</i> 65 ⁰ F <i>Temperature:</i> 150 ⁰ F	
9. Remarks: None	•		
		·	

### CERTIFICATE OF COMPLIANCE

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

Prepared By Kuldip Singh - Materials And Inspection Manager, Materials And Inspection Manager, Materials And Inspection _____Date______7-14-94-Date

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period 6-21-94 to 7-15-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI

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

Day	Hoga-th				_Commissions _	9556W	NSI
Date	Unspector's Signature 7-15-94	h	•	,	_	National Board, State	, and Endorsements



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 6/22/94 Sheet: 1 of 1

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

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Containment Vacuum Breaker (CVB) System
- (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980
   Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CVB-V-1JK	Anderson Greenwood	VB 7695	N/A	N/A	1983	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Replaced rear snubber for Containment Vacuum Breaker (CVB) valve CVB-V-1JK. The replacement work was performed as follows
  - 1) Removed existing rear snubber from the valve
  - 2) Installed new rear snubber for the valve



Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X Notes Pressure: Psig Test Temperature: 9 F Component Design Pressure: Psig Test Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Temperature: 9 F Tempe	POHM NIS-2 OVINE	1'S HEPURI FUR	HEPAIRS OR	REPLACEMENTS (	васк)
CERTIFICATE OF COMPLIANCE  We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules 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 Sign - Materials And Inspection  Date Signed By Manager, Materials And Inspection  Date Gl2214 Date G-Z3.94  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period C-1/-94 to 1-24-4 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  Dispector's Signature  Commissions  National Board, State, and Endorsements	Test Pressure: §	sig	Test	t Temperature: ° F	Other X No
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules 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				,	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By				•	P
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By					
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We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules 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 Expiration Date: Not Applicable  Prepared By Lucy Signed By Manager, Materials And Inspection  Date Date Gold State of Macterials And Inspection  Date Gold State of Washington and employed by Arkwight Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period Gold State of the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report during the period Gold State of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  Washington Signature  Total Post Authorization National Board, State, and Endorsements	1	CERTIFICATE C	F COMPLIAN	NCE	
to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Expiration Date: Not Applicable  Prepared By Lucy Signed By Manager, Materials And Inspection  Date Date Gold State of Macterials And Inspection  Date Gold State of Washington and employed by Arkwight Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components described in this Owner's Report during the period Gold State of the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report during the period Gold State of the ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  Washington Signature  Total Post Authorization National Board, State, and Endorsements					
Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable  Prepared By	We certify that the statements n	ade in this Owner's	Report are c	orrect and this replace	ment conforms
Certificate Of Authorization No.: Not applicable  Expiration Date: Not Applicable  Prepared By					
Expiration Date: Not Applicable  Prepared By					
Kuldip Singh - Materials And Inspection  Manager, Materials And Inspection  Date 6 22 4 Date 6-23-74  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 6-1/-94 to 6-24-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 4556 W NBT  National Board, State, and Endorsements					
Kuldip Singh - Materials And Inspection  Manager, Materials And Inspection  Date 6 22 4 Date 6-23-74  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 6-1/-94 to 6-24-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  WBT  National Board, State, and Endorsements	- 17.1.81	2° 1		PA	
CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period		Sigi	ned By	Millon	I
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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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 6-1/-94 to 6-24-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 956 W NBI  National Board, State, and Endorsements	Date6 22/19	Date		6-23-74	
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described in this Owner's Report during the period	Vessel Inspectors and the State	of Washington and e	employed by A	Arkwright Mutual Insurar	nce Company
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corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.  Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions  Gommissions  ASSE  National Board, State, and Endorsements	described in this Owner's Report	t during the period	6-11-94	1	<u>94</u> and
ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.  Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions  Gommissions  Astional Board, State, and Endorsements					
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Implied, concerning the examinations and corrective measures described in this Owner's Report.  Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 4556 W NBT  National Board, State, and Endorsements		r the Inspector nor	his employer	makes any warranty.	eypressed or
Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 4556 W NBI  National Board, State, and Endorsements	implied, concerning the examina	itions and correctly	ve measures d	lescribed in this Own	er's Report.
Commissions 4556 W NBI Unspector's Signature National Board, State, and Endorsements	Furthermore, neither the inspec	or nor his employe	r shall be liab	le in any manner for a	any personal
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/ 24 44	(//// An //////)	Co	mmissions		1001
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Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 6/25/94 Sheet: 1 of 1 Unit: WNP-2

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Standby Liquid Control (SLC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Winter 1975 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC-V-14	Borg Warner	20168	N/A	N/A	1977	Repair	Yes, Code Class 2
		·					

- 7. Description Of Work Performed: Removed surface defects on the disc seating surface for valve SLC-V-14. The work was performed as follows
  - 1) Removed surface defects on the disc seating surface by machining
  - 2) Performed PT examination on the final machined seating surfaces. PT examination results acceptable



FO	ORM NIS-2 OWNE	ER'S REPORT	FOR REPAIR:	S OR RE	PLACEME	NTS (Back)	
Tests Conducto	ed: Hydrostatic Test Pressure: Component De	Psig .			nperature: °	e .Othe	er X No
. Remarks: None	,						
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		CERTIFICA	TE OF COMP	LIANCE			
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	it the statements i f the ASME Code,		ner's Report a	ire corre	ct and this i	repair <i>conforn</i>	ns
	<i>'mbol Stamp:</i> Not a						
	Authorization No.						
Expiration Da	te: Not Applicable				_		
Prepared By _	17 1-1910	0.04	Cimmod Dec		Amo	e	
Preparea By _ 	Kuldip Singh - Materi	als And Inspection	_Signed By	Ma Ma	nager, Materia	Is And Inspection	
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	ned, holding a va tors and the State						
	Engineering Assoc						
described in t	his Owner's Repo	rt during the pe	eriod <u>6-20</u>	-94	_to <u>_6-</u>	<del>27-94</del>	_ and
	est of my knowled						
	asures described	in this Owner's	Report in acc	ordance	with the re	quirements d	of the
ASME Code, S	secuon xı İs certificate neith	er the inspecto	r nor his emni	over mak	'AC ANV WAR	ranti evnre	seed or
	erning the examin						
	neither the inspec						
injury or prop	erty damage or a	loss of any kind	i arising from	or conne	cted with ti	nis inspectio	n
Dona Chla	we A		Camminaia	. 0	55/41	ALA	7
14	apector's Signature		_ Commission	Natio	onal Board, Str	ate, and Endorse	ments
Date	1/5/94						
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1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 6/30/94 Sheet: 1 of 1

Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Containment Instrument Air (CIA) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Summer 1975 Addenda, Code Case: None

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

Name Of · Component	Name Of Manufacturer	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-30A	Borg Warner	27083	N/A	N/A	1978	Repair	Yes, Code Class 2

- 7. Description Of Work Performed: Made body to bonnet seal weld for valve CIA-V-30A. The work was performed as follows
  - 1) Cut valve body to bonnet seal weld
  - 2) Removed valve internals for troubleshooting
  - 3) Prepped cut/ground areas on the valve body and the bonnet
  - 4) Machined disc seating surface
  - 5) Performed PT examination on the final machined disc seating surface. PT examination results acceptable
  - 6) Reinstalled valve internals and the bonnet
  - 7) Made valve body to bonnet seal weld
  - 8) Performed PT examination on the final seal weld. PT examination results acceptable



FO	RM NIS-2 OWNER'S RE	PORT FOR REPAIRS OF	R REPLACEMEN	TS (Back)
Tests Conducte	d: Hydrostatic Phe Test Pressure: Psig Component Design Pre		erating Pressure t Temperature: ° F nperature: ° F	Other X Non
Remarks: None				
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	050	TIFICATE OF COMPLIA	NCE	
,	CER	TIFICATE OF COMPLIA	VCE	
to the rules of	the ASME Code, Section	this Owner's Report are o XI	correct and this rep	oair conforms
	<i>mbol Stamp:</i> Not applicable A <i>uthorization No.:</i> Not appl	icahle		
Expiration Dat	• •	Cabio		ı
Prepared By _	Quento Qu'	طم Signed By	DAnise	
Preparea By _	Kuldip Singh - Materials And In	spection Signed by	Manager, Materials	And Inspection
Date	6/30194	Date	7-4-94	
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	CERTIFIC	ATE OF INSERVICE INS	PECTION	•
	t t abilian annillal anni	minutes leaved by the Ma	tional Board of Br	allar and Processes
Vessel Inspec	tors and the State of Was	mission issued by the Na hington and employed by A	Arkwright Mutual Ins	surance Company
(Factory Mutual	Engineering Association) of	Norwood, Massachusetts h	ave inspected the	components
described in ti	his Owner's Report durin est of my knowledge and	g the period <u> </u>	4 to7_ formed examination	/ - 74 and and ons and taken
corrective me	stormy knomedge and s asures described in this (	Owner's Report in accord	ance with the requ	uirements of the
ASME Code. S	Section XI			
By signing this implied conce	s ceruncate neither the li emina the examinations :	nspector nor his employed and corrective measures	makes any warra described in this (	Owner's Report.
Furthermore, I	neither the inspector nor	his employer shall be liab	ole in any manner	for any personal
injury or prope	erty damage or a loss of	any kind arising from or c	onnected with thi	s inspection
Any Klark	aso-th-	Commissions _	9556W	NBI
JAN TO THE	spector's Signature			e, and Endorsements
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Date	<i>5   44</i>			

Date: 7/15/94 Sheet: 1 of 1

Unit: WNP-2



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

1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

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

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

4. Identification Of System: 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308

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
CAC-HR-1B	Air Products	76 130 3	5210	N/A	1977	Repair .	Yes, Code Class 2

- 7. Description Of Work Performed: Repaired pin hole leak in 2" socket weld for CAC-HR-1B piping. The repair work was performed as follows
  - 1) Removed (locally) unacceptable pin hole leak
  - 2) Prepared the cavity for weld repair
  - 3) Performed PT examination on the cavity. PT examination results acceptable
  - 4) Weld repaired the cavity
  - 5) Blended the weld repaired area with the surrounding weld metal
  - 6) Performed PT examination on the weld repaired area, PT examination results acceptable
  - 7) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



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

8 Tests Conducte	d: Hydrostatic Pnet Test Pressure: 57 Psig Component Design Pre	umatic X Nomina ssure: 45 Psig	al Operating Pressu Test Temperature Temperature: 350	2:73.9 ⁰ F
9. Remarks: None				
		.,		•
				•
	CER	TIFICATE OF COMP	PLIANCE	
We certify that	the statements made in t	this Owner's Report	are correct and this	s repair <i>conforms</i>
to the rules of t	the ASME Code, Section . nbol Stamp: Not applicable	XI		•
Certificate Of A	<i>Nuthorization No.:</i> Not applicable	enhle		•
Expiration Date				
Prepared By	Ruch Sur Kuldip Singh - Materials And Ins	Signed By_	Ame	<u> </u>
Date		•	маладог, мато 7-15 —	rials And Inspection
Date	4217	Date	7- 10 -	74
	CERTIFICA	TE OF INSERVICE	INSPECTION	
l, the undersign	ned, holding a valid comn	nission issued by the	a National Board of	Boller and Pressure
Vessel Inspecto	o <b>rs and the State of</b> Washi	ington <i>and employed</i>	by Arkwright Mutual	Insurance Company
(Factory Mutual E	Engineering Association) of I Is Owner's Report during	Norwood, Massachuse	tts have inspected	
state to the bes	t of my knowledge and b	ellef. the Owner has	performed examina	18/54 and
corrective meas	sures described in this O	wner's Report in acc	ordance with the n	equirements of the
ASME Code, Se	ection XI			_
implied, concer	certificate neither the ins ning the examinations ar	spector nor nis empi nd corrective messui	oyer makes any wa res described in thi	Irranty, expressed or
Furthermore, ne	either the inspector nor h	is employer shall be	liabie in any mann	er for any personal
injury or proper	ty damage or a loss of ar	ny kind arising from	or connected with	this inspection
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Insp	octor's Signature			itate, and Endorsements
Date	2/94	<del></del> -		
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1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/25/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Process Sample Radioactive (PSR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PSR-V-0077A/1	Target Rock	1	N/A	N/A	1982	Repair And Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Made body to bonnet seal weld for valve PSR-V-0077A/1. The work was performed as follows
  - 1) Cut valve body to bonnet seal weld
  - 2) Removed valve internals for troubleshooting
  - 3) Prepped cut/ground areas on the valve body and the bonnet
  - 4) Performed PT examination on the final prepped surfaces of the valve body and bonnet. PT examination results acceptable
  - 5) Installed new valve main disc
  - 6) Reinstalled the bonnet in the valve
  - 7) Made valve body to bonnet seal weld
  - 8) Performed PT examination on the final seal weld. PT examination results acceptable



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X Non Test Pressure: Psig Test Temperature: F Component Design Pressure: Psig Temperature: F
9.	Remarks: See attached N-2 Code Data Report for the new valve main disc, Serial No 2087
	,
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this repair and replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable  Certificate Of Authorization No.: Not applicable  Expiration Date: Not Applicable
	Prepared By Rudip Singh - Materials And Inspection  Kuldip Singh - Materials And Inspection  Manager, Materials And Inspection
	Date 7/26/94 Date 7-26-94
	CERTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 1-8-94 to 1-26-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
	implied, concerning the examinations and corrective measures described in this Owner's Report.  Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection
	Dan Noyon TH Commissions 9552 W NBI
	Unspector's Signature National Board, State, and Endorsements  Date 7-26-94
	•

Front

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# FORM N-2 N OR NPT CERTIFICATE HOLDERS DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES PLAN NO.

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

_,			-1	
Net	To	Freed	One Day's	Production

Pa 1 of 2

1. Measuractured and certified by Target Rock Corp.; 1966E Broadhollow Rd; E. Farmingdale, NY 1473    Description of Corp.   Target Rock Corp.; 1966E Broadhollow Rd; E. Farmingdale, NY 1473   Description of Corp.   Target Rock Corp.; 1966E Broadhollow Rd; E. Farmingdale, NY 1473   Description of Corp.   Target Rock Corp.; 1966E Broadhollow Rd; E. Farmingdale, NY 1473   Description of Corp.   Target Rock Corp.; 1966E Broadhollow Rd; E. Farmingdale, NY 1473   Description of Corp.   Target Rock Corp.; 1966E Broadhollow Rd; E. Farmingdale, NY 1473   Description Records Rd; E. Farmingdale, NY 1473   Description Records Rd; E. Farmingdale, NY 1473   Participation Records Rd; E. Farmingdale, NY 1473   Description Rd; E. Farmingdale, NY 1473   Description Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmingdale, NY 1473   Participation Rd; E. Farmi	1	Maguiactured and certified by	Target Rock Con	p.; 1966E Broa	dhollow Rd; E. Fars	singdale, NY 11735
3. Location of installation WNP-2; North Power Plant Loop; Richland, WA 99352    Company of Section Plant Revision   N/A   1992		•				
3. Location of installation WNP-2; North Power Plant Loop; Richland, WA 99352    Company of Section Plant Revision   N/A   1992	,	Manufactured for Washingt	on Public Power	Supply System;	Richland, WA 99352	<u> </u>
4. Type 202539-1 SA-564 630 140 ksi N/A 1992    Greening no.) (mer'l, spec, no.) (territe strength) (CNIQ (spec) strength)  5. ASME Code, Section III: 1974 Winter 1975 1 None    Goderon (Section III: 1974 Winter 1975 1 None (Code Case na.) (Code Case na.) (Code Case na.) (Code Case na.) (Code Case na.) (N/A Revision N/A Date N/A (N/A Date N/A Date N/A Date N/A Date N/A Date N/A Date N/A Date Date Date Date Date Date Date Date				Article that any and any	n or posture)	-
4. Type 202539-1 SA-564 630 140 ksi N/A 1992    Idramong no.) (mer'l. spec. no.) (sersets strength) (CMQ) (peer bused)  5. ASME Code, Section III: 1974 Winter 1975 1 None  6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  7. Remerks: Spare parts for completed valve assembly Model No. 82H-001    DISC SIN 2087   Cudh Supplementary Spec. (Div. 2 only) Supplementary Spec. (Div. 2 only) Spec. (Div. 2 only) Spare parts for completed valve assembly Model No. 82H-001    DISC SIN 2087   Cudh Supplementary Spec. (Div. 2 only) Spec. (Div. 2 only) Spare parts for completed valve assembly Model No. 82H-001    DISC SIN 2087   Cudh Supplementary Spec. (Div. 2 only) Spec. (Div. 2 only) Spare parts for completed valve assembly Model No. 82H-001    DISC SIN 2087   Cudh Supplementary Spec. (Div. 2 only) Spec. (Div. 2 only) Spare parts for completed valve assembly Model No. 82H-001	3	Location of installation WN	P-2; North Power	Plant Loop; R	ichland, WA 99352	
4. Type   Idrumg no.)   (mer'l. spec. no.)   Identic strength   (CALQ)   Inverticated   Identicated    ٠.			(name a	nd paternant		
5. ASME Code, Section III: 1974 Winter 1975 1 None  6. Fabricated in accordance with Const. Spec. (Div. 2 only) 3/A Revision N/A Date N/A  7. Remarks: Spare parts for completed valve assembly Model No. 82M-001  DISC SIN 2087 Queby  7/25/94  8. Nome thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A  9. When applicable, Certificate Holders' data reports are attached for each item of this report:	•	Type 202539-1	SA-564 630	140 ksi	N/A	1992
5. ASME Code, Section III:    Indepen	→.	(drawing no.)	(met'l, spec, no.)	(tereste strength)	(CA40)	(year build)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) 3/A Revision N/A Date N/A  7. Remarks: Spare parts for completed valve assembly Model No. 82H-001  DICC SIN 2087 Queb Sup 5  7/25/94  8. Herr., thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A  9. When applicable, Certificate Holders' data reports are attached for each item of this report:	6	ASME Code Section III:	1974	Winter 1975	. 1	None
7. Remerks: Spare parts for completed valve assembly Model No. 82M-001  DIEC SIN 2087 Qual Sweb  7/25/94  8. Norm. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A  9. When applicable, Certificate Holders' data reports are attached for each item of this report:	٠.		(notribe)	(addende)	(class)	(Code Case na.)
7. Remerks: Spare parts for completed valve assembly Model No. 82M-001  DIEC SIN 2087 Qual Sweb  7/25/94  8. Norm. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A  9. When applicable, Certificate Holders' data reports are attached for each item of this report:	R	Esheinmed in accordance with	Const. Spec. (Div. 2 or	oly) 3/A	Revision N/A	Date N/A
9. When applicable, Certificate Holders' data reports are attached for each item of this report:	٥.	•		(PAL)		
B. Norm. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A  9. When applicable, Certificate Holders' data reports are attached for each item of this report:	7	Remerker Spare	parts for compl	eced valve ass	embly Model No. 82M	I <b>-</b> 001
8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A  9. When applicable, Certificate Holders' data reports are attached for each item of this report:	••		-1	. 1	01 0 11	
8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A  9. When applicable, Certificate Holders' data reports are attached for each item of this report:		JISC DISC	SIN 208	1 Vul	Sups Cux	<u> </u>
8. Hom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A  9. When applicable, Certificate Holders' data reports are attached for each item of this report:					/	
9. When applicable, Certificate Holders' data reports are attached for each item of this report:			<del></del>			
9. When applicable, Certificate Holders' data reports are attached for each item of this report:	8.	Hom, thickness (in.) N/A	Min, design thickness	(in.) N/A Dia. ID	(ft. & in.) N/A Length	overall (ft. & in.) N/A
	9.	When apolicable, Certificate H	lolders' data reports ar	e attached for each it	em of this report:	•
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	In Numerical Order	Serial Number	Board Number In Numerical Order
2064	N/A	(26)	
2076	N/A	_   (27) [*]	···
2087	N/A	(28)	
2096	N/A	(29)	
2099	A/N	(30)	
2102	N/A	(31)	
N/A	N/A	(32)	
		(33)	
		(34)	
0)		(35)	
1)		(36)	
2)		(37)	
3)		(38)	
4)		(39)	
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3)		(48) श्रिट्सप्रियारच	7708 / 15'41 / DATE
4)		(49)	
5)		(50)	

"Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8% X 1, (2) information in trems 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,

THE PARTITION ON NET CERTIFICAL See Brone data report for identical Mr. Sets No. Nuclear Partsand Appurtences-G. L. Mayfield Design specifications certified by · (when applicable) J. Miazza 51883 P. E. state ... NY: -- Reg. no. Design report* certified by. haten annilestist CERTIFICATE OF SHOP COMPLIANCE Part We certify that the statements made in this report are correct and that this (these), conform to the rules of construction of the ASME Code, Section IIk. 1948 Expires NPT Certificate of Authorization no. Target Rock Corporation (NFT Carbificase Holder) Champey 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 proand employed by Commercial Union Insurance Company Ince of New York of Boston, Mass. have inspected these items described in this data report on _ and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above. . . . . By signing this certificate, neither the inspector nor his employer makes any warranty; expressed or implied, concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or

N. Y. STATE COMMISSION NO. 2288

Commissions COMMISSIONED IN PENN., OHIO & CONN

property damage or loss of any kind arising from or connected with this inspection.



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 4/4/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR-RV-5	Lonergan	509258-86-1	N/A	N/A	1979	Replacement	Yes, Code Class 2

- 7. Description Of Work Performed: Replaced parts for relief valve RHR-RV-5. The replacement work was performed as follows
  - 1) Installed new disc in the relief valve
  - 2) Installed new nozzle in the relief valve
  - 3) Reinstalled the relief valve in the system
  - 4) Performed pressure test to confirm pressure boundary integrity. No evidence of leakage during the pressure test



FORM NIS-2 OWNER'S	REPORT FOR REPAIR	S OR REPLACEMENTS (Bad	:k)
8 Tests Conducted: Hydrostatic Test Pressure: 62 Ps Component Design		l Operating Pressure O Test Temperature: 96.8/115.6° i Temperature: 425° F	ther X ILR
9. Remarks: None			
	CERTIFICATE OF COMP	LIANCE	
			•
We certify that the statements made to the rules of the ASME Code, Sec.		are correct and this replacement	conforms
Type Code Symbol Stamp: Not applica	ble		
Certificate Of Authorization No.: Not	applicable		
Expiration Date: Not Applicable		0.4	
Prepared By Vilalib Su	_ Signed By	RAMO	
Kuldip Singh J Materials Ar	id Inspection	Manager, Materials And Inspe	ction
Date \$ 3194	Date	8-4-94	
· ·			
		·	
CERTI	FICATE OF INSERVICE	INSPECTION	
	TOATE OF MOENTIOE	moi borion	2
I, the undersigned, holding a valid of			
Vessel Inspectors and the State of V (Factory Mutual Engineering Association			
described in this Owner's Report du	ring the period7-9-	94 to 8-4.94	
state to the best of my knowledge a	nd belief, the Owner has	performed examinations and t	
corrective measures described in the	is Owner's Report in acc	ordance with the requirement	s of the
ASME Code, Section XI By signing this certificate neither th	a Inchector nor hic empl	over maker onu warrantu evn	reced or
implied, concerning the examination			
Furthermore, neither the inspector i			
injury or property damage or a loss	of any kind arising from	or connected with this inspect	tion
Day Wangs th	Commissio	ns 9550W NB	<del>7-</del>
(Inspector's Signature	Commission	National Board, State, and Endo	orsements
Date 8-4-94	,	,	



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/25/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS(2)-1	WPPSS	HPCS(2)-1-P1	N/A	N/A	1973	Ropair	Yes, Code Class 2

- 7. Description Of Work Performed: Repaired drain connection with valve HPCS-V-58. The repair work was performed as follows
  Note Unacceptable PT indication was observed in pipe to half coupling socket weld
  - 1) Cut pipe to half coupling socket weld
  - 2) Cut pipe near the socket weld with unacceptable PT indication
  - 3) Removed pipe and socket weld with unacceptable PT indication
  - 4) Reinstalled the remaining pipe nipple in the half coupling
  - 5) Made required socket weld
  - 6) Performed PT examination on the final socket weld. PT examination results acceptable



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

Tests Conducted: Hydrostatic Pn Test Pressure: Psig Component Design Pl	7	Operating Pressure Test Temperature: ° Temperature: ° F	
. Remarks: None			
<b>s</b> ,	•		
CE	RTIFICATE OF COMPL	IANCE	
We certify that the statements made it	in this Owner's Report ar	e correct and this i	ensir <i>conforms</i>
to the rules of the ASME Code, Section	on XI		opan comormo
Type Code Symbol Stamp: Not applicable			
Certificate Of Authorization No.: Not ap Expiration Date: Not Applicable	plicable		
2	h 1	PAn.	
Prepared By Vuldib Sur Kuldip Singh - Materials And	<u> </u>	Managor, Matoria	Is And Inspection
Date 7/25/94	Date	7-26-94	•
7287	Date,	, 222 , ,	
	•		
CERTIFI	ICATE OF INSERVICE II	NSPECTION	
I, the undersigned, holding a valid col			
Vessel Inspectors and the State of Wa			
(Factory Mutual Engineering Association)  described in this Owner's Report duri			
state to the best of my knowledge and	d belief, the Owner has p	erformed examinat	llons and taken
corrective measures described in this	s Owner's Report in acco	ordance with the re	quirements of the
ASME Code, Section XI By signing this certificate neither the	Inspector nor his emplo	ver makes anv war	ranty evereeced or
implied, concerning the examinations			
Furthermore, neither the inspector no	or his employer shall be l	liable in any manne	er for any personal
injury or property damage or a loss of	f any kind arising from o	r connected with th	his inspection
Du Yogganth	Commission:	s 9556W	NBI
Unspector's Signature			ate, and Endorsements
Date 7-26-94			



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/3/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Process Sample Radioactive (PSR) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980
- Addenda, Code Case: N-308
  6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PI(1)-4S-X77Ac	7CI	Pi(1)-4S-X77Ac	N/A	N/A	198 <u>3</u>	Replacement	Yes, Code Class 1
•		,	,				

- 7. Description Of Work Performed: Replaced valve PSR-V-0077A/1. The replacement work was performed as follows
  - 1) Removed existing valve
  - 2) installed new valve
  - 3) Made required socket welds
  - 4) Performed PT examination on the final socket welds. PT examination results acceptable

Revision - Revised Item 6 and Item 9 (Underlined portion only)



### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back) 8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X None Test Temperature: ° F Test Pressure: Psig Temperature: ° F Component Design Pressure: Psig 9. Remarks: See attached NPV-1 Code Data Report for the new valve, Serial No 1 CERTIFICATE OF COMPLIANCE We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Prepared By Kuldip Singh - Materials And Inspection Signed By Manager, Mate Manager, Materials And Inspection 8|3|94 Date 8-4-94 Date_ CERTIFICATE OF INSERVICE INSPECTION

### l, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period 1-15-94 to 8-8-94 and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection NBZ ___ Commissions __ National Board, State, and Endorsements B-8-94 Date

Revised S/N 1 Upgraded

FORM NPV-1 (back)

PLAN NO. 2-1103.

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

	(4	de america		achie or a come a series	
				low Rd.,Farmingdale	NY 1
2. Manufactured for V	Washington Public	Supply System, Ri	chland , Washi	ngton	
2		(name and address of F	functioner or Owners		_
3. Location of installet	on Plant 2 F	dichland, Washingt			_
	* 860-00 86Q-001	1032110	nd address) )—7	C N/A	
4. Model No., Series N	la or Type	Drawing 10)2110	Rev	CRN	-
S. ASME Code Section	1980	W81	1	N/A	
	Edition	, Addenda date •	Class	Code Case no.	_
S. Pump or valve	Valve Nomine	I inlet suzz	, Outlet size	1	
7. Material: Body	A 182 F316L Bonnet	SA479 315 GAL Oles	SA564 630	, (in.) N/A	_
					_
(a)	(6)	(c)	(d)	(e)	
Cert.	Nat'i	Body	Bonnet	Disk	
Holder's	Board No. 1	Serial	Serial	Serial No.	
Senal No.	No	·No. ·	· :::: No.		-
* 1	N/A	<u>4816A</u>	301.3	1348	
2	N/A_	1.700A	3003.	1300	_
	<u> </u>	48304	3010	1391	-
	N/A	4841A	3004	1397	-
5	N/A	4851A	208/	130).	-
	N/A	4815A		1365	-
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This form (E00037) may be obtained from the Order Debt., ASME, 345 E. 47th St., New York, N.Y. 10017

(6/85)

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,

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· serves : '

FORM NPV-1 (back)

S/N 1 UPGRADED

Guart 1/5/34

	7/15/94
	Mfr. Serial No. See Front
TEPORT FOR NUCLEAR PUMPS OF VA: VES-	TSTR. 015Y- 18STE TSTE TELL WETE - EARS.
8. Remarks Harroad June J. S. S. S. S. S. S. S. S. S. S. S. S. S.	
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* 1550 psi * 57	10 mm. " 1 m. 1
9. Design conditions psi psi psi psi psi psi psi psi psi ps	Or valve pressure class no as 900 mms (1)
10. Cold working pressure 1800 pai at 100°	E
11. Hydrostatic test 2700 psi Temp. N/A	•F Disk differential test pressure 1980 psi
11. Hydrostatic test 2/00 psi Temp. 10/ K	* 3000 psi
	**
CERTIFICATI	on of design
Design Specification certified byDavid_MBosi	Prof. Eng. state (25hington Reg. No. 2004)
Design Report certified by Martin Goldstone	Prof. Eng. state New York Reg. No. 31940
·	
•	
OCTUBIOATE OF	SHOP COMPLIANCE
CERTIFICATE OF	SHOP COMPLIANCE
We certify that the statements made in this report are correct	and that this pump or valve conforms to the rules for construction
of the ASME Code, Section III.	
N Certificate of Authorization No. 10/7	Expires #12-0-36
Oate 4-20-56 Name Target Book Corporat	$\cdot$ $\cdot$ $\sim$ $\cdot$
Oste Name TATZET HOCK LOCKATI	Signed (regressortstrye)
	- C. Horneso, Q.A. Herioger
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·	·
CERTIFICATE OF	SHOP INSPECTION
	<u> </u>
the State or Province of New York	a National Board of Boiler and Pressure Vessel Inspectors and and employed by <u>Commercial Union Ins.</u> Co.
Person Maga	r inspected the pump, or valve, described in this Data Report on
((7)) 96	e best of my knowledge and belief, the N Certificate Holder has
constructed this pump, or valve, in accordance with the ASMI	1
	{
By signing this certificate, neither the Inspector nor his emplo	over makes any warranty, expressed or implied, concerning the
	the inspector nor his employer shall be liable in any manner for
any personal injury or property damage or a loss of any kind a	nsing from or connected with this inspection.
Date 4/30 /19 86	
11/1/2: 1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/	NEW YORK STATE COMMISSION NO. 2288
William ( Kland Com	nissions ALSO COMMISSIONED IN Penn. Ohio & Contra
(Inspector)	(Net'l Sd., (Incl. endorsements) State, Prov. and No.)

made and the design of the design of the design of the design of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the sec

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1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/20/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4	WPPSS	MS(9)-4-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Replaced snubber for support MS-1368-13. The replacement work was performed as follows
  - 1) Removed existing snubber with Serial No 2145
  - 2) Installed new snubber with Serial No 2470
  - 3) Performed operability test on the new snubber. Operability test was satisfactory



FORM NIS-2 OWNER'S REPORT F	FOR REPAIRS OR REPLACEMENTS (Back)
B Tests Conducted: Hydrostatic Pneumatic [ Test Pressure: Psig Component Design Pressure: P	Nominal Operating Pressure Other X Non Test Temperature: ° F Psig Temperature: ° F
9. Remarks: None	
•	•
	<del> </del>
CERTIFICAT	TE OF COMPLIANCE
We certify that the statements made in this Own	ner's Report are correct and this replacement conforms
to the rules of the ASME Code, Section XI	Ter o report are correct and and replacement comornia
Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable	
Expiration Date: Not Applicable	
1	a car RAMA
Prepared By Audin Supb Kuldip Singh - Materials And Inspection	Signed By Manager, Materials And Inspection
2) 104	Date 7-21-94
	31
CERTIFICATE OF	INSERVICE INSPECTION
<b>'</b>	
	issued by the National Board of Boiler and Pressure and employed by Arkwright Mutual Insurance Company
	d, Massachusetts have inspected the components
described in this Owner's Report during the per	rlod 5/20/94 to 7/25/94 and
	ne Owner has performed examinations and taken Report in accordance with the requirements of the
ASME Code, Section XI	neport in accordance with the requirements of the
By signing this certificate neither the inspector	nor his employer makes any warranty, expressed or
	ective measures described in this Owner's Report.
injury or property damage or a loss of any kind	loyer shall be liable in any manner for any personal arising from or connected with this inspection
De Offin It	
Ipspector's Signature	Commissions 9556W NBI  National Board, State, and Endorsements
Date 7/25/94	, maying asset amol and charlotting
	,

1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 7/20/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Reactor Recirculation Cooling (RRC) System

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B35-G001A	WPPSS	B35-G001A-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
ı							

7. Description Of Work Performed: Deleted (removed) snubbers for the following supports for Reactor Recirculation Cooling (RRC) System, Loop "A". The work was performed as follows

Support Mark No	Modification Action	ASME NF Class	Comment
RRC-SA-1	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-2	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-8	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-9	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-11	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-12	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-13	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-14	Doleted	NF(1)	Removed One (1) Snubber
RRC-SA-15	Deleted	NF(1)	Removed One (1) Snubber And Clamp
RRC-SA-16	Deleted	NF(1)	Removed One (1) Snubber And Clamp
RRC-SA-17	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-18	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-19	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-20	Deleted	NF(1)	Removed One (1) Snubber
RRC-SA-25	Deleted	NF(1)	, Removed One (1) Snubber
RRC-SA-66	Deleted	NF(1)	Removed One (1) Snubber And Clamp



ests Conducte	ed: Hydrostatic Pnet Test Pressure: Psig Component Design Pre	Tes	erating Pressure st Temperature:° mperature:° F	
Remarks: None				
	d			
				······································
	CER	TIFICATE OF COMPLIA	NCE	
We certify tha	t the statements made in	this Owner's Report are	correct and this r	eplacement conforms
to the rules of	the ASME Code, Section			
	mbol Stamp: Not applicable			
	Authorization No.: Not appli	icable		
expiration Da	fe: Not Applicable		01	
Prepared By _	Quais Euro		KXMC	
	Kuldip Singh - Materials And In	spection	Manager, Material	•
Date	7/21/94	Date	7-21-94	-
		•		
				<del></del>
	CERTIFIC	ATE OF INSERVICE INS	SPECTION	
l the condensite	gned, holding a valid com	uniceion issued by the N	etional Board of I	Roller and Pressure
ı, me undersiç Vessel insped	ctors and the State of Was	hington and employed by	Arkwright Mutual I	nsurance Company
(Factory Mutua	Engineering Association) of	f Norwood, Massachusetts /	have inspected ti	ne components
described in t	his Owner's Report durin	g the period <u>5/20/</u>	94to	7/25/94 and
state to the be	est of my knowledge and :	belief, the Owner has per	rformed examinal	uons and taken
	easures described in this	Owner's Report in accord	dance with the re	quirements of the
ASME Code,	Section XI is certificate neither the li	nenector nor hie employ	er makes anv war	ranty, expressed or
by signing un	eming the examinations	and corrective measures	described in this	Owner's Report
Furthermore.	neither the inspector nor	his employer shall be lia	ible in any manne	er for any personal
injury or prop	erty damage or a loss of	any kind arising from or	connected with ti	his inspection
D. N/n			<b>1</b>	NAT
Bu Kloc	Maria Simona	Commissions		ate, and Endorsements
	nspector's Signature		Handing Dougl, St	morale Bisologiiono
Date7/	ECION	•		



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/20/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Reactor Recirculation Cooling (RRC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC(51)-4	WPPSS	RRC(51)-4-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
RRC(51)-4	WPPSS	RRC(51)-4-P2	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Deleted (removed) snubbers for the following supports for Reactor Recirculation Cooling (RRC) System, Loop "A". The work was performed as follows

Support Mark No

**Modification Action** 

ASME NF Class

Comment

RHR-SA-30 RHR-SA-31

Deleted Deleted NF(1) NF(1) Removed Two (2) Snubbers And Clamp

Removed One (1) Snubber

Note - RHR-SA-30 and RHR-SA-31 supports for Reactor Recirculation Cooling (RRC) System



ests Conducted: Hydrostatic Pol Test Pressure: Psig Component Design Pr		Operating Pressure Test Temperature: ° I Temperature: ° F	Other X N
emarks: None			•
	··•		
CE	RTIFICATE OF COMPL	JANCE	
We certify that the statements made in		re correct and this re	placement conforms
to the rules of the ASME Code, Section Type Code Symbol Stamp: Not applicable			
Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not ap			
Expiration Date: Not Applicable	F		
20100		Qtru-0	Æ
Prepared By Rudin Surg	Signed By	Manager, Materials	And Inspection
ماء امر	•	<del>-</del> '	And Inspection
Date 1/21/14	Date	7-21-94	
		•	
CERTIFI	CATE OF INSERVICE	INSPECTION	
, the undersigned, holding a valid co	mmission issued by the	National Board of B	oiler and Pressure
Vessel Inspectors and the State of Wa (Factory Mutual Engineering Association)	ashington and employed	by Arkwright Mutual In	surance Company
ractory Mutual Engineering Association) described in this Owner's Report duri	ing the period 5/20/	94 to 7/2	5/94 and
state to the best of my knowledge and	d belief, the Owner has	performed examinati	ons and taken
corrective measures described in this	s Owner's Report in acc	ordance with the req	uirements of the
ASME Code, Section XI	-		
By signing this certificate neither the implied, concerning the examinations	Inspector nor his empl	oyer makes any wan	anty, expressed of
implied, concerning the examinations Furthermore, neither the inspector no	s and correcuve measul or his employer shall be	es described in uns Ilable in anv manne	r for anv personal
injury or property damage or a loss o	f any kind arising from	or connected with th	is inspection
		000.	
to dogath	Commission	\	NBI
Cinspector's Signature		National Board, Sta	te, and Endorsements
Date 7/25/94			



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/20/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-4B1	WPPSS	RHR(1)-481-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
			·				

7. Description Of Work Performed: Deleted (removed) snubber for the following support for Residual Heat Removal (RHR) System, Loop "B". The work was performed as follows

Support Mark No RHR-2264-21 Modification Action
Deleted

ASME NF Class NF(1) Comment

Removed One (1) Snubber



sts Conducte	ed: Hydrostatic Pro Test Pressure: Psig Component Design Pro		Operating Pressure Other X Notes Temperature: F Temperature: F
<i>emarks:</i> None			
		•	•
r	CE	RTIFICATE OF COMP	PLIANCE
Ne certify tha	t the statements made li	n this Owner's Report	are correct and this replacement conforms
o the rules of	f the ASME Code, Section	n XI	
Type Code Sy Cartificate Of	/mbol Stamp: Not applicable Authorization No.: Not ap	) olicable	
	te: Not Applicable	piicazio	
•	9 01 02	Stand Dec	Atwas.
Prepared By	Kuldip Singh - Materials And	طمSigned By	Manager, Materials And Inspection
Date	7/24/54	Date	7-21-94
Jale			
	•		
	CERTIFI	CATE OF INSERVICE	INSPECTION
, the undersi	gned, holding a valid col	mmission issued by th	e National Board of Boiler and Pressure
Vessel Inspec	tors and the State of Wa	shington and employed	d by Arkwright Mutual Insurance Company
Factory Mutua	ll Engineering Association) : this Owner's Report duri	of Norwood, Massachuse ing the period 5/20	etts have inspected the components 0/94 to 7/25/94 and
state to the b	est of my knowledge and	d belief, the Owner has	performed examinations and taken
corrective me	easures described in this	s Owner's Report in ac	cordance with the requirements of the
ASME Code,	Section XI	Inenactor nor hie emn	oloyer makes any warranty, expressed or
by signing th implied, cond	is ceruiicate neither the emina the examination:	mspector nor ms emp and corrective meast	ures described in this Owner's Report.
Furthermore.	neither the inspector no	or his employer shall b	e llable in any manner for any personal
injury or prop	erty damage or a loss o	f any kind arising from	or connected with this inspection
Tan Xbo	Earth -	Commissio	ons 9556W NBI
$=$ $\alpha$	hspector's Signature		National Board, State, and Endorsements
	125/94	-	



1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

Date: 7/20/94 Sheet: 1 of 1

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

Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

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

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

7. Description Of Work Performed: Deleted (removed) snubbers for the following supports for Residual Heat Removal (RHR) System, Loop "A". The work was performed as follows

Support Mark No	Modification Action	ASME NF Class	<u>Comment</u>
RHR-SA-35	Deleted	NF(1)	Removed One (1) Snubber
RHR-SA-36	Deleted	NF(1) ,	Removed One (1) Snubber
RHR-SA-37	Deleted	NF(1)	Removed One (1) Snubber
RHR-SA-39	¹ Deleted	NF(1)	Removed Two (2) Snubbers
RHR-SA-40	Deleted	NF(1)	Removed One (1) Snubber



FO	RM NIS-2 OWNER'S R	REPORT FOR REPAIRS	OR REPLACEMEN	TS (Back)
ests Conducte	ed: Hydrostatic Pri Test Pressure: Psig Component Design P		perating Pressure est Temperature: ° F emperature: ° F	
Remarks: None				
	CE	ERTIFICATE OF COMPLI	ANCE	
to the rules of Type Code Sy	the ASME Code, Section  mbol Stamp: Not applicable  Authorization No.: Not ap	lo .	o correct and this rep	placement <i>conforms</i>
Prepared By _	Buldib Eni	ے Signed By	ExMedi	
	Kuldip Singh - Materials And		Manager, Materials	And Inspection
Date	7/21/94	Date	7-21-94	
	CERTIFI	ICATE OF INSERVICE IN	ISPECTION	
Vessel Inspect (Factory Mutual described in ti	tors and the State of Wa Engineering Association) his Owner's Report duri	mmission issued by the Nashington and employed by of Norwood, Massachusetts ing the period	y Arkwright Mutual Ins have inspected the 94to7/	surance Company components 25/94_and
corrective mea ASME Code, S	asures described in this Section XI	d belief, the Owner has pe s Owner's Report in accor	rdance with the requ	uirements of the
implied, conce Furthermore, i	erning the examinations neither the inspector no	Inspector nor his employ s and corrective measure: or his employer shall be li of any kind arising from or	s described in this ( able in any manner	Owner's Report. for any personal
Dan Xloxi	a-/h		9556W	NBI
CG _n	spector's Signature		National Board, Stat	e, and Endorsements
Date 7/2	C/9/L			



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/20/94 Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-4A1	WPPSS	RHR(1)-4A1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Deleted (removed) snubbers for the following supports for Residual Heat Removal (RHR) System, Loop "A". The work was performed as follows

Support Mark No	Modification Action	ASME NF Class	Comment
RHR-SA-54	Deleted	NF(1)	Removed One (1) Snubber And Clamp
RHR-SA-55	Deleted	NF(1)	Removed One (1) Snubber
RHR-SA-57	Deleted	NF(1)	Removed One (1) Snubber
RHR-SA-58	Deleted	NF(1)	Removed Two (2) Snubbers
RHR-SA-59	Deleted	NF(1)	Removed One (1) Snubber



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

87	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X No Test Pressure: Psig Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9.	Remarks: None
ſ	
١	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms
ı	to the rules of the ASME Code, Section XI
١	Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable
1	Expiration Date: Not Applicable
	$\Omega_{\perp}$
١	Prepared By Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
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-	Date 7/21/14 Date 7-21-91-
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1	
	CERTIFICATE OF INSERVICE INSPECTION
	the state of Board of Bollon and Broading
1	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 Arkwright Mutual Insurance Company
i	(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
	described in this Owner's Report during the period 5/20/94 to 1/25/94 and
	state to the best of my knowledge and belief, the Owner has performed examinations and taken
	corrective measures described in this Owner's Report in accordance with the requirements of the
ļ	ASME Code. Section XI
	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
	implied, concerning the examinations and corrective measures described in this Owner's Report.  Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
	injury or property damage or a loss of any kind arising from or connected with this inspection
	Jan Voyaget Commissions 9556 W NOI
	Onspector's Signature National Board, State, and Endorsements
	Date



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/20/94 Sheet: 1 of 1

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Reactor Recirculation Cooling (RRC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B35-G001B	WPPSS	B35-G001B-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Deleted (removed) snubbers for the following supports for Reactor Recirculation Cooling (RRC) System, Loop *B*. The work was performed as follows

Support Mark No	Modification Action	ASME NF Class	Comment
RRC-SB-1	Deleted	NF(1)	Removed One (1) Snubber
RRC-SB-2	Deleted	NF(1)	Removed One (1) Snubber
RRC-SB-11	Deleted	NF(1)	Removed One (1) Snubber
RRC-SB-12	Deleted	NF(1)	Removed One (1) Snubber
RRC-SB-13	Deleted	NF(1)	Removed One (1) Snubber
RRC-SB-14	Deleted	NF(1)	Removed One (1) Snubber
RRC-SB-15	Deleted	NF(1)	Removed One (1) Snubber And Clamp
RRC-SB-16	Deleted	NF(1)	Removed Two (2) Snubbers
RRC-SB-17	Deleted	NF(1)	Removed One (1) Snubber
RRC-SB-18	Deleted	NF(1)	Removed One (1) Snubber
RRC-SB-25	Deleted	NF(1)	Removed One (1) Snubber
RRC-SB-66	Deleted	NF(1)	Removed One (1) Snubber And Clamp



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

		ssure: Psig ent Design Pressu		est Temperature: ° F emperature: ° F	
Remarks: None		•			
					,
	<del></del>				
		CERTIF	ICATE OF COMPL	IANCE	1
			s Owner's Report ar	e correct and this replace	ment <i>conforms</i>
to the rules of Type Code Sy		Code, Section XI  P: Not applicable			
Certificate Of	Authorizat	ion No.: Not applicable	io ,		
Expiration Dat		_		24.	
Prepared By_	<u>Audol</u>	Materials And Inspec	Signed By	Manager, Materials And	In an artisa
Date		1	Date	7-21-94	inspection
Date		12111	Date		<del></del>
			··		
		CERTIFICAT	E OF INSERVICE II	NSDECTION	
			•		
				<b>National Board of Boiler</b> By Arkwright Mutual Insural	
(Factory Mutual	Engineerin	g Association) of No	rwood, Massachusetts	s have inspected the col	mponents
described in ti	nis Owner	s Report during th	ne period <u>5/20/</u>	94to7/25/9	94and
				erformed examinations rdance with the require	
ASME Code, S					
				yer makes any warranty	
				s described in this Own lable in any manner for	
				r connected with this in:	
Dry X6	ssar X	/	Commissions	9556W	NBI
6	poctor's Sig	nature		National Board, State, and	d Endorsements
Date	125/94				



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/20/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No. Job No. etc.: Washington Public Power Supply System (WPPSS)

- 4. Identification Of System: Reactor Recirculation Cooling (RRC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Bullt	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC(51)-4	WPPSS	RRC(51)-4-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1
RRC(51)-4	WPPSS	RRC(51)-4-P2	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Deleted (removed) snubbers for the following supports for Reactor Recirculation Cooling (RRC) System, Loop *B*. The work was performed as follows

Support Mark No RHR-SB-30

**Modification Action** 

ASME NF Class

Deleted

NF(1)

Removed One (1) Snubber And Clamp

RHR-SB-31 Deleted

NF(1)

Removed One (1) Snubber And Clamp

Note - RHR-SB-30 and RHR-SB-31 supports for Reactor Recirculation Cooling (RRC) System



FORM NIS-2	OWNER'S REPORT	FOR REPAIRS	OR REPLAC	EMENTS (Ba	ack)
	tatic Pneumatic ssure: Psig ent Design Pressure:		Operating Pre Test Temperat Temperature:	ure:°F	Other X Non
Remarks: None				P	
					•
	CERTIFICA	ATE OF COMPI	JANCE		
We certify that the stater to the rules of the ASME		wner's Report a	re correct and	this replaceme	ent conforms
Type Code Symbol Stam	p: Not applicable	-			
Certificate Of Authorizati Expiration Date: Not Applic					
			atra	1	
Prepared By Kuldip Singh	16 Surph	_ Signed By	Manager	Materials And In:	enection
, vigib singu	21/94	<b>5</b> -4-	7-21	_0/_	
Date	MIT.	Date	1-61	-14-	
				·	
<u> </u>					
	CERTIFICATE C	OF INSERVICE	INSPECTION		
   I, the undersigned, holdl	na a valid commissic	on issued by the	National Boa	rd of Boiler a	nd Pressure
Vessel Inspectors and th	ne State of Washington	and employed	by Arkwright M	utual Insuranc	e Company
(Factory Mutual Engineerin described in this Owner	g Association) of Norwo	ood, Massachuset	its have inspec	ted the comp 7/25/9	ponents 4- and
state to the best of my k					
corrective measures des	scribed in this Owner	's Report in acc	ordance with	the requirem	ents of the
ASME Code, Section XI					
By signing this certification	te neither the Inspect	or nor his empl	oyer makes an	y warranty, e In this Owner	expressed or r's Banari
Furthermore, neither the	examinations and co Inspector nor his en	rrecuve measu oplover shall be	es described i liable in any r	nanner for al	ny personal
injury or property damag	ge or a loss of any kir	nd arising from	or connected t	with this insp	ection
Da When Sit		Commission	ns 9556	[] A	IST
Urspector's Sig	nature	Commission		oard, State, and	Endorsements
Date 7/25/94		·			



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/20/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-4B	WPPSS	RHR(1)-48-P1	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Deleted (removed) snubbers for the following supports for Residual Heat Removal (RHR) System, Loop *B*. The work was performed as follows

Support Mark No	Modification Action	ASME NF Class	Comment
RHR-SB-32	Deleted	NF(1)	Removed One (1) Snubber
RHR-SB-34	Deleted	NF(1)	Removed Two (2) Snubbers
· RHR-SB-35	Deleted	NF(1)	Removed One (1) Snubber
RHR-SB-36	Deleted c	NF(1)	Removed One (1) Snubber
RHR-SB-39	<del>Del</del> eted	NF(1)	Removed Two (2) Snubbers



F	FORM NIS-2 OWNER'S REPO	RT FOR REPAIRS	OR REPLACEMENTS	(Back)
3 Tests Conduc	ted: Hydrostatic Pneum Test Pressure: Psig Component Design Pressu	7	, Operating Pressure lest Temperature: ° F lemperature: ° F	Other X No.
<b>9. Remarks:</b> Nor	16			
	J	,	•	
	•	•	•	
	CERTIF	FICATE OF COMPL	ANCE	
	nat the statements made in this of the ASME Code, Section XI		e correct and this replac	ement <i>conforms</i>
	Symbol Stamp: Not applicable  If Authorization No.: Not applicab	t _a		
	Pate: Not Applicable	но		
Prepared By	Munich Such	Signed By	PAMO.	
Trepared by	Kuldip Singh - Materials And Inspec		Manager, Materials And	Inspection
Date	7/2184	Date	. 7-21-94	<del></del>
<u></u>	<del>-</del>			
	CERTIFICAT	E OF INSERVICE II	NSPECTION	
Vessel Inspe (Factory Mutu	ilgned, holding a valid commisectors and the State of Washing al Engineering Association) of No this Owner's Report during the	gton <i>and employed b</i> prwood, Massachusett	y Arkwright Mutual Insura have inspected the co	ance Company omponents
state to the l	best of my knowledge and bel leasures described in this Ow	ief, the Owner has p	erformed examinations	and taken
implied, con Furthermore	his certificate neither the inspicerning the examinations and e, neither the inspector nor his perty damage or a loss of any	l corrective measure s employer shall be i	s described in this Ow lable in any manner fol	ner's Report. r any personal
2000	in Sales	•		110-
Tunco	hospector's Signature	Commissions	National Board, State, a	nd Endorsements
Date	7/25/94			



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/16/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Control Rod Drives (CRD's)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, See below for Code Edition and Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD's	GE	See Below	N/A	N/A	See Below	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced thirty (30) Control Rod Drives (CRD's). The replacement work was performed as follows - 1) Removed thirty (30) existing CRD's, 2) Installed replacement CRD's, 3) Installed new replacement cap screws for each CRD flanged connection for all the core locations, 4) Torqued the cap screws for the CRD flanged connections to the required torque values, 5) Performed pressure test on CRD flanged connections to confirm pressure boundary integrity. Leakage was observed during pressure test and was evaluated to be acceptable

Co	oto	CRD Removed	Code Year	CRD Replaced	Code Year	<u>Yoar</u>
	cation	Serial Number	And Addenda	Serial Number	And Addenda	Built
	2-31	6126	1971/-	6339	1971/-	1974
	2-27	6343	1971/-	A9131	1974/W75	1991
	;-27	7045	1974/-	7408	1971/-	1975
	2-11	6690	1971/-	A8926	1974/W75	1991
	)-31	6433	1971/-	6453	1971/-	1975
	2-07	6260	1971/-	5970	1971/-	1975
	2-43	7294	1971/-	6512	1971/-	1975
	3-27	7279	1971/-	5648	1971/-	1974
	2-31	7081	1971/-	A8896	1974/W75	1991
	3-19	6697	1971/-	7492	1971/-	1975
	3-43	6778	1971/-	7081	1971/-	1975
	3-43	CRD Serial No 7081	was removed and i	oinstalled at this cor	e location	
	3-47	7364	1971/-	7217	1971/-	1975
58	3-19	6512	1971/-	A8922	1971/-	1974
18	3-59	7330	1971/-	7232	1971/-	1975
50	0-27	7143	1971/-	A8915	1971/-	1974
	2-19	5648	1971/-	4703	1971/-	1975
	2-23	7357	1971/-	A9158	1971/-	1974
	2-43	6404	1971/-	6370	1971/-	1975
	2-59	7144	1971/-	A8913	1974/W75	1991
	5-07	7126	1971/-	A8932	,1971/-	1975
	6-15	6731	1971/-	6447	1971/-	1974
	0-23	6631	1971/-	6246	1971/-	1975
	0-31	5485	1971/-	A8983	1974/W75	1992
30	0-43	4970	1971/-	5485	1971/-	1975
30	0-47	6736	1971/-	6433	1971/-	1974
34	4-15	7183	1971/-	A8900	1971/-	1975
42	2-35	7202	1971/-	6491	1971/-	1975
46	6-39 *	6588	1971/-	7357	1971/-	1975
46	6-39 *	7357	1971/-	A9333	1974/W75	1992
54	4-39	A8745	1974/W75	7560	1971/-	1975
* Replaced CRD twice	at this core locat	ion		· · · · · · · · · · · · · · · · · · ·		



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

Tests Conducted: Hydrostatic X Pr  Test Pressure: 1021/91  Component Design P  Remarks: 1) N-2 Code Data Reports for the re- rdrostatic test was performed on CRD flanged con- d test temperature of 200° F, 3) CRD flanged con- minal operating pressure test. Nominal operating p	7 Psig Test Pressure: 1250 Psig Terr  Placement Control Rod Drives (CRD nections to confirm pressure bounds nections for which leakage was obse	uy integrity. Hydrostatic test p rved during hydrostatic test v	nis NIS-2 form, 2) xessure of 1021 Psi
CE	ERTIFICATE OF COMPLIAI	NCE	•
We certify that the statements made to the rules of the ASME Code, Section Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable  Prepared By Kuldip Singh - Materials And Bill 14	on XI le pplicable Signed By	Amou Manager, Materials And In	
I, the undersigned, holding a valid converse inspectors and the State of W (Factory Mutual Engineering Association) described in this Owner's Report during state to the best of my knowledge and corrective measures described in this ASME Code, Section XI By signing this certificate neither the implied, concerning the examination Furthermore, neither the inspector in injury or property damage or a loss of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the	ashington and employed by a of Norwood, Massachusetts he fing the period	tional Board of Boiler of Arkwright Mutual Insurance ave inspected the complete to 8-17- formed examinations a sance with the requirements of the complete in any manner for a connected with this inspected with this inspected.	ee Company ponents 94 and nd taken pents of the expressed or er's Report. ny personal pection
Date 8-17-94	Commissions _	9556W A	BT Endorsements



Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 8/16/94 Sheet: 1 of 1

Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, See below for Code Edition and Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	See Below	N/A	N/A	See Below	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced one (1) Control Rod Drive (CRD). The replacement work was performed as follows 1) Removed the existing CRD, 2) Installed replacement CRD, 3) Installed new replacement cap screws for the CRD flanged connection, 4)
Torqued the cap screws for the CRD flanged connection to the required torque values, 5) Performed pressure test on CRD flanged connection to confirm pressure boundary integrity. No evidence of leakage during the pressure test

<u>Coro</u>	CRD Removed	Code Year	CRD Replaced	<u>Code Year</u>	You
<u>Location</u>	Serial Number	And Addenda	Serial Number	And Addenda	Built
38-23	6340	1971/-	A9161	1974/W75	1991



CERTIFICATE OF COMPLIANCE  We certify that the statements made in this Owner's Report are correct and this replacement cont to the rules of the ASME Code, Section XI  Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable Expiration Date: Not Applicable Prepared By Signed By Manager, Materials And Inspection  Date State of Washington and employed by Arkwright Mutual Insurance Comp (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period (1/2-94 to 3-70-94 state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report under the Inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report under the Inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report In accordance with the requirements of ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report In accordance with this inspection of the Asmade Board, State, and Endorsen National Board, State, and Endorsen National Board, State, and Endorsen	^ ^
We certify that the statements made in this Owner's Report are correct and this replacement cont to the rules 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 Signed By Manager, Materials And Inspection  Date Date Date Signed And Inspection  Date Signed By Signed By Manager, Materials And Inspection  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Comp (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period 12-94 to 8-17-94 state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, express 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 pers injury or property damage or a loss of any kind arising from or connected with this inspection	*
We certify that the statements made in this Owner's Report are correct and this replacement cont to the rules 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 Signed By Manager, Materials And Inspection  Date Date Signed By Manager, Materials And Inspection  Date Signed By Manager, Materials And Inspection  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Compensation of Institute Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Compensations of Institute Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Compensations of Institute Inspectory Mutual Engineering Association) of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period 1.2.94 to 8-17.94  state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, express 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 pers Injury or property damage or a loss of any kind arising from or connected with this inspection	
We certify that the statements made in this Owner's Report are correct and this replacement cont to the rules 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 cont to the rules 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 Signed By Manager, Materials And Inspection  Date Sile S4 Date B- /6 - 94  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Compression of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period (2.2.94 to 8-17.94)  state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, express 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 pers injury or property damage or a loss of any kind arising from or connected with this inspection	
We certify that the statements made in this Owner's Report are correct and this replacement cont to the rules 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 Signed By Manager, Materials And Inspection  Date Sile 4 Date B- 16-94  CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Complexion (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period 6-2-94 to 8-17-94 state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, express 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 pers injury or property damage or a loss of any kind arising from or connected with this inspection	
Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable Expiration Date: Not Applicable  Prepared By	
Type Code Symbol Stamp: Not applicable  Certificate Of Authorization No.: Not applicable  Expiration Date: Not Applicable  Prepared By	nforms
Certificate Of Authorization No.: Not applicable  Expiration Date: Not Applicable  Prepared By	
Prepared By	
Signed By   Signed By   Manager, Materials And Inspection   Manager, Materials And Inspection	
Kuldip Singh - Materials And Inspection   Manager, Materials And Inspection	
Kuldip Singh - Materials And Inspection   Manager, Materials And Inspection	
CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevented Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Comp (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period (1.2.94 to 3.17.94) state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI By signing this certificate neither the inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Repfurthermore, neither the inspector nor his employer shall be liable in any manner for any persinjury or property damage or a loss of any kind arising from or connected with this inspection	1
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevence Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Comp (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period (12.94 to 8-17.94) state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report in accordance with the Inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report understand the Inspector nor his employer shall be liable in any manner for any persinjury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 95600 WBT	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevented Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Components (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period (12.94) to (8.17.94) state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report Furthermore, neither the inspector nor his employer shall be liable in any manner for any persinjury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 95600 NST	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevented Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Components (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period (12.94) to (8.17.94) state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report Furthermore, neither the Inspector nor his employer shall be liable in any manner for any persinjury or property damage or a loss of any kind arising from or connected with this inspection (Commissions (1956)).	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevented Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Components (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period (12.94) to (8.17.94) state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 95600 NST	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Prevented Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Components (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components described in this Owner's Report during the period (12.94) to (8.17.94) state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 95600 NST	
Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Composition (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period (12.94 to 8-17.94) state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report Furthermore, neither the Inspector nor his employer shall be liable in any manner for any persinjury 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 Arkwright Mutual Insurance Composition (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period 4.2.94 to 8-17.94 state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report Furthermore, neither the Inspector nor his employer shall be liable in any manner for any persinjury or property damage or a loss of any kind arising from or connected with this inspection	
(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the component described in this Owner's Report during the period (12.94) to (8-17.94) state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the Inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report Furthermore, neither the Inspector nor his employer shall be liable in any manner for any persinjury or property damage or a loss of any kind arising from or connected with this inspection	essure many
described in this Owner's Report during the period (1-2-94 to 8-17-94) state to the best of my knowledge and belief, the Owner has performed examinations and take corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, expressimplied, concerning the examinations and corrective measures described in this Owner's Report Furthermore, neither the inspector nor his employer shall be liable in any manner for any persinjury or property damage or a loss of any kind arising from or connected with this inspection	ipaliy its
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corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI  By signing this certificate neither the inspector nor his employer makes any warranty, express implied, concerning the examinations and corrective measures described in this Owner's Report Furthermore, neither the inspector nor his employer shall be liable in any manner for any persinjury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 95600 NST	en
ASME Code, Section XI By signing this certificate neither the Inspector nor his employer makes any warranty, express 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 pers injury or property damage or a loss of any kind arising from or connected with this Inspection  Commissions 95600 NSI	of the
By signing this certificate neither the Inspector nor his employer makes any warranty, express 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 pers injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 95600 NSI	
Furthermore, neither the Inspector nor his employer shall be liable in any manner for any pers injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 95660 NSI	ssed or
injury or property damage or a loss of any kind arising from or connected with this inspection  Commissions 95560 NET	port.
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	ements
Date 8/17/94	



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 8/16/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, See below for Code Edition and Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	See Below	N/A	N/A	See Below	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced one (1) Control Rod Drive (CRD). The replacement work was performed as follows 1) Removed the existing CRD, 2) Installed replacement CRD, 3) Reinstalled existing cap screws, 4) Torqued the cap screws for the CRD flanged connection to the required torque values, 5) Performed pressure test on CRD flanged connection to confirm pressure boundary integrity. No evidence of leakage during the pressure test

CRD Removed Code Year CRD Replaced Code Year <u>Yoar</u> Serial Number And Addenda ocation <u>Serial Number</u> <u>And Addenda</u> Bullt A8915 1971/-A9026 1974/W75 1992

### Notes -

- 1) CRD Serial No A8915 was installed under WO No CG 2401 at core location 50-27. Serial No A8915 CRD was removed and replacement CRD Serial No A9026 was installed under WO No KT 8902
- 2) New replacement cap screws installed under WO No CG 2401 for core location 50-27 were reinstalled when the CRD was replaced under WO No KT 8902



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

8 Tests Conduc	ted: Hydrostatic X Pne Test Pressure: 1021 Psig Component Design Pre	!	al Operating Pressure  Test Temperature: 200° F  Temperature: 535° F	Other Non
9. Remarks: N-2	Code Data Report for the replace	ment Control Rod Drive (C	RD) is filed separately from this NIS-2	t form
	CEF	RTIFICATE OF COM	PLIANCE	
to the rules of Type Code S	at the statements made in of the ASME Code, Section ymbol Stamp: Not applicable f Authorization No.: Not app	ı XI	are correct and this replaceme	nt <i>conforms</i>
1	Ruck Sur Kuldip Singh - Materials And In	Signed By	RAMOGUL Manager, Materials And Ins	pection
Date	8/16[34	Date	8-16-94-	
	CERTIFIC	CATE OF INSERVICE	INSPECTION	
Vessel Inspe (Factory Mutus described in state to the b corrective management ASME Code, By signing the implied, cond	ctors and the State of Was al Engineering Association) of this Owner's Report during est of my knowledge and easures described in this Section XI his certificate neither the li- cerning the examinations	shington and employe of Norwood, Massachus og the period	te National Board of Boller and by Arkwright Mutual Insurance etts have inspected the complete for the complete for the complete for the complete for the complete for the condense with the requiremental of the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the complete for the	e Company conents
		any kind arising fron	ons <u>95366</u> National Board, State, and E	ection
Date	B-17-94		National Board, State, and E	ngorsements



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/28/94

Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 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: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE .	7045	N/A	n/A	1974	Replaced	Yes, Code Class 1
CT&F		A8963	N/A	n/A	1992	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7045. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A8983

- 1) The existing Control Rod Drive (CRD) assembly Serial No 7045, ASME Section III, Code Class 1, 1974 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A8983, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A8983



	FORM NIS-2 OWNER'S I	REPORT FOR REPAIRS	OR REPLACEMEN	TS (Back)
Tests Cond	ucted: Hydrostatic Pi Test Pressure: Psig Component Design F	<del></del>	<i>Operating Pressure</i> Test Temperature: ° F Temperature: ° F	
Remarks: :	See attached N-2 Code Data Repo	rt for the new Cylinder Tube And	d Flange (CT&F) assembly	Serial No A8983
	•			
	CE	ERTIFICATE OF COMPL	LIANCE	•
to the rule Type Code Certificate	that the statements made is of the ASME Code, Section Symbol Stamp: Not applicable Of Authorization No.: Not applicable Date: Not Applicable	on XI le	re correct and this rep	olacement <i>conforms</i>
•	_	Signed By	BAMOEL	
	By Kuldip Singh- Materials And	Inspection	Manager, Materials	And Inspection
Date	7/28/94	Date	7-29-94-	
			,	
I, the unde	CERTIF ersigned, holding a valid co	ICATE OF INSERVICE I Immission issued by the		ller and Pressure
Vessel Ins (Factory Mu	pectors and the State of Wa itual Engineering Association) In this Owner's Report dur	ashington <i>and employed</i> i of Norwood, Massachusett	by Arkwright Mutual Ins ts <i>have inspected the</i>	urance Company components
state to the corrective ASME Cod	e best of my knowledge and measures described in this le, Section XI	d belief, the Owner has p s Owner's Report in acco	performed examination or dance with the requirements of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the contro	ns and taken lirements of the
	this certificate neither the encerning the examinations	s and corrective measure	es described in this C liable in any manner	wner's Report.
implied, co Furthermo	re, neither the inspector no		or connected with this	
implied, co Furthermo Injury or p	re, neither the Inspector no roperty damage or a loss o	f any kind arising from o		inspection
implied, co Furthermo Injury or p	re, neither the inspector no	f any kind arising from o	s 9556 W National Board, State	Inspection  NBI

	2117 Castle Hayne Road, Wilmington, North Carolina 28401
	, ( Name and Address of NPT Certificate Bolder )
	(b) Hanufactured for: WNP 2 Richland, Washington 99352
	( Name and Address of H Certificate Holder for completed nuclear component )
•	Identification - Certificate.Holder's S/N of Part : A8983 Nat'l Bd. No. N/A
	(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
	(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>
	(c) Applicable ASHE Code: Section III . Edition 1974 . Addenda Date W75 . Case No. N207 1361-2 Class 1
3.	REHARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 psi, min.  ( Brief description of service for which component was designed )
	Sheet 1 of 2
	We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASHE Code Section III. ( The applicable Designed Specification and Strew Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenance is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included the component Design Specification and Stress Report ).
	Oate: 12/22/92 Signed GE-NEBG-NF & CM-QA By SC ON Representive )
	Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPTN - 1151
	Certification of Design for Appurtenance
	Design information on file at <u>GE Company</u> , San Jose, California
•	Stress analysis report on file atGE Company . San Jose . California
	DC22A6253 Rev. 1 Design specification certified by <u>Blorn Haabera</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 North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Oata Report on 12/16, 1292, 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 Oata 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.

(47/90)

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		Girth _			н.т		R.T.	•	Ko. of	Courses	
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(0)	If rem	ovable, be	its used	- Character		Size Number)	Other faster	ning			
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13.	Heads:										
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(5)			its used (a)		_(b)	(c)	Other	fastening			
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8.	Support	s: Skir	·	Lugs _		_ Legs	0tl	her	. Attacl	ned	4

1. Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

(b)	Manufactured for :	WNP 2	Richland, Washington 99352
,			and Address of N Certificate Holder for completed nuclear component

- 2. Identification Certificate Holder's S/N of Part : A8983 Nat'l Bd. No. N/A
  - (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
    - (b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>
  - (c) Applicable ASME Code: Section III. Edition 1974. Addenda Date W75. Case No. N207 1361-2 Class 1
- 3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

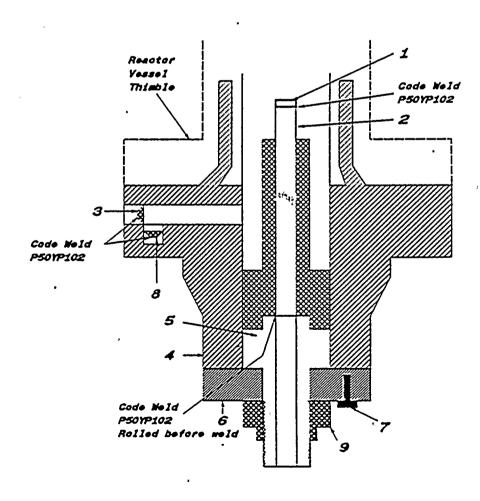
  ( Brief description of service for which component was designed )

Sheet 2 of 2

1. Cap 16689274P001 SA182 - 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.

- 3. Plug 159A1176P001 SA182 - F304 1/4" thick x 0.812" OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8* thick x 2.875* dia.
- 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Scrow 117C4516P002 SA193 - B6 6 ea. 1/2º dia. on 4 1/8º bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.



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1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/28/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CT&F	GE	6690	N/A	N/A	1975	Replaced	Yes, Code Class 1
	GE	A9126	N/A	N/A	1991	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6690. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly, PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Senal No A9126

- 1) The existing Control Rod Drive (CRD) assembly Serial No 6690, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A9126, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Red Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A9126



FORM NIS-2 OWNER'S REPOR	RF FOR REPAIRS OR REPLACEMENTS (Back)
8 Tests Conducted: Hydrostatic Pneuma Test Pressure: Psig Component Design Pressu	atic Nominal Operating Pressure Other None Test Temperature: ° F  Temperature: ° F
7. Remarks: See attached N-2 Code Data Report for the	e new Cylinder Tube And Flange (CT&F) assembly Serial No A9126
	•
CERTIFI	ICATE OF COMPLIANCE
	Owner's Report are correct and this replacement conforms
Prepared By Kuldip Such Kuldip Singli - Materials And Inspect Date 728194	Signed By RAMOR  tion Manager, Materials And Inspection  Date 7-29-94-
CERTIFICATE	E OF INSERVICE INSPECTION
Vessel Inspectors and the State of Washingt (Factory Mutual Engineering Association) of Non- described in this Owner's Report during the state to the best of my knowledge and belle	sion Issued by the National Board of Boller and Pressure ton and employed by Arkwright Mutual Insurance Company twood, Massachusetts have inspected the components to 7.29-94 and to 7.29-94 and tof, the Owner has performed examinations and taken ther's Report in accordance with the requirements of the
ASME Code, Section XI By signing this certificate neither the inspection implied, concerning the examinations and control furthermore, neither the inspector nor his examination.	ector 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 kind arising from or connected with this inspection
Date 7-29-94	Commissions 9556 W NBT  National Board, State, and Endorsements

. Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM	1)
. 2117 Castle Hayne Road, Wilmington, North Carolina 28401 ( Name and Address of NPT Certificate Holder )	•
(b) Hanufactured for : WNP 2 Richland, Washington 99352	
( Name and Address of N Certificate Holder for completed nuclear component )	
2. Identification - Certificate Holder's S/H of Part : <u>A9126</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>Cylinder Tube &amp; Flange</u>	
(c) Applicable ASME Code: Section III. Edition 1974. Addenda Date W'75. Case No. N207 1361-2 Class 1	
3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.  ( Brief description of service for which component was designed )	
•	
Sheet 1 of 2	
is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).  Date: 11/18/91 Signed GE-NEBG-NF & CM-QA By (NPT Certificate Holder)  Certificate of Authorization Expires: 6/16/93 Certification of Authorization No.: NPT N-1151	I
Certification of Design for Appurtenance	
Design information on file atGE Company , San Jose , California	
Stress analysis report on file atGE Company, San Jose, California	ı
OC22A6253 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 North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 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	

1//8 1991 June P Evers NC 1231, Ohio, WC 3686 PA

Date National Board, State, Province And No.

#Supplemental sheets in form of lists sketches or drawing may be us

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".

Floating. Material Dia Thickness in. Attachment Dia Thickness in. Attachment Type	It	ems 4-8 [nc]. to be comple	ted for single wall v	essels, jacket	s vessels, or shells	of heat exchangers.	
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Occident Charry Dept. Charry Impact	7.	Jacket Closure:	(Describe as ogee	and werd, bar, etc. If t	er give dimensions, if bolts, desc	nbe of sketch)	
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tems II - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.  Nominal Corrosion In Dia, ft. in Length ft. in (Kind & Spec. No.) (Min. of Range Specific)  Seams: Long H.T. R.T. Efficiency M. Girth H.T. R.T. K.T. Mo. of Courses  Hades: (a) Material T.S. (b) Material T.S.  Location Thickness Radius Radius Ratio Apex Angle Radius Diameter (conv. or conc.) a) Top. bottom, ends b) Channel If removable, bolts used (a) (b) (c) Other fastening (Describe or attach swetch)  Drop Weight Charpy Impact ft-ib Fat temp of F tems below to be completed for all vessels where applicable.  Safety Valve Outlets: Number Size Location Number Dia or Size Type Material Thickness Material How Attached Size Location Thickness Roughlands How Attached Size Location Thickness Roughlands How Attached Location Thickness Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Roughlands Ro	₹.	Tube Sheets: Stationary.	Material (Kind & S. Material	Dia Dia	(Subject to pressure)	ckness in. Attac ckness in. Attac	hment (Welded, Boiled)
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^{1 -} If Postweld Heal-Treated.

^{2 -} List other internal or external pressure with coincident temperature when applicable,

١.	Manufactured & Certified by :	General Electric Company Nuclear Fuel & Components Manufacturing ( G	SE NF & CM)
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### 2117 Castle Hayne Road, Wilmington, North Carolina 28401

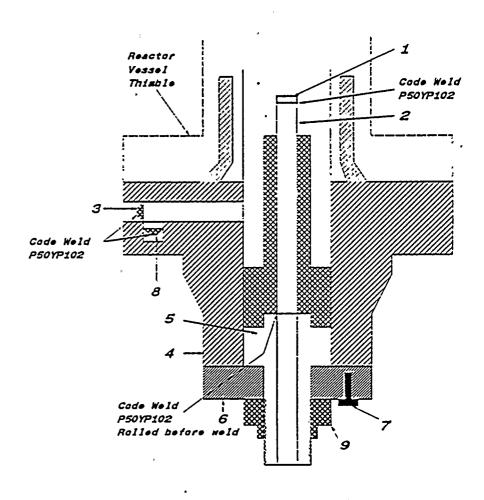
( Name and Address of NPT Certificate Holder )

(b)	Hanufactured for :	WNP 2	Richland, Washington 99352	
• •		/ Mama and	d Address of N Carrificate Holder for completed nuclea	r component

- ___ Nat'l Bd. No. ___N/A 2. Identification - Certificate Holder's S/N of Part : A9126
  - (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
  - (b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>
  - (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1
- 3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min. ( Brief description of service for which component was designed )

Sheet 2 of 2

- 1. Cap 166B9274P001 SA182 - F304 3/8° thick x 1 1/16° OD
- 2. Indicator Tube 16689313P001 SA312 - TP316 3/4° sch 40 - seamless pipe 0.113° wall thickness 1.065° max. dia.
- 3. Plug 159A1176P001 SA182 - F304 1/4° thick x 0.812° OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8° thick x 2.875° dia.
- 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2° dia. on 4 1/8° bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.



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Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/28/94 Sheet: 1 of 1 Unit: WNP-2

Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
 Address: Hanford Reservation, Benton County, Washington

00 George Washington Way Richland WA

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	G G	6260	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F		A9346	N/A	N/A	1992	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6260. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9348

- 1) The existing Control Rod Drive (CRD) assembly Serial No 6260, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A9346, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A9346



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

ests Conducted: Hydrostatic F Test Pressure: Psig Component Design	<del>,</del>	il Operating Pressure Test Temperature: ° F Temperature: ° F	Other X
emarks: See attached N-2 Code Data Rep	ort for the new Cylinder Tube A	nd Flange (CT&F) assembly:	Serial No A9346
		•	
·	ERTIFICATE OF COMP	PLIANCE	
We certify that the statements made o the rules of the ASME Code, Sect		are correct and this rep	lacement <i>conforms</i>
Type Code Symbol Stamp: Not applica			
Certificate Of Authorization No.: Not			
Expiration Date: Not Applicable	••	_	
	ه	Amer.	
repared By Kuldip Singh - Materials An	Signed By	Manager, Materials	And Inspection
م مرمد	•	7-29-94	and inspection
Pate	Date	1-61-14-	
•			
CERTI	FICATE OF INSERVICE	INSPECTION	٠
the undersigned, holding a valid c			
<i>'essel Inspectors and the State of</i> V Factory Mutual Engineering Association			
lescribed in this Owner's Report du	ring the period 5-2	4. 94 to 7.7	29-94 and
tate to the best of my knowledge a	nd belief, the Owner has	performed examinatio	ns and taken
orrective measures described in th			
SME Code, Section XI			
ly signing this certificate neither the model of the model of the model of the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examination in the examinatio			
riphed, concerning the examination furthermore, neither the inspector n			
jury or property damage or a loss			
Dan Waganto	Commission	ns <u>9556 W</u> National Board, State	NBI
. // /) :		National Hoam State	ADG EDGGGGGGGGGG
Inspector's Signature  7-29-94		Tatoona coald, Cano	

-		
1		Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
		' 2117 Castle Hayne Road, Wilmington, North Carolina 28401
		( Name and Address of NFT Certificate Holder )
		(b) Hanufactured for: WNP 2 Richland, Washington 99352  ( Name and Address of M Certificate Holder for completed nuclear component )
	2.	Identification - Certificate Holder's S/H of Part : A9346 Nat'l Bd. No. N/A
		(a) Constructed According to Orawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
		(b) Description of Part Inspected: Cylinder Tube & Flange
		(c) Applicable ASHE Code: Section III . Edition 1974 . Addenda Date W75 . Case No. N207 1361-2 Class 1
	3.	REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
		( Brief description of service for which component was designed )
		•
-	-	Sheet 1 of 2
-		
		We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms—to the rules of construction of the ASHE Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).
		Date: 12/22/92 Signed GE-NEBG-NF & CM-QA By SC QA 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 at <u>GE Company, San Jose, California</u>
Ì		OC22A6253 Rev. 1 Design specification certified by <u>Biom Haabera</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
		OC22A6254 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 Mational Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 18/19, 1922, and state that to the best of my knowledge and belief, the NPT Cartificate Holder has constructed this part in accordance with the ASHE Code Section III.  By signing this cartificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.
		12/22 , 1992 1 Lance P & November 1231, Ohio, WC 3686 PA    Date   November 1231, Ohio, WC 3686 PA
ı		Date   Inspector's Signature Hational Soard, 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".

(47/20)

S/N A 4546 Budip Emps.

Ite	tems 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.	8794
4.	Nominal Corrosion   Shell: Material T.S. Thickness in Allowance in Dia. ft. in Length (Kind & Spec, No.) (Min, of Renge Specified)	ft.
5.	Seams: Long H.T R.T Efficiency	
	Girth H.T. R.T. No. of Courses	
6.	i. Heads: (a) Material T.S (b) Material T.S	
	Location ( Top Crown Knuckle Elliptical Concial Hemispherical Flat Side to Pro- Bottom, Ends ) Thickness Radius Radius Ratio Apex Angle Radius Diameter ( conv. or a)	ess.
ν-,	If removable, boilts used Other fastening (Describe or ettach switch)	<del></del> .
7.	. Jacket Closure:  (Occarbe as ogoe and weld, bar, etc. If bar give dimensions, If bolts, describe or swetch)	<del></del>
	Orop Veight	— . —
8.	Design pressure 1250 psi at 575 F at temp of	•
Ite	tems 9 and 10 to be completed for tube sections	
9.	. Tube Sheets: Stationary. Material Dia Thickness in. Attachment	Welded, Borled )
	Floating. 'Haterial (Mnd & Spec. No.) Dia. (Subject to pressure) Thickness in. Attachment	
10.	Tubes: Material 0.0 in. Thickness inchesorgege, Number Type	(Str. or U)
Ite	tems 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.	(3.40)
	Nominal Correston	
11.	. Shell: MaterialT.SThicknessin. Allowancein. Diaftin. Lengthi  (Mond & Spec. No.) (Man. of Range Specified)	
ız.	. Seams: Long H.T R.T Efficiency	
	Girth H.T "R.T No. of Courses	<del></del>
13.	. Heads: (a) Haterial T.S (b) Haterial T.S	<del></del> '
(a)	Crown Knuckle Elliptical Concial Hemispherical Flat Side to Pro- Location Thickness Radius Radius Ratio Apex Angle Radius Diameter (conv. or a) Top.bottom.ends b) Channel	
<b>\-</b> ,	If removable, bolts used (a)(b)(c) Other fastening(Counts or affect) waster	
	Orop Veight Charpy Expact	ft-lb
14.	. Oesign pressurepsi at Fat temp of	F
Ite	tems below to be completed for all vessels where applicable.	
15.	. Safety Valve Outlets: Number Size Location	
16.		Atteched
17.		
	. Inspection Hanholes. No. Size Location Openings: Handholes, No. Size Location Threaded, No. Size Location	

^{1 -} If Possweld Hess-Treated.

1. Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NFT Certificate Bolder )

(b)	Manufactured for	:	WNP 2	Richland, W	lashington 99352			
			( Name a	nd Address of N Ce	rtificate Holder for	completed nuclear	component )	

- 2. Identification Certificate Holder's S/N of Part : A9346 Nat'l Bd. No. N/A
  - (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
  - (b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>
  - (c) Applicable ASHE Code: Section III. Edition 1974, Addenda Date W75, Case No. N207 1361-2 Class 1
- 3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

  ( Brief description of service for which component was designed )

Sheet 2 of 2

1. Cap 16689274P001 SA182 - F304 3/8° thick x 1 1/16° OD

2 Indicator Tube 16689313P001

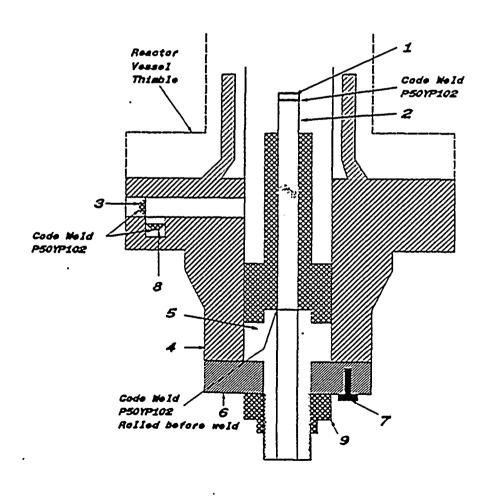
• SA312 - TP316

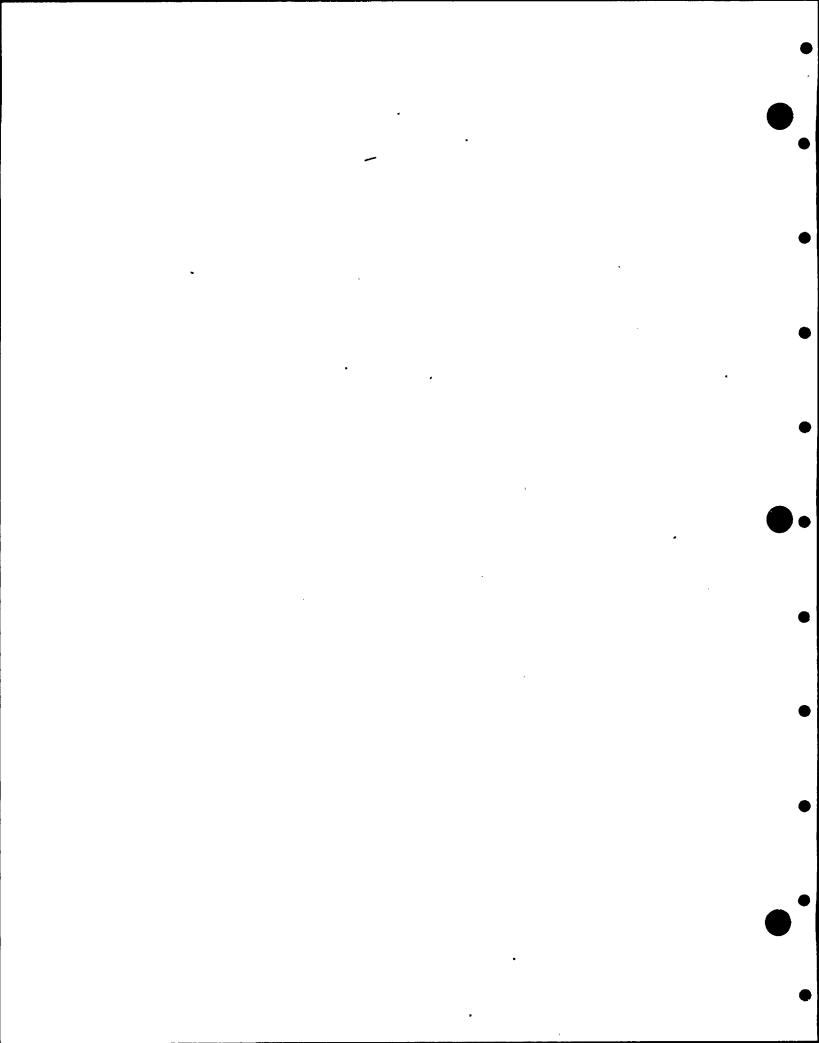
• 3/4" sch 40 - seamless pipe

[0.113" wall thickness

-1.065" max. dia.

- 3. Plug 159A1176P001 SA182 - F304 1/4° thick x 0.812° OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8° thick x 2.875° dia.
- 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Scrow 117C4516P002 SA193 - 86 6 ea. 1/2° dia, on 4 1/8° bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dla.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dig.







1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

Date: 7/29/94 Sheet: 1 of 1 Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No. Job No. etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CT&F	GE	7294	N/A	N/A	1975	Replaced	Yes, Code Class 1
	GE	A8977	N/A	N/A	1991	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7294. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly, PT examination results acceptable
  - 3) Cylinder Tube And Flange (CT&F) assembly was rejected due to bad cooling water crifice port
  - 4) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A8977

- 1) The existing Control Rod Drive (CRD) assembly Serial No 7294, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A8977, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A8977



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS	(Back)
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure  Test Pressure: Psig Test Temperature: ° F  Component Design Pressure: Psig Temperature: ° F	Other X No
9. Remarks: See attached N-2 Code Data Report for the new Cylinder Tube And Flange (CT&F) assembly See	rial No A8977
	•
•	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replac	ement conforms
to the rules of the ASME Code, Section XI	
Type Code Symbol Stamp: Not applicable Certificate Of Authorization No.: Not applicable	
Expiration Date: Not Applicable	
Detrus	
Prepared By   Wilding Singh   Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Manager, Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materials And Inspection   Materia	d lagration
	a inspection
Date 1/29/4 Date 7-29-99-	
CERTIFICATE OF INSERVICE INSPECTION	•
OLATINOATE OF MISERVIOL MISFEOTION	
I, the undersigned, holding a valid commission issued by the National Board of Boile	
Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insura (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the co	
described in this Owner's Report during the period 5-23-94 to 7-29	imponents -94 and
state to the best of my knowledge and belief, the Owner has performed examinations	and taken
corrective measures described in this Owner's Report in accordance with the require	ments of the
ASME Code, Section XI	·
By signing this certificate neither the inspector nor his employer makes any warranty implied, concerning the examinations and corrective measures described in this Ow.	
Furthermore, neither the inspector nor his employer shall be liable in any manner for	rany personal
injury or property damage or a loss of any kind arising from or connected with this in	nspection
Da Vinga A Commissions 9556W N	67
Inspector's Signature Commissions National Board, State, as	nd Endorsements
Date 7-28-94	

1. Hanufactured & 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) Hanufactured for : WNP 2 Richland, Washington 99352
( Name and Address of N Certificate Holder for completed nuclear component )
2. Identification - Certificate Holder's S/H of Part : <u>A8977</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>Cylinder Tube &amp; Flange</u>
(c) Applicable ASHE Code: Section III . Edition <u>1974</u> . Addenda Oate <u>W'75</u> . Case No. <u>N207 1361-2</u> Class <u>1</u>
3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.  ( Brief description of service for which component was designed )
•
•
Sheet 1 of 2
We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).  Date: 11/18/91 Signed GE-NEBG-NF&CM-OA By Conformation Stress Report ( NPT Certificate Holder )  Certificate of Authorization Expires: 6/16/93 Certification of Authorization No.: NPTN-1151
Certification of Design for Appurtenance
· · · · · · · · · · · · · · · · · · ·
Design information on file atGE Company. San Jose, California
Stress analysis report on file at <u>GE Company, San Jose, California</u>
OC22A6253 Rev. 1 Oesign specification certified by <u>Biorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
OC22A6254 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 Roard of Roiler and Pressure Inspectors and/or the

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 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, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

11/18 . 1991 August P & 10000 NC 1231, Ohio, WC 3686 PA

Dave 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".

Ite	ms 4-8 1	incl. to b	e completed	for sing	gle wall ve	ssels, jacket	s vessels, or	shells of heat	exchangers.	
4.	Shell:	Hateria l	T. nd & Spec. No.)	.S. (Min. of Rang	Nominal Thickness (* Specified)	in. Al	nrosion Nowance	in. Dia fo	in. Lengt	th ft in
۶.	Seams:	Long	<del></del>		н.т.		R.T.		Efficiency	x
		Girth					R.T.		No. of Cour	.ses
6.	Heads:	(a) Hate	rial		<del></del>	T.S	(р) н	aterial	T.S	·
(a)	Bottom,	_	Thickness	Radius	Radius	Elliptical Ratio	Apex Angle		Olameter ( c	de to Press.
(6)	If remo	vable, bo	its used _				Other faste	ning	Describe or attach sketch	
7.			<del> </del>			Size Number)				
		a		(De	rachbe as age <del>e</del> ad	nd weld, bar, etc. #	ber give dimensions,	if boits, describe or sketch Orop & Charpy	eight	ft-1b
8.	Design	pressure		1250	ps	i at	575	F at tem	p of	F
Ite	ms 9 and	10 to be	completed	for tube	sections		•			
		Fi	oating.	Materia]		Dia	· Coolect to bresso	Thickness	in. Attach	
10.	Tubes:	Haterial			0.0	in. Thic	kness	_ inches or gage, N	umber	Type (Str. or U)
Ite	ns 11 -	14 incl. 1	to be compl	eted for	inner chami	ers of jacke	ted vessels.	or channels of h	eat exchangers.	
		(Kin	id & Spec. No.) (	Min. of Rang	e Specified) 1					h ft (n.
12.	Seams:			<del></del>	н.т.,		R.T.		Efficiency	
			<del></del>			•			No. of Cour	
13.	Heads:	(a) Mater	·ia1	·	<del></del>	T.S	(b) Ha	iterial	T.S	<del></del>
			Thickness	Crown Radius	Knuck le Radius	Elliptical Ratio		Radius		e to Press. onv. or conc. )
		vable, bol	ts used (a	)	_(b)	(c)	Other	fastening	( Describe of a	tach sketch)
									eight	ft-1b
1.	Desian o	2 oressure			6	si at	·	•		, F
\			pleted for			<del></del>				
<b> </b>			ets: Numb				<del> </del>	Locati	on	
1		Purpose (In Outlet, Drain	let,	nber	Die. or Size	Туре	Matenal	Thickness	Reinforcement Malenal	How Attached
									-	
	Inspecti Openings		oles, No.			Size Size	L	ocation		
	Supports	:: Skirt	(Yes or No)	_ Lugs _	(Number)	Legs(	Ot Number)	her (Describe)	Attached	(Where & How)

^{1 -} N Postweld Heal-Treated.

^{2 -} List other internal or external pressure with coincident temperature when applicable.

Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

### 2117 Castle Hayne Road, Wilmington, North Carolina 28401

( Name and Address of NPT Certificate Holder )

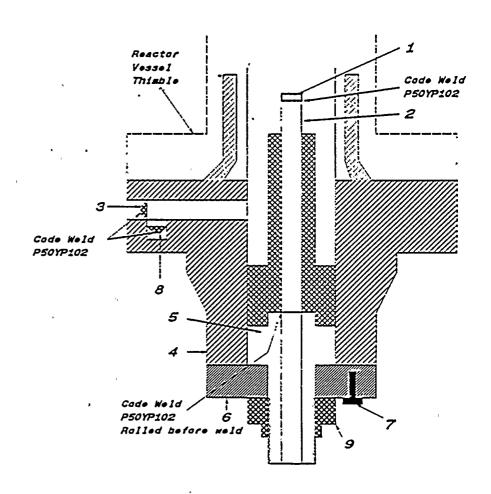
(b) Manufactured	for :	WNP 2	Richland, Washington 99352	
•	,	( Name and A	Address of N Certificate Holder for completed nuclear component )	

- 2. Identification Certificate Holder's S/N of Part : A8977 Nat'l Bd. No. N/A
  - (a) Constructed According to Orawing No: 919D258G003 Rev 17 Owg. Prepared by D. L. Peterson
  - (b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>
  - (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1
- 3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 osi. min.

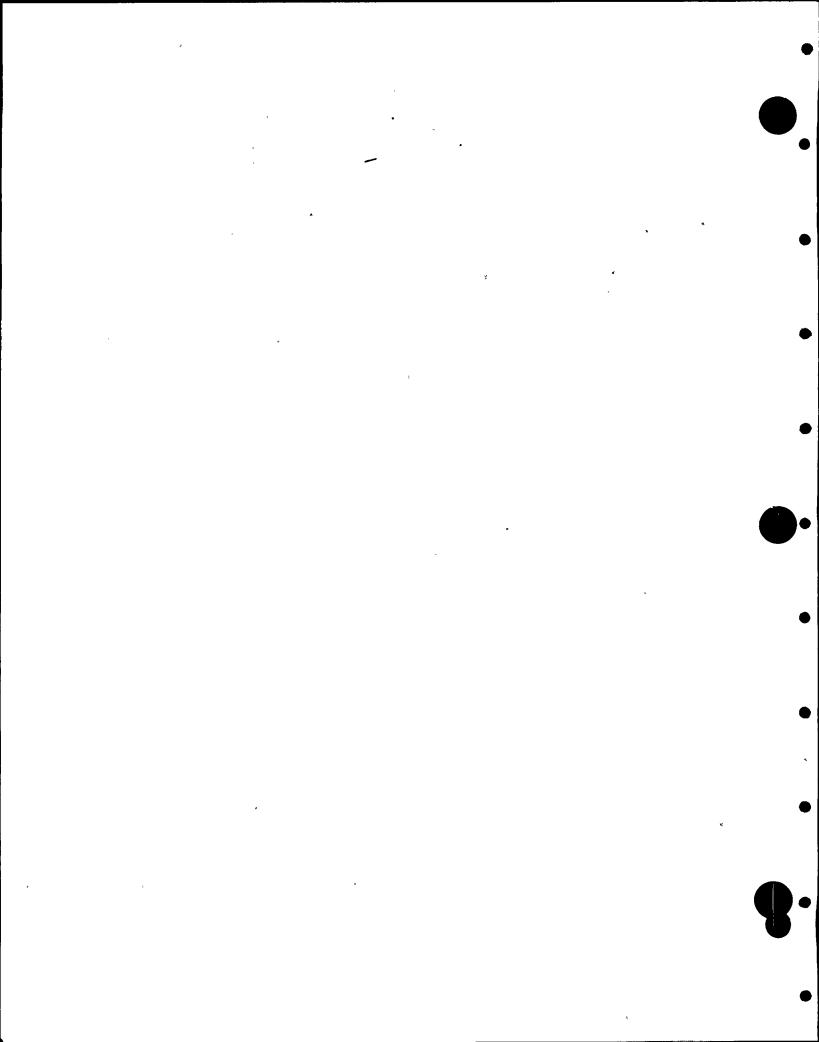
  ( Brief description of service for which component was designed )

Sheet 2 of 2

- 1. Cap 166B9274P001 SA182 - F304 3/8* thick x 1 1/16* OD
- Indicator Tube 16689313P001 SA312 - TP316 3/4" sch 40 - seamless pipe 0.113" wall thickness 1,065" max. dia.
- 3. Plug 159A1176P001 SA182 - F304 1/4° thick x 0.812° OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8* thick x 2.875* dia.
- 6. Ring Flange 11485122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2° dia. on 4 1/8° bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dia.
- 9. Nut 137C5934P001 -XM - 19 SA479 1.30° thick x 2.62° dia.









Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/28/94

Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA

- (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD CT&F	GE GE	7279 A9026	N/A N/A	N/A N/A	1975 1992	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1
			,				

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7279. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9026

- 1) The existing Control Rod Drive (CRD) assembly Serial No 7279, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A9026, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A9026



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other None Test Pressure: Psig Test Temperature: F Component Design Pressure: Psig Temperature: F
9	. Remarks: See attached N-2 Code Data Report for the new Cylinder Tube And Flange (CT&F) assembly Serial No A9026
	•
	· ·
	CERTIFICATE OF COMPLIANCE
	· ·
	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI
	Type Code Symbol Stamp: Not applicable
	Certificate Of Authorization No.: Not applicable
	Expiration Date: Not Applicable
	Prepared By Rudib Luis Signed By KIME
	Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
	Date 7/28/94 Date 7-29-94
	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 Arkwright Mutual Insurance Company
	(Factory Mutual Engineering Association) of Norwood, Massachusetts have Inspected the components
	described in this Owner's Report during the period 5-28-94 to 7-29-94 and
	state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the
	ASME Code, Section XI
i	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
	implied, concerning the examinations and corrective measures described in this Owner's Report.  Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
	injury or property damage or a loss of any kind arising from or connected with this inspection
	Du Vaganti Commissions 9556W NBI
	Onspector's Signature Commissions National Board, State, and Endorsements
ļ	Date 7-29-94
į	
- 1	· · · · · · · · · · · · · · · · · · ·

D	Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & Components Company Nuclear Fuel & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Components Manufacturing (GE NF & Comp
	2117 Castle Hayne Road, Wilmington, North Caroling 28401 ( Name and Address of NPT Certificate Holder )
	(b) Hanufactured for: WNP 2 Richland-Washington 99352  ( Name and Address of M Certificate Holder for completed nuclear component )
,	Identification - Certificate Holder's S/N of Part : A9026 Nat'l Bd. No. N/A
٠.	(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
	(b) Description of Part Inspected: Cylinder Tube & Flance
_	(c) Applicable ASHE Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1
3.	REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.  ( Brief description of service for which component was designed )
	•
	We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the coc
	We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the cod conforms to the rules of construction of the ASKE Code Section III. ( The applicable Designed Specification and Stre Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtena
	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 Stree Report are not the responsibility of the MPT Certificate Holder for parts. An MPT Certification Holder for appurtena is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included the component Design Specification and Stress Report ).  Date: 12/22/92 Signed GE-NEBG-NF & CM-QA By GE-NEBG-NF & CM-QA By GE-NEBG-NF & CM-QA By GE-NEBG-NF & CM-QA By GA Representive )
	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 Stree Report are not the responsibility of the MPT Certificate Holder for parts. An MPT Certification Holder for appurtena is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included the component Design Specification and Stress Report ).  Date: 12/22/92 Signed GE-NEBG-NF&CM-OA By Contemporarior ( MPT Certificate Holder )  Certificate of Authorization Expires: 6/16/93 Certification of Authorization No.: NPTN-1151
	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 ASME Code Section III. (The applicable Designed Specification and Stree Report are not the responsibility of the MPT Certificate Holder for parts. An MPT Certification Holder for appurtena is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included the component Design Specification and Stress Report).  Date: 12/22/92 Signed GE-NEBG-NF&CM-OA By Cartificate Bolder)  Certificate of Authorization Expires: 6/16/93 Cartification of Authorization No.: NPTN-1151  Certification of Design for Appurtenance
	Oate: 12/22/92 Signed GE-NEBG-NF & CM-QA By GA Representive)  Certificate of Authorization Expires: 6/16/93 Certification of Authorization No.: NPTN-1151  Certification of Design for Appurtenance  Oesign information on file at GE Company, San Jose, California

### Certification of Shop Inspection

12/22, 1992 Justice P Enone NC 1231, Ohio, WC 3686 PA

Data 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".

SIN A 9026 Kulaip Euros

Ite	ms 4-8 I	ncl. to be compl	ated for sing	ic wall ve	ssels, jacket	s vessels, or	shells of heat	exchangers.	7/28/94
4.	Shell:		T.S. Na.) (Min. of Fleng		fn. A1	rrosion lowance	in. Dia ft	in. L	ength ft
5.	Seams:	Long		н.т.¹		R.T.		Efficie	ncyx
		Girth		н.т.'		R.T.		Ka. of	Courses
6.	Heads:	(a) Material	<del></del>		T.S	(ь) ж	sterial	T.	s
(a) (b)	8attom,	n ( Top Ends ) Thickn		Radius	Ratio		Hemispherical Radius		Side to Press. ( conv. or conc. )
(0)	If remo	vable, bolts use	id .			Other faster	ning	escribe or attach s	
7.	Jacket	Closure:	Material	, Spec. No., T.S.	Size Humber)			Percripe or Reach s	
		Closure:	, (De	ecribe as ogee ar	nd weid, ber, etc. If t	er give dimensions, i	f boits, describe or state Orop V Charpy	n) eight Impact	ft-1b
8.	0es ign	pressure	1250	ps	1 at	575	F at tem	p of	F
Ite	ms 9 and	10 to be comple	ted for tube	sections					
9.	Tube Sh	eets: / Stationar	y. Material		D1a	•	Thickness _	in. At	tachment
	_	Floating.	Haterial	(Xn4 & Sp	oc.Ho.) Dia	(Subject to preseu	re) Thickness _	in. At	(Welded, Boiled)
10.	Tubes:	<i>₹</i> 7					4		Type (Str. or U)
Ite	ms 11 -	14 incl. to be o	completed for	inner cham	bers of jacke	ted vessels,	or channels of h	eat exchange	rs.
11.	Shell:	Haterial(Kind & Spec.	T.S.	Nominal Thickness • Specified)	in. A1	rrosion lowance	in. Diaft	· in. L	ength ft
12.	Seams:	Long		H.T.		`R.T.		Efficie	encyx
		Girth		н.т.		R.T.		Ma. of	Courses
13.	Heads:								s
(a)	Loca Top,bot	tion Thickn	Crown		Elliptical	Concial	Hemispherical Radius	Flat	
(b)	Channel If remo	vable, bolts use	d (a)	(b)	(c)	Other	r fastening		
		2	•		· · ·		Orca V	(Descri eight Impact	be or attach steach) .
14.	Design	pressure		1	psi at <u> </u>		Fat tex	p [.] of	F
Ita	ms below	to be completed	for all vess	als where	applicable.				
15.	Safety	Valve Gutlets:	Number		Size	· · · · · · · · · · · · · · · · · · ·	Locati	on	
16.	Nozzles	2 Purpose (Inlet; Outlet, Drain)	Humber	Ole, or Stee-		Material	<del></del>	Reinforcer	Here Attached
17.	Inspect Opening	ion Manholes, s: Handholes, Threaded,	Na		Size		Location	-	
18.	Support	s: Skirt	Lugs _		Legs	o	ther	Attac	

. Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401
( Name and Address of NPT Certificate Holder )

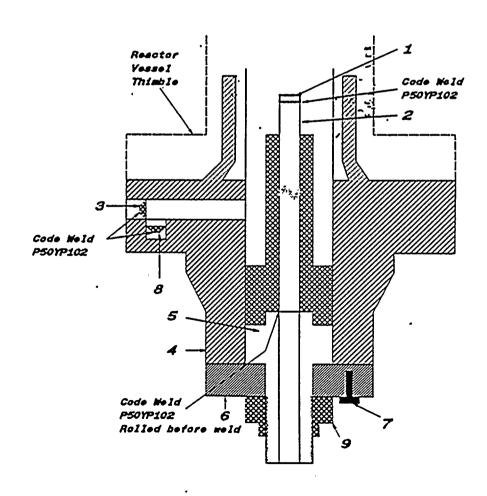
(b)	Manufactured for	:	WNP 2	Richland	Washington 99352	2	
•			( Name	and Address of N	Certificate Holder	for completed nuclear component )	

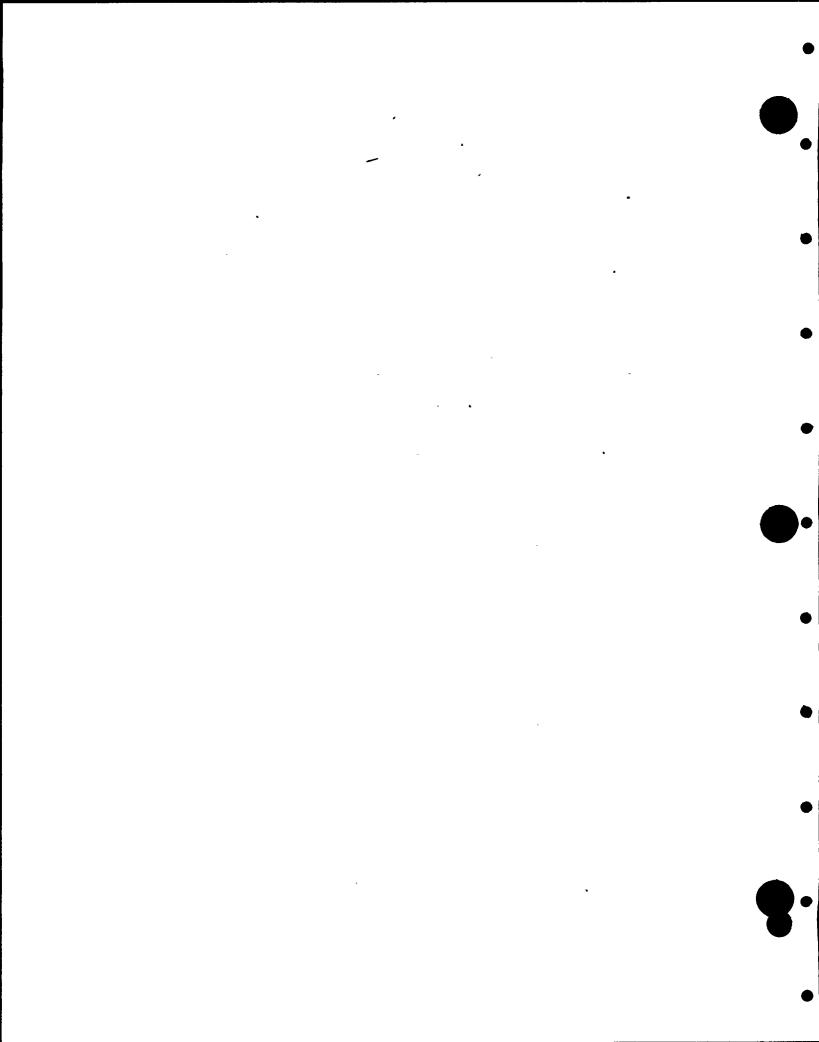
- 2. Identification Certificate Holder's S/N of Part : A9026______ Nat'l Bd. No. N/A___
  - (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
  - (b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>
  - (c) Applicable ASHE Code: Section III . Edition 1974 . Addenda Date W75 . Case No. N207 1361-2 Class 1
- 3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

  ( Brief description of service for which component was designed )

Sheet 2 of 2

- 1. Cap 166B9274P001 SA182 - F304 3/8° thick x 1 1/16° OD
- 2. Indicator Tube 16689313P001 SA312 - TP316 3/4" sch 40 - seamless pipe 0.113" wall thickness 1.065" max. dia.
- 3. Plug 159A1176P001 SA182 - F304 1/4° thick x 0.812° OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8° thick x 2.875° dia.
- 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 1" thick x 5.0" OD x 1.75" ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2° dia. on 4 1/8° bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38" thick x 1.307" dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.







1. Owner: Washington Public Power Supply System (WPPSS) Address: 3000 George Washington Way, Richland, Washington Date: 7/28/94

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Control Rod Drive (CRD)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6697	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	GE	A9161	N/A	N/A	1991	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6697. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9161

- 1) The existing Control Rod Drive (CRD) assembly Serial No 6697, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A9161, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A9161



FUI	KM NIS-Z UWNEK'S KI	EPORT FOR REPAIRS	S OR REPLACEMENTS (Back)
Tests Conducted	d: Hydrostatic Pne Test Pressure: Psig Component Design Pre		Operating Pressure Other X  Test Temperature: ° F  Temperature: ° F
<i>Remarks:</i> See at	tached N-2 Code Data Report	for the new Cylinder Tube An	d Flange (CT&F) assembly Sorial No A9161
	•		
	CEI	RTIFICATE OF COMP	LIANCE
to the rules of t	the ASME Code, Section nbol Stamp: Not applicable	n XI	are correct and this replacement conforms
Certificate Of A Expiration Date	Authorization No.: Not app e: Not Applicable	licable	
Prepared By	Rudib Sure Kuldip Singh Materials And In	2 Signed By	Manager, Materials And Inspection
Date	7/28/94	Date	7-29-94
· · · · · · · · · · · · · · · · · · ·	<del></del>	<del></del>	<del></del>
	CERTIEIC	CATE OF INSERVICE	INSPECTION
l the underside			National Board of Boiler and Pressure
Vessel Inspect	ors and the State of Was	shington and employed	by Arkwright Mutual Insurance Company
			tts have inspected the components 2- 94- to 7- 29- 94- and
aescribed in in state to the bes	is Owner's neport aurin it of mv knowledge and	beilef. the Owner has i	2-94 to 7-29-94 and performed examinations and taken
			ordance with the requirements of the
ASME Code, Se			
By signing this	: ceruticate nettner the il mina the examinations	nspector nor nis empic and corrective measur	oyer makes any warranty, expressed or res described in this Owner's Report.
Furthermore, n	either the inspector nor	his employer shall be	liable in any manner for any personal or connected with this inspection
			Arrive Albert
Dry Volan	man/h	Cammicelar	re 9.556 W NBI
Don Store	poctor's Signature	Commission	ns 9556 W NBZ National Board, State, and Endorsements
	poctor's Signature 29-94	Commission	National Board, State, and Endorsements

anufactured & C	Certified by : General Electric Company Nuclear Fuel & Components Manu	ufacturing (GE NF &
	2117 Castle Hayne Road, Wilmington, North Carolina 2840	1
-	. ( Name and Address of NPT Certificate Holder )	
(b) Manufacture	ed for : WNP 2 Richland, Washington 99352  ( Name and Address of N Certificate Holder for completed nuclear	component )
Identification .	- Certificate Holder's S/N of Part : <u>A9161</u> Nat'l Bd. No. <u>N</u>	
	According to Orawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. I	retersori_
	of Part Inspected: <u>Cylinder Tube &amp; Flange</u>	
(c) Applicable	ASHE Code: Section III , Edition $1974$ , Addenda Date $W'75$ , Case No.	N207 1361-2 Class _
REMARKS: Stano	Hard part for use with Reactor. Hydrostatically tested at 1825 psi. min.  ( Brief description of service for which component was designed )	
	, while describition of service for which combonent was designed )	
	•	
<del> </del>		Sheet 1 of 2
conforms to the r Report are not th is responsible fo	the statements in this report are correct and this vessel part or appurtenance rules of construction of the ASME Code Section III. (The applicable Designed he responsibility of the MPT Certificate Holder for parts. An MPT Certification of furnishing a separate Design Specification and Stress Report if the appurtence of the separate Design Specification and Stress Report if the appurtence of the separate Design Specification and Stress Report if the appurtence of the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Stress Report in the separate Design Specification and Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specification Specif	Specification and Stroom Nolder for appurtent
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conforms to the responsible for the component Destruction of August 11/18/91  Certificate of August 11/18/91  Design information of Stress analysis  OC22A6253 Rev. 1	rules of construction of the ASME Code Section III. (The applicable Designed the responsibility of the NPT Certificate Holder for parts. An NPT Certification for furnishing a separate Design Specification and Stress Report if the appurt of the Signed GE-NEBG-NF & CM-QA (NPT Certificate Holder)  Signed (NPT Certificate Holder)  Certification Expires: 6/16/93 Certification of Authorization No.: NPT  Certification of Design for Appurtenance from on file at GE Company, San Jose, California  report on file at GE Company, San Jose, California	Specification and Street on Holder for appurtent enance is not included presentive)  N-1151
conforms to the r Report are not the is responsible for the component Des Date: 11/18/91  Certificate of Au Design informati Stress analysis DC22A6253 Rev. 1 Design specifica DC22A6254 Rev 1	rules of construction of the ASME Code Section III. (The applicable Designed the responsibility of the NPT Certificate Holder for parts. An NPT Certification or furnishing a separate Design Specification and Stress Report if the appurtuing Specification and Stress Report ).  Signed <u>GE-NEBG-NF&amp;CM-QA</u> (NPT Certificate Holder)  SCON Report of the ASME Code Section III. (The applicable Design Specification and Stress Report if the appurtuing Section 1.1.  Signed <u>GE-NEBG-NF&amp;CM-QA</u> (NPT Certificate Holder)  Certification Expires: 6/16/93 Certification of Authorization No.: <u>NPT</u> Certification of Design for Appurtuance for on file at <u>GE Company</u> , San Jose, California	Specification and Streen Holder for appurtena enance is not included  presentive )  N-1151
conforms to the r Report are not the is responsible for the component Des Date: 11/18/91  Certificate of Au Design informati Stress analysis DC22A6253 Rev. 1 Design specifica DC22A6254 Rev 1	rules of construction of the ASHE Code Section III. (The applicable Designed the responsibility of the NPT Certificate Holder for parts. An NPT Certification for furnishing a separate Design Specification and Stress Report if the appurtuing Specification and Stress Report ).  Signed GE-NEBG-NF & CM-QA (NPT Certificate Holder)  SCOX Report (NPT Certificate Holder)  Certification Expires: 6/16/93 Certification of Authorization No.: NPT  Certification of Design for Appurtuance from on file at GE Company, San Jose, California  report on file at GE Company, San Jose, California  Ation certified by Biom Haaberg Prof. Eng. State Calif. Reg. No. 15	Specification and Streen Holder for appurtena enance is not included  presentive)  N-1151

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

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

11/18 .1991 June P E very 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".

tems 4-8	Incl. to be com	pleted for sin	gle wall ve	ssels, jacket	s vessels, or	shells of heat	exchangers.	
. Shell:	Haterial (Kind & So	T.S. ec.,No.) (Min. of Rans	Nominal Thickness ge Specified)	in. Al	errosion llowance i	in. Ola f	t in. Lengt	ch ft ir
. Seams:	Long	<del> </del>	н.т		R.T		Efficiency	x
	Girth	<del></del>	н.т.'		R.T		No. of Cour	ses
. Heads:	(a) Material			T.S	(b) Ma	iterial	T.S	
Bottom, a)	Ends ) Thic	Crown kness Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle		Flat Sic	le to Press.
ום	ovable, bolts u	sed			Other faster	ing	Describe or attach sketch	
	Closure:	(Materia	u, Spec. No., T.S.	Size Number)		. (	Describe or attach sketch	)
	pressure	(00	-		_	Charp	ch) Weight y. Impact	ft-1b
	•			1 at	3/3	_ r at te	mp 01	
	1 10 to be comp			V1-		Thickness	in Assaul	mont
								ment (Welded, Bolled)
. Tubes:	Hateriai		0.0	in. Thic	kness	inches or gage. In	lumber	(Sv. or U)
tems 11 -	14 incl. to be	completed for	inner chamb	ers of jacke	ted vessels, o	r channels of h	neat exchangers.	
	(Rind & So	ic. No.) (Min. of Hang	je Specified )			_		h ft in
. Seams:	Long		1				Efficiency	
	Girth						No. of Cour	
Heads:	(a) Materiai	<del></del>		T.S	(b) Ha	terial	T.S	
	tion Thick			Elliptical Ratio		Hemispherical Radius	Flat Sid Diameter (c	e to Press. onv. or conc. )
If remo	vable, bolts us	sed (a)	(b)	(c)	Other	fastening	( Describe or a	Mach street 1
	2					Charpy	leight	
Design	pressure		p	si at		F at tem	p of	
ems be low	to be complete	d for all vess	els where a	pplicable.				···
Safety '	Valve Outlets:	Number	<del></del>	Size		Locati	on	
Hozz les	Purpose (Inlet, Outlet, Drain )	Number	Dia, or Size	Туре	Material	Thickness	Reinforcement Material	How Attached
	ion Manholes,	No		Size	Lo	ocation		
Inspect Opening:				Size	(	ocation		

^{1 -} If Postweld Heat-Treated.

^{2 -} List other internal or external pressure with coincident temperature when applicable.

Hanufactured & 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 Holde	T
---------------------------------------------	---

(b)	Manufactured for :	WNP 2	Richland, Washington 99352	

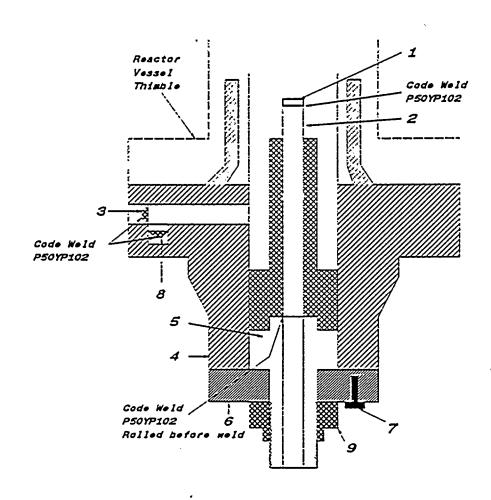
( Name and Address of N Certificate Holder for completed nuclear component )

- 2. Identification Certificate Holder's S/N of Part : <u>A9161</u> Nat'l Bd. No. <u>N/A</u>
  - (a) Constructed According to Orawing No: 919D258G003 Rev 17 Owg. Prepared by D. L. Peterson
  - (b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>
  - (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Oate W'75 , Case No. N207 1361-2 Class 1
- 3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

  ( Brief description of service for which component was designed )

Sheet 2 of 2

- 1. Cap 166B9274P001 SA182 - F304 3/8° thick x 1 1/16° OD
- 2. Indicator Tube 16689313P001 SA312 - TP316 3/4' sch 40 - seamless pipe 0.113' wall thickness 1.065' max. dia.
- 3. Plug 159A1176P001 SA182 - F304 1/4° thick x 0.812° OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8' thick x 2.875' dia.
- 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2* dia. on 4 1/8* bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38* thick x 1.307* dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.



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				8.
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1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/28/94

Address: 3000 George Washington Way, Richland, Washington

Sheat: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6778	N/A	NVA	1975	Replaced	Yes, Code Class 1
CT&F	GE	A9333	N/A	NVA	1992	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6778. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9333

#### NOTES

- 1) The existing Control Rod Drive (CRD) assembly Serial No 6778, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A9333, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A9333



「ests Conducted: Hydrostatic Pri Test Pressure: Psig Component Design Pi	<del></del>	Operating Pressure Test Temperature:° Temperature:° F	
Remarks: See attached N-2 Code Data Report	for the new Cylinder Tube An	d Flange (CT&F) assembly	/ Serial No A9333
	-		
CE	RTIFICATE OF COMPL	LIANCE	1
We certify that the statements made in	n this Owner's Report a	re correct and this re	placement conforms
to the rules of the ASME Code, Section Type Code Symbol Stamp: Not applicable			
Certificate Of Authorization No.: Not ap			
Expiration Date: Not Applicable		4	
Prepared By Vuldib Luis L	Signed By	Amou	_
Kuldip Singh - Materials And	nspection	Manager, Materials	•
Date 7)28[94	Date	7-29-94	
•			
,			•
CERTIFIC	CATE OF INSERVICE I	NSPECTION	
l, the undersigned, holding a valid con	mission issued by the	National Board of B	oller and Pressure
<b>Vessel inspectors and the State of</b> Wa	shington <i>and employed</i> i	by Arkwright Mutual Ins	surance Company
(Factory Mutual Engineering Association)	f Norwood, Massachusett	s have inspected the	
described in this Owner's Report duri state to the best of my knowledge and	ig the period	-74to1-2	<del>9-94-</del> and
corrective measures described in this	Owner's Report in acco	erionned examination ordance with the real	ภาร ยาน เยหยา uirements of the
ASME Code, Section XI	·	•	
By signing this certificate neither the i	nspector nor his emplo	yer makes any warra	inty, expressed or
Implied, concerning the examinations Furthermore, neither the Inspector no	ana correcuve measure · his employer shall he	es described in this ( lighte in any manner	Jwner's Report.
injury or property damage or a loss of	any kind arising from c	or connected with this	ior any personal s inspection
Dr. When SH	-	_	NBI
amxing jours	Commission	s 9556 W National Board, State	o, and Endorsements
Iptractor's Signature			
laspector's Signature Date 7-29-94		THEOTHE DOWN, CHA	

# 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

1.	Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GENF & CM)  2117 Castle Hayne Road, Wilmington, North Carolina 28401  ( Hame and Address of NPT Certificate Bolder )
	(b) Hanufactured for : WNP 2 Richland, Washington 99352  ( Name and Address of M Certificate Holder for completed nuclear component )
2.	Identification - Certificate Holder's S/N of Part : A9333 Nat'l Bd. No. N/A
	(a) Constructed According to Orawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
	(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>
	(c) Applicable ASHE Code: Section III . Edition 1974 . Addenda Date W75 . Case No. N207 1361-2 Class 1 .
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 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 ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).  Date: 12/22/92  Signed GE-NEBG-NF & CM-OA  ( SPT Certificate Bolder )  SC QA Zepresentive )
	Cartificate of Authorization Expires: 6/16/93 Cartification of Authorization No. : NPTN-1151
	Certification of Design for Appurtenance
	Design information on file atGE Company . San Jose . California
-	Stress analysis report on file at <u>GE Company, San Jose, California</u>
	OC22A6253 Rev. I Design specification certified by <u>Blom Heaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u> -
	DC22A6254 Rev 1 Stress analysis report cartified 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 North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 19/18, 1992, and state that to the best of my knowledge and belief, the NPT Cartificate 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, 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.

Date 1992 Permer PÉvere Date Inspector's Signature

NC 1231, Ohio, WC 3686 PA
National Soard, 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".

### FORM N-2 ( back )

S/N A 9333 Vudip <u>Eu</u>éb

It	ems 4-8	Incl. to be	completed	for sin	gle wall ve	ssels, jacke	ts vessels, or	shells of hea	t exchangers.	7/28/94
4.	Shell:	Haterial(Kind	T. A Spec. Na.)	S. [Mn. of Ren	Hominal Thickness ge Specified)		Corrosion	in. Dia	ft in. l	ength ft
5.	Seams:	Long			н.т.	·	R.T.		Efficie	incyx
		Girth	<del> </del>		н.т.'	· · · · · · · · · · · · · · · · · · ·	R.T.		No. of	Courses
6.	Heads:	(a) Materi			<del></del>	T.S	(ь) н	laterial	т.	s
(a) (b)	Bottom,	on ( Top . Ends ) T	hickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Apex Angle	Radius		( conv. or conc. )
(-,		vable, bolt	s used		d Sans No. 70	Size Number)	Other faste	ning	( Describe or attach a	
7.	Jacket	Closure:		· <b>·</b>		·				wich)
				(0	HICTOR BE OGRE M	nd werd, ber, etc. 1	r ber give dimensions, ,	Y botts, describe or st Drop	Velobt	
a	Dooloo	2		1050						ft-1b
						1 at	575	_ F at t	emp of	F
		10 to be c						<del></del>	-	· · · · · · · · · · · · · · · · · · ·
у.	inpe 2u	eets: Stat	lonary.	Material	(Kind & Sp	01. •c.No.)	2. (Subject to pressu	Thickness	in. At	tachment (Welded, Boiled
		TO A Floa	ting.	Materiai		01.	a	Thickness	in. At	tachment
10.	Tubes:	Haterial _		<del></del>	0.0	in. Thi	ckness	_ Inches or gage.	Number	Type (Secoru)
Ita	ms 11 -	1≠ incl. to	be comple	eted for	inner chamb	pers of jack	eted vessels.	or channels of	heat exchange	
		Haterial _		s	Nominal Thickness					ength ft
12.	Seams:	Long			H.T.		R.T.		Efficie	ncy
					7		-			Courses
13.	Heads:	(a) Materi								·
(a)	Loca Top,bot Channel	tom, ends _	hickness	Crown		Elliptical Ratio	Concial	Hemispherica Radius	l Flat	Side to Press. ( conv. or conc. )
(5)	If remo	vable, bolt	s used (a)		(b)	(c)	Other	fastening	·	
,					•			Orop	Veight	e or attach statich)
		2				•		•	y Impact	ft-lb
						si at		Fat to	≠p of	F
		to be comp							- <del></del>	
		Valve Outle		r	•	Size	<del></del>	Locat	:ton	
.6.	Nozz les:	Purpose (Inlet, Outlet, Drain)	Num	ber	Ole. or Size	Турь	Material	Thictenaus	Reinforcem Metertal	How Attached
									<del></del>	
	Inspect: Openings	ion Manhole : Handhol Threade	les. Na.			Size				
.8.	Supports	_	1			_ Legs	Ot	her	Attach	ed
			( 100 CM)		(Number)		(Number)	(Describe	)	(Where & How)

# FORM N-2 NPT CERTIFIC E HOLDERS' DATA REPORT FOR NUCE R PART AND APPURTENANCES* As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Hanufactured & 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)	Hanufactured for :	WNP 2		nd, Washington 9935			
-		( Name a	and Address of	N Certificate Holder	for complete	ed nuclear component	t)

2. Identification - Certificate Holder's S/N of Part : A9333 Nat'l Bd. No. N/A

(a) Constructed According to Orawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>

(c) Applicable ASME Code: Section III. Edition 1974. Addenda Date W75. Case No. N207 1361-2 Class 1

3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

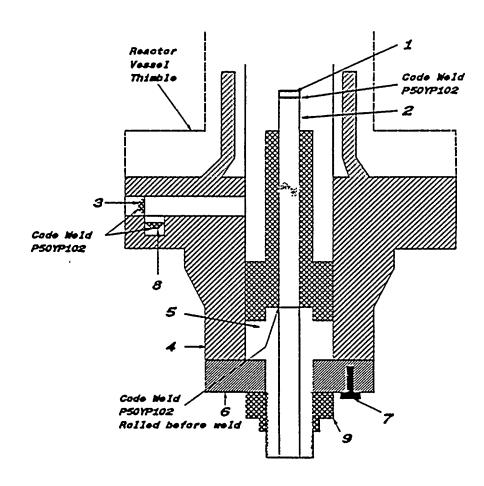
( Brief description of service for which component was designed )

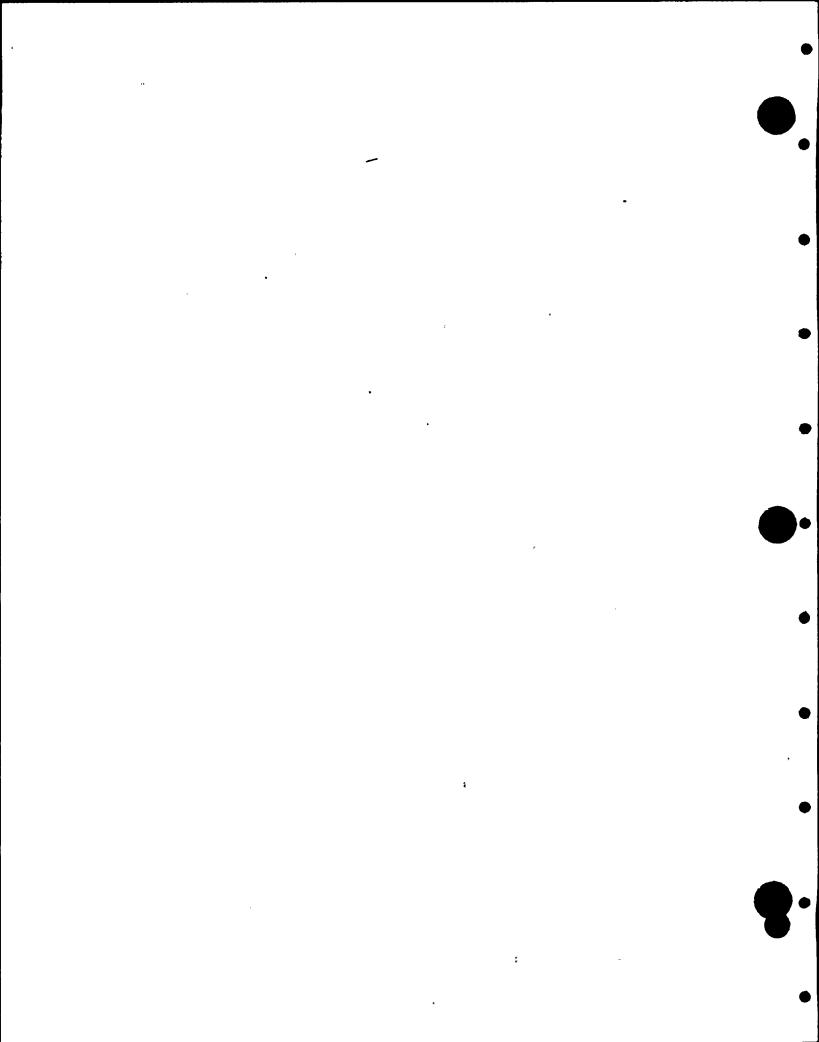
Sheet 2 of 2

1. Cap 166B9274P001 SA182 - F304 3/8" thick x 1 1/16" OD

2: Indicator Tube 16689313P001 SA312 - TP316 3/4' sch 40 - seamless pipe -0.113' wall thickness "1.065' max. dia.

- 3. Plug 159A1176P001 SA182 - F304 1/4° thick x 0.812° OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37* thick x 9 5/8* OD
- 5. Base 137C5311P001 SA182 - F304 7/8' thick x 2.875' dia.
- 6. Ring Flange 11485122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2° dia. on 4 1/8° bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dla.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2,62° dia.







Owner: Washington Public Power Supply System (WPPSS)
 Address: 3000 George Washington Way, Richland, Washington

Date: 7/28/94 Sheet: 1 of 1

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

Address: Hanford Reservation, Benton County, Washington

Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980
  Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7330	N/A	N/A	1975	Replacement	Yes, Code Class 1
Piston Tube	GE	3179	N/A	N/A	1985	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7330. The overhaul work was performed as follows
  - 1) Disassembled Control Fod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results acceptable
  - 3) Performed visual examination on the existing Piston Tube assembly. Visual examination results unacceptable
  - 4) Reassembled Control Rod Drive (CRD) parts and installed new Piston Tube assembly Serial No 3179

#### NOTES

- 1) The existing Control Rod Drive (CRD) assembly Serial No 7330, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Piston Tube assembly Serial No 3179, ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda



,		SUPPLY S	YSTEM		
FC	ORM NIS-2 OWNER'S	S REPORT FOR REP	AIRS OR REPLAC	EMENTS (Back)	
Tests Conducto	ed: Hydrostatic Test Pressure: Psig Component Design	, —	ninal Operating Pre Test Temperat Temperature:	ture: ° F	× No.
. Remarks: See 1	attached N-2 Code Data Re	port for the new Piston Tube	assembly Serial No 317	r9	
			•		
	•	CERTIFICATE OF CO	OMPLIANCE	•	
to the rules of Type Code Sy Certificate Of	t the statements mad f the ASME Code, Sec mbol Stamp: Not applic Authorization No.: No te: Not Applicable	able	ort are correct and	this replacement confo	rms
Prepared By _	- Rudup Sur Kuldip Singh - Materials A	グレ Signed E	By RAW	Naterials And Inspection	
Date	7/28/94	Date	7-29	•	
<del>-</del>					
		•			
	CERT	TIFICATE OF INSERV	ICE INSPECTION		•
Vessel Inspec (Factory Mutual described in to state to the be	tors and the State of the State of the Engineering Association has Owner's Report of the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the English that the En	commission issued by Washington and employen) of Norwood, Massack uring the period <u>S</u> and belief, the Owner this Owner's Report in	pyed by Arkwright Mu husetts have inspec -26 - 94 to has performed exam	itual Insurance Compar ted the components <u>1-29-94</u> ar minations and taken	ny nd
By signing this implied, concerning furthermore, in	is certificate neither ti erning the examinatio neither the inspector	he inspector nor his e ons and corrective me nor his employer sha s of any kind arising fi	asures described li Il be liable in any m	n this Owner's Repor nanner for any persor	t.
Dan Vla	ggar/h	Commis	ssions <u>9556</u>		<del></del>
v	Applicator's Signature	·····	National Bos	ard, State, and Endorsemer	nts

FORM N-2 NPT CERTIFICATE HOLDERS' DATA ALL ONL CONTROLL ON THE ASME Code Rules, Section III. Div. 1
General Electric Co., Castle Hayne Rd., Wilmington, N.C.
(a) Manufactured by General Electric Co., Castle Hayles Rd., Williams and address of NPT Certificate Holders  WNP-2
(Name and address of N Certificate Holder for completed suclear component)
2. Identification-Certificate Holder's Serial No. of Part 3179 Nar'l Bd. No. Nar'l Bd. No.
(a) Constructed According to Drawing No. 798D228G010 Drawing Prepared by D. L. Peterson
(b) Description of Part Inspected Piston Tube Assembly
(c) Applicable ASME Coder Section III, Edition 1971, Addenda date 5'73, Case No Class 1
3. Remarks: Standard part for use with reactor.
(Brief description of service for which component was designed)  Rydrostatically tested at 1825 psi.
* Number of Sheets - 2
Date 4-17 19 85 Signed GE-NEPD-WD By Extraction No. NPT N-1151  CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)
Design information on file at GENERAL ELECTRIC CO., SAN JOSE, CALIF.
Scress analysis report on file as GENERAL ELECTRIC CO., SAN JOSE, CALIF.
Design specifications certified by Vermon W. Pence Prof. Eng. State Calif. Reg. No. 14488
Stress analysis report certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488
CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors
sod/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this
Partial Data Report on
Date 4/19 19 85  N.C. 723, PA.WC1766, OHIO  Commissions
Inspector's Signature - National Board, State, Prevince and No.

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List other internal or external presours with eqineldent temperature when applicable.



1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/28/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No. Job No. etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7144	N/A	N/A	1975	Replacement	Yes, Code Class 1
Piston Tube	GE	3215	N/A	N/A	1985	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7144. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results acceptable
  - 3) Performed visual examination on the existing Piston Tube assembly. Visual examination results unacceptable
  - 4) Reassembled Control Rod Drive (CRD) parts and installed new Piston Tube assembly Serial No 3215

- 1) The existing Control Rod Drive (CRD) assembly Serial No 7144, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Piston Tube assembly Serial No 3215, ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda



7	Hydrostatic  Pneum est Pressure: Psig Component Design Press	Tes	perating Pressure Other X  st Temperature: ° F  mperature: ° F
Remarks: Soo attac	hed N-2 Code Data Report for t	the new Piston Tube assembly	y Serial No 3215
		<del></del>	
	CERTI	FICATE OF COMPLIA	NCE
We certify that th	e statements made in th	is Owner's Report are o	correct and this replacement conforms
to the rules of the	e ASME Code, Section X		•
	ol Stamp: Not applicable thorization No.: Not applica	bla	
Expiration Date:		DAG	
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Prepared By	Judely Surb dip Singh - Materials And Inspe	Signed By	KXIMOSI
Kul	· ·		Manager, Materials And Inspection
Date	7/28/94	Date	7-29-84
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	CERTIFICA:	TE OF INSERVICE INS	PECTION
			tional Board of Boiler and Pressure
			Arkwright Mutual Insurance Company nave inspected the components
described in this	Owner's Report during t	the period 5-25	-94_ to and
			formed examinations and taken
		vner's Report in accord	ance with the requirements of the
ASME Code, Sec			
			r makes any warranty, expressed or
			described in this Owner's Report. ble in any manner for any personal
			connected with this inspection
injury or property	•	,	
Injury or property	· السب		
Dan Horge	auth .	Commissions _	
Dan Horge	au/A	Commissions _ ·	National Board, State, and Endorsements

	As required by the Provision of the ASME Code Rules, Section III. Div. 1
,	General Electric Co., Castle Hayne Rd., Wilmington, N.C.
	WNP-2
	(b) Manufactured for the completed suclear component (Name and address of N Certificate Holder for completed suclear component)  Identification-Certificate Holder's Serial No. of Part 3215  Nat'l Bd. No. N/A
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	(b) Description of Part Inspected PISCAT TUDE ASSERDIY  (c) Applicable ASME Code: Section III, Edition 1971, Addenda date S'73, Case No. Class 1
	(c) Applicable ASME Code: Section III, Edition, Assemble date, Case No
•	(Brief description of service for which compenent was designed)
•	Bydrostatically tested at 1825 psi.
	* Number of Sheets - 2
	nuificate of Authorization Expires June 16, 1987
	CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)  GENERAL ELECTRIC CO., SAN JOSE, CALIF.
	GENERAL ELECTRIC CO. SAN JOSE, CALIF.
	Design specifications certified by Vermon W. Pence Prof. Eng. State Calif. Reg. No. 14488
	Stress analysis report certified by Vermon W. Pence Prof. Eng. State Calif. Reg. No. 14488
	CERTIFICATE OF SHOP INSPECTION.  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 19 I and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.  By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
	N.C. 723, PA.WC1766, OHIO

Supplemental shoots in form of lists, altotakes or drawings may be used provided (1) also in MY x 11", (2) information in Home 1-7 on this that is included an each short, and (2) care then it membered secret is recreated in the 1, "Remarks".

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	Shell: Seams:	Los Gin	S		H.T.	The Range Spirit	ickness.	R.T.	(b) M	No.	liciescy	rses		Side to Pro (Conv. or Co
	Shell: Seasts: Heads (a) Top	Con Girt (a) k	laterial	Thickn	H.T.	The Range Spirit	reiness.	R.T.	(b) M	No.	liciency	rses	T.S.	Side to Pro (Conv. or Co
	Shell: Seast: Heads (a) Top (b) Cha	Los Gire (a) M Loss bott	laterial	Thickn	H.T.	The Range Spirit	reiness	R.T.	(b) M	No.	liciency	rses	T.S.	Side to Pro (Conv. or Co
	Shell: Seast: Heads (a) Top (b) Cha	Los Gire (a) M Loss bott	laterial	Thickn	H.T.	The Range Spirit	T.S. Kauckie Rodius	R.T.	(b) M	No lacerial Angle	liciency	ical	Tisc	Side to Pro (Conv. or Co
	Shell: Seast: Heads (a) Top (b) Cha	Los Gire (a) M Loss bott	laterial	Thickn	H.T.	The Range Sp.	T.S. Kauckie Rodius	R.T.	(b) M	No lacerial Angle	ficiency of Cou femispher Radius	iest	T-So.	Side to Pro (Conv. or Co
	Shells Seass: Heads (a) Top (b) Cha	Girt (a) M Loca bot nnel rable	laterial	Thickn	H.T.	The Range Sp.	T.S. Kauckie Rodius	R.T.	(b) M	No lacerial Angle	ficiency, of Cou femispher Radius	teet Der (Der top Veigharpy Im	T.S. Plac lameter	Side to Pro (Coave or Co
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List other internal or external pressure with coincident temperature when applicable.



1. Owner: Washington Public Power Supply System (WPPSS) Address: 3000 George Washington Way, Richland, Washington Date: 7/28/94

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7126	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	GE	A9100	N/A	N/A	1992	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Red Drive (CRD) assembly Serial No 7126. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9100

#### NOTES -

- 1) The existing Control Rod Drive (CRD) assembly Serial No 7126, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A9100, ASME Section III, Code Class 1, 1974 Edition with Winter
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A9100



FOI	RM NIS-2 OWNER'S RI	EPORT FOR REPAIRS	OR REPLACEME!	VTS (Back)
ests Conducted	d: Hydrostatic Pne Test Pressure: Psig Component Design Pre		perating Pressure est Temperature:° emperature:° F	
<i>lemarks:</i> Soo at	tached N-2 Code Data Report	for the new Cylinder Tube And I	Flange (CT&F) assembl	y Serial No A9100
	Ŀ			
	CEF	RTIFICATE OF COMPLIA	ANCE	
		this Owner's Report are	correct and this	eplacement <i>conforms</i>
	the ASME Code, Section			
	n <i>bol Stamp:</i> Not applicable Authorization No.: Not app			
Certificate Of A Expiration Date		HICELHO		
•		•	11	
Prepared By	Quair Such	Signed By	KAMOEL	-
1	Kuldip Singh - Materials And I	nspection	Managor, Material	s And Inspection
Date	7128194	Date	7-29-94	
	CERTIFIC	CATE OF INSERVICE IN	SPECTION	•
<b>Vessel Inspect</b> Factory Mutual E	o <b>rs and the State of</b> Was Engineering Association) o	nmission issued by the Nathington and employed by forwood, Massachusetts ag the period <u>5-28-9</u>	Arkwright Mutual Ir have inspected th	nsurance Company e components
	sures described in this	belief, the Owner has pe Owner's Report in accor		
By signing this	certificate neither the li	nspector nor his employ and corrective measures		
	either the inspector nor	his employer shall be ill any kind arising from or	able in any manne	r for any personal
	rty damage or a loss of			
	rty damage or a loss of	Commissions	955% W	NRT
Injury or proper	poctor's Signature	Commissions	9556 W National Board, Sta	NBII te, and Endorsements

# 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

	Manufactured & Certified by: General Electric Company Nuclear Fuel & Components Manufacturing (GENF & CM)
	, 2117 Castle Hayne Road, Wilmington, North Carolina 28401 (Name and Address of MPT Certificate Holder)
	(b) Hanufactured for : WNP 2 Richland, Washington 99352  ( Hame and Address of H Certificate Holder for completed nuclear component )
2.	Identification - Certificate Holder's S/N of Part : A9100 Nat'l Bd. No. N/A
	(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
	(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>
	(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 . Case No. N207 1361-2 Class 1

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 MPT Certificate Holder for parts. An MPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ).

Date: 12/22/92

" Signed <u>GE - NEBG - NF & CM - QA</u>

( Brief description of service for which component was designed )

REHARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 psi, min.

( MPT Certificate Holder )

SC QA Representive )

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No.: NPTN-1151

Certification of Design for Appurtenance ·						
Design information on file atGE Company, San Jose, California						
Stress analysis report on file at <u>GE Company</u> , San Jose, California						
DC22A6253 Rev. 1 Design specification certified by <u>Biom Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>						
OCZZA6254 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 North Caroling and employed by Department of Labor of State of North Caroling have inspected the part of a pressure vessel described in this Partial Data Report on additional state that to the best of my knowledge and belief, the NPT Cartificate 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, 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.

12/32, 1992 Decore P E Next NC 1231, Ohio, WC 3686 PA

Date | 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".

(47/90)

S/N A9100 · ·

FORM N-2 (	ha	ck 1
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1+4	me 4-8 1	nol to be con	mieted for sig	ale vall ve	ssels, jacket	s vessels, or	shells of heat	exchangers.	-120794
			710100 101 311						7/28794
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5.	Seams:	Long		н.т. 1		R.T.		Efficiency _	
				1 .	_			Na. of Cours	
6.	Heads:		•			•			
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(0)	If remo	vable, bolts (		el, Spec. No., T.S.	Size Number)	Other faste	ning(D	escribe or attach shetch)	-
				eccribe as ogee a	nd weld, bar, etc. #1	ber give dimensions,	if botts, describe of shetch Drogs, Vi		
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			pleted for tube					<del></del>	
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		,=		Momina 1			····		
11.	Shell:		T.S. Dec. No.) (Mrs. of Ren	_ Thickness	in. A1	lowance	in. Dia ft	in. Length	ft
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13.	Heads:	(a) Haterial			T.S	(ь) н	atorial		<del></del>
		tion Thic				Concial Apex Angle	Hemispherical Radius		
ν-,	If remo	vable, bolts u	ized (a)	<u>(6)</u>	(c)	Othe	r fastening		
		•					Orop W Charpy	(Describe or as sight Impact	řt-lb
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			ed for all ves			•	•		<del></del>
ıs.	Safety	Valve Outlets:	: Number		Size		Locatio	on	
16.	Nozzles	: Purpose (Inlet,						Reinforcement	
		Outet, Drain)	Number	Oles or Stop		Material		Meterial	How Attached
17.	Inspect Opening	ion Manholes, s: Handholes	. Xa		Size		Location	<del></del>	·
	ahan nuð	Threaded,	. No		Size		Location		
18.	Support	s: Skirt	Lugs	(Number)	Legs	(Number)	ther(Describe)	Attached _	(Where & How)
		•	•	- ·	•	. •	••		

^{1 -} If Producted Heat-Treated

^{2 -} List other internal or external pressure with councident temperature when applicable,

### FORM N-2 NPT CERTIFIC AT HOLDERS' DATA REPORT FOR NUCL AR PART AND APPURTENANCES* As required by the Provision of the ASME Code Rules, Section III, Div. I

Hanufactured & 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)	Hanufactured	for	:	<u></u>

Richland, Washington 99352 ( Name and Address of N Certificate Holder for completed nuclear component )

Nat'l Bd. No. ___N/A 2. Identification - Certificate Holder's S/N of Part : A9100

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: __Cylinder Tube & Flange

(c) Applicable ASHE Code: Section III. Edition 1974. Addenda Date W75. Case No. N207 1361-2 Class 1

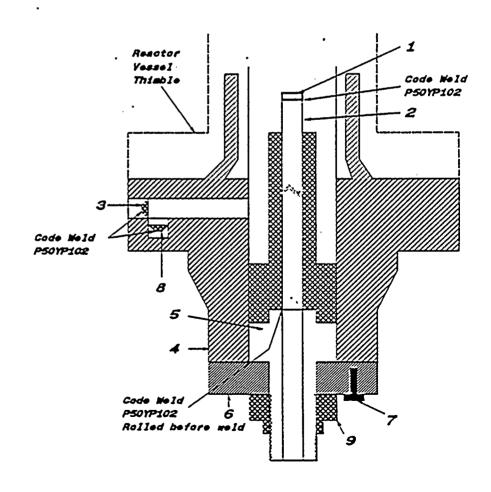
3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min. ( Brief description of service for which component was designed )

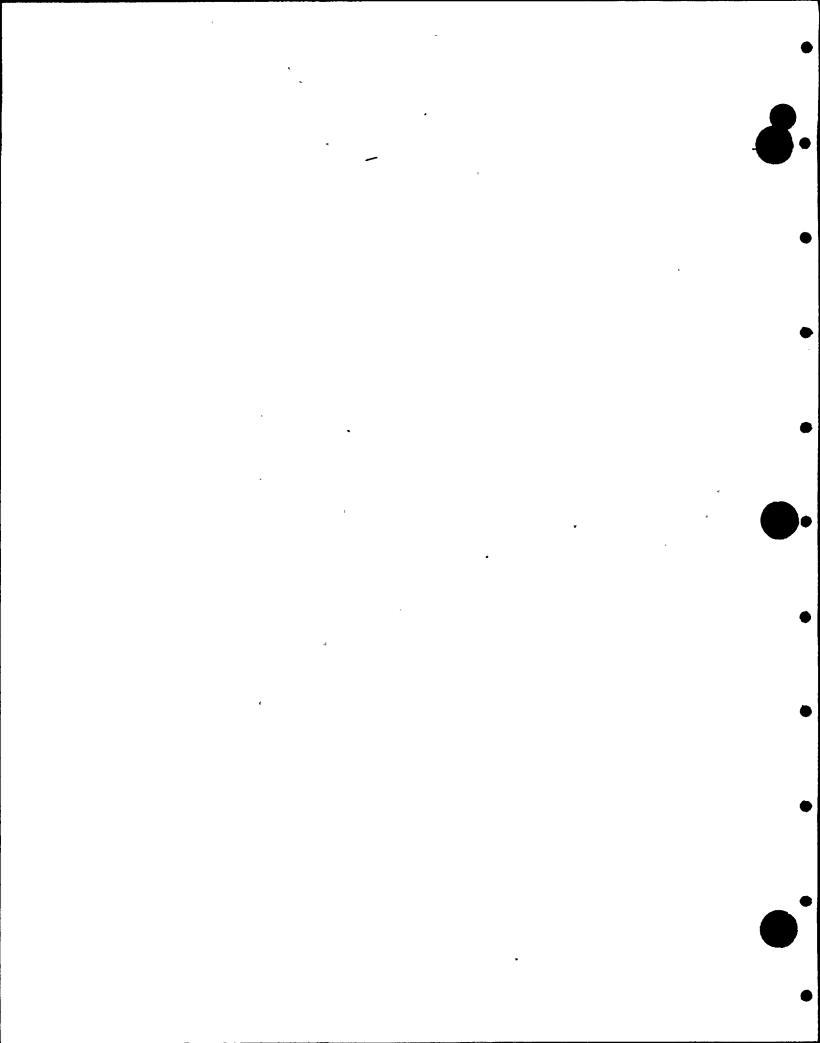
Sheet 2 of 2

1. Cap 166B9274P001 SA182 - F304 3/8° thick x 1 1/16° OD

2 Indicator Tube 16689313P001. . SA312 - TP316 3/4° sch 40 - seamless pipe °0.113° wall thickness 1.065° max. dia.

- 3. Plug 159A1176P001 SA182 - F304 1/4° thick x 0.812° OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8° thick x 2.875° dia.
- 6. Ring Flange 11485122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2º dia. on 4 1/8º bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.







1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/28/94 Sheet: 1 of 1

Address: 3000 George Washington Way, Richland, Washington

Sneet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6731	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	GE	A8896	N/A	N/A	1991	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6731. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A8898

#### NOTES -

- 1) The existing Control Rod Drive (CRD) assembly Serial No 6731, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A8896, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A8896



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

8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X Nor Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9.	Remarks: See attached N-2 Code Data Report for the new Cylinder Tube And Flange (CT&F) assembly Serial No A8896
	•
1	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms
ı	to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable
١	Certificate Of Authorization No.: Not applicable
١	Expiration Date: Not Applicable
	Prepared By Luck Signed By Roman
Ì	Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
- [	Date 7/28/94 Date 7-29-84
- 1	
l	
[	•
	CERTIFICATE OF INSERVICE INSPECTION
1	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
1	Vessel Inspectors and the State of Washington and employed by Arkwright Mutual Insurance Company
ł	(Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
1	described in this Owner's Report during the period <u>5-19-94</u> to <u>1-29-94</u> and state to the best of my knowledge and belief, the Owner has performed examinations and taken
ł	corrective measures described in this Owner's Report in accordance with the requirements of the
١	ASME Code, Section XI
1	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
١	implied, concerning the examinations and corrective measures described in this Owner's Report.
1	Furthermore, neither the inspector nor his employer shall be 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	) h// = //.
1	Can XI ggar/X Commissions 9556 W NBI
1	Ibsopector's Signature National Board, State, and Endorsements
	Date
-	

# ... 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. Hanufactured & Certified by: <u>General Electric Company Nuclear Fuel &amp; Components Manufac</u>	turing (GENF&CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401	
( Name and Address of NPT Certificate Holder )	.*
o) Hanufactured for : WNP 2 Richland, Washington 99352  ( Name and Address of N Cartificate Holder for completed nuclear com	ponent )
2. Identification - Certificate Holder's S/N of Part : A8896 Nat'l Bd. No. N/A	
(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Pete	
(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>	
(c) Applicable ASHE Code: Section III , Edition 1974 , Addenda Oate W75 , Case No. N20	07 1361-2 Class 1
3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.	
( Brief description of service for which component was designed )	
, )	
	Sheet 1 of 2
	31100 2 41 6
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 ASHE 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 appurtenanthe component Design Specification and Stress Report).	cification and Stress older for appurtenances
Oate: 06/14/91 Signed GE-NE3G-NF & CM-QA By (SC AA Repres	entive )
Certificate of Authorization Expires: 6/16/93 Certification of Authorization No.: NPTN-	<u>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>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>	· <u>)</u>
OC22A62S4 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>MO</u>	18646
Certification of Shop Inspection	
I, the undersigned, holding a valid commission by the National Soard of Boiler and Pressure Insustate or Province of North Carolina and employed by Department of Labor of State of North 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 accordance with the ASHE Code Section III.  By signing this certificate, neither the Inspector nor his employer makes any warranty, express concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor shall be liable in any manner for any personal injury or property damages or a loss of any kind connected with this inspection.    Output   Description   NC 1231, Ohio   NC 1231, Ohio   Date   Date   NC 1231, Ohio   National Board, State, Prov	d this part in  sed or implied, r his employer arising from or
Supplemental sheets in form of lists, sketches or drawing more provided (1) size is 8-1/2" x 11", (2) information in 1-2 of Report is included on each sheet, and (3) each sheet is number of sheets is recorded in Item 3. "REMARKS".	ay be used n this Data bered.and
	(07/94)

15	ens 4-8	Incl. to be con	pleted for sir	igle wall ve	essels, jackel	ts vessels, or	· shells of heat	exchangers.	•
4.	Shell:	Haterial (Mnd & Sp	T.S. -c.No.) (Min. of Ran	Thickness	in. A	orrosion llowance	in. Dia f	t in.	Length ft i
5.	Seams:	Long	· · · · · · · · · · · · · · · · · · ·	н.т		R.T.		Effici	ency
		6irth		н.т.		R.T.		No. of	Courses
٤.	Heads:	(a) Haterial			T.S	(ь) н	aterial	<u> </u>	.s
(a) (b)	Bottom	Ends ) Thick	<del></del>	Radius	Ratio	Apex Angle		Diameter	( conv. or conc. )
		ovable, bolts u	( Materia	N, Spec. No., T.S.	. Stre Number)	Other faste	ning(	Describe or attach	starra)
7.	Jacket	Closure:			•		Y hote describe as she		
		2				ā	Orop S Charpy	leight	ft-1b
8.	Design	pressure	1250	ps	i at	575	F at ten	p of	°F
Ite	ms 9 and	d 10 to be comp	leted for tube	sections		•			
		r roading	, natsilai		U1a	• ———	inicxness _	in. A	(Weided, Soded)
0.	Tubes:	Haterial		0.0	in. Thic	kness	_ Inchee or gage. N	umber	Туре
Ite	ns 11 -	14 incl. to be	completed for	inner chami	hare of isobo	tod vessels			(St. or U)
		Haterial		- Nominal Thickness					ength ft
2.	Seams:	Long		н.т.		Ŗ.T	<del></del>	Efficie	ency
		Girth		н.т.		R.T	·	No. of	Courses
3.	Heads:	(a) Haterial _	<del></del>	<del></del>	T.S	(Б) на	iterial	т.	s
(a)	Loca	tion Thick	Crown ness Radius			Concial	Hemispherical Radius	Flat	
• •		vable, bolts us	ed (a)	(b)	(c)	Other	fastening		
		2					Orop V Charpy	(Doscn eight Impact	be or attach sketch)
4.	0es ign	pressure	<del></del>	F	si at		Fat ten	of	°F
		to be complete							
5.	Safety '	Valve Outlets:	Number		Size		Locatio	חכ	
		Purpose (Inlet, Outlet, Drain)	Number	Dist. or Size	Туре	Meterial	Thickness	Reinforcer Material	
7.	Inspect Opening:	ion Hanholes, s: Handholes, Threaded,	No.		Size	L	ocation		
3.	Support	s: Skirt					her (Cescobe)		hed

e d Protunid Heat-Treated

^{2 -} List other internal of external creasure with coincident lamourature upon annionals.

### 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. Hanufactured & 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 )

		2
)		
	ч	

(b) Hanufactured for: WNP 2 Richland, Washington 99352

( Name and Address of H Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A8896 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>

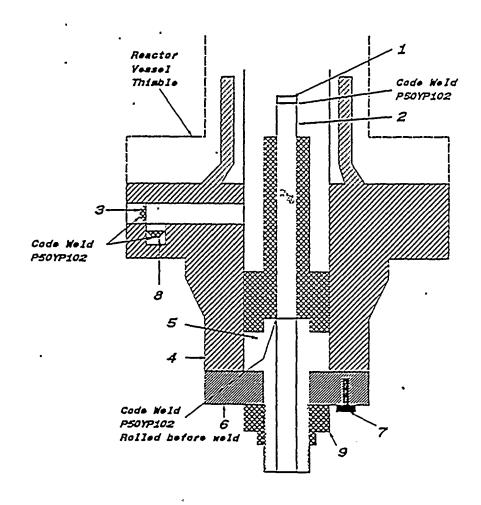
(c) Applicable ASHE Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

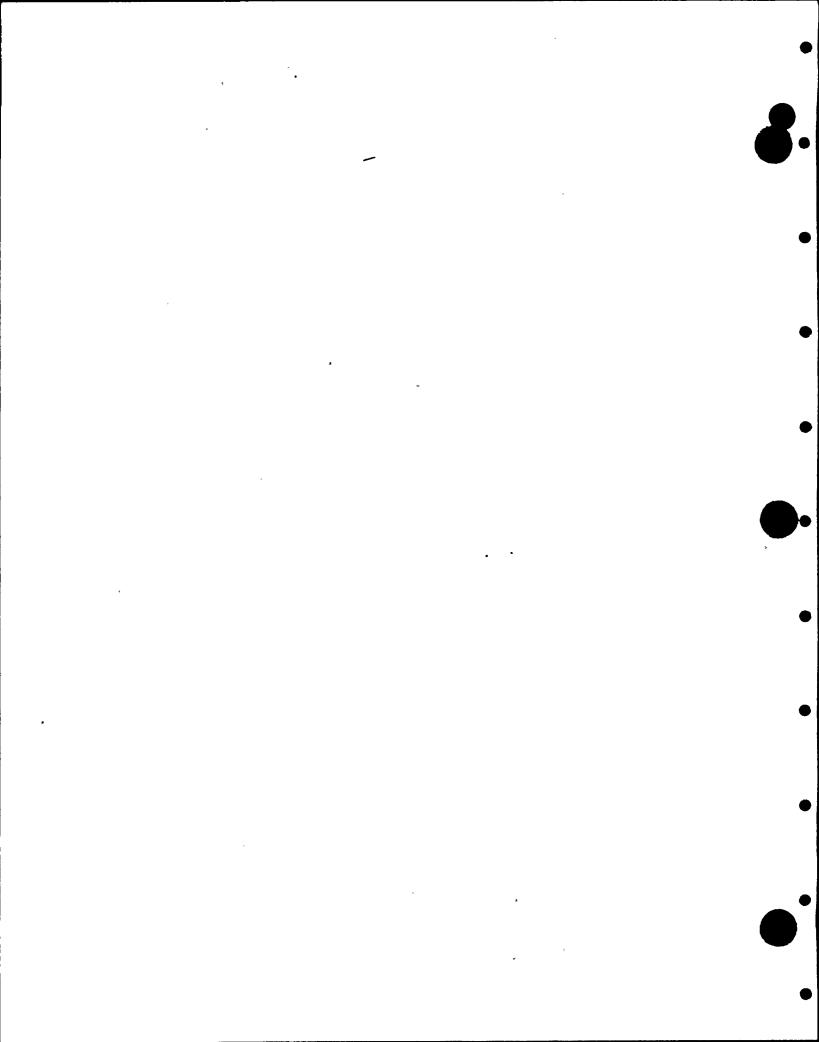
3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

( Brief description of service for which component was designed )

Sheet 2 of 2

- 1. Cap 166B9274P001 SA182 - F304 3/8" thick x 1 1/16" OD
- 2. Indicator Tube 166B9313P001 SA312 - TP316 3/4" sch 40 - seamless pipe 0.113" wall thickness 1.065" max. dia.
- 3. Plug 159A1176P001 SA182 - F304 1/4" thick x 0.812" OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37* thick x 9 5/8* OD
- 5. Base 137C5311P001 SA182 - F304 7/8° thick x 2.875° dia.
- 6. Ring Flange 114B5122P002, P003 137C3151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2° dia. on 4 1/8° bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38" thick x 1.307" dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.







1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

Date: 7/28/94 Sheet: 1 of 1 Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA (b) Repair Organization P.O. No. Job No. etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	,	6631	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	B	A8913	N/A	N/A	1991	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6631. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results acceptable
  - 3) Cylinder Tube And Flange (CT&F) assembly was rejected due to bad cooling water orifice port
  - 4) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A8913

#### NOTES

- 1) The existing Control Rod Drive (CRD) assembly Serial No 6631, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A8913, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A8913



	FORM NIS-2 OWNER'S RE	PORT FOR REPAIRS	OR REPLACEMENTS (Back)
Tests Condi	ucted: Hydrostatic Pne Test Pressure: Psig Component Design Pre		Operating Pressure . Other X N Test Temperature: F Temperature: F
<i>Remarks:</i> S	iee attached N-2 Code Data Report f	or the new Cylinder Tube And	d Flange (CT&F) assembly Serial No A8913
			•
<del> </del>	CER	RTIFICATE OF COMPL	JANCE
to the rules Type Code Certificate	that the statements made in s of the ASME Code, Section Symbol Stamp: Not applicable Of Authorization No.: Not appl Date: Not Applicable	a XI	re correct and this replacement conforms
Prepared E	By Rudub Ruigh Kuldip Singh Materials And In	Signed By	Manager, Materials And Inspection
Date	7/28/94	Date	· 7-29-94
	CERTIFIC	CATE OF INSERVICE I	NSPECTION
Vessel Insp (Factory Mut described i state to the corrective i	pectors and the State of Was tual Engineering Association) of In this Owner's Report during best of my knowledge and measures described in this	hington <i>and employed</i> I f Norwood, Massachusett g the period <u>5°20-</u> belief, the Owner has p	National Board of Boller and Pressure by Arkwright Mutual Insurance Company is have inspected the components 94toand performed examinations and taken predance with the requirements of the
By signing implied, co Furthermoi	ncerning the examinations are, neither the inspector nor	and corrective measure his employer shall be	oyer makes any warranty, expressed or es described in this Owner's Report. Ilable in any manner for any personal or connected with this inspection
` A	le a cell		0
San X	Unspector's Signature	Commission	S 9556W NBI  National Board, State, and Endorsements

_ 1.	Hanufactured & Certified by: General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
	2117 Castle Hayne Road, Wilmington, North Carolina 28401 ( Name and Address of MPT Certificate Holder )
	(b) Hanufactured 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>A8913</u> Nat'l Bd. No. <u>N/A</u>
	(a) Constructed According to Orawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
	(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.	REHARKS: _Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
	( Brief description of service for which component was designed )
	·
<del></del>	
	Sheet Î af 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).
	Oate: 06/14/91 Signed GE-NEBG-NF&CM-QA By SC QA Representive)
	Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPTN-1151
	Certification of Design for Appurtenance
1	Design information on file atGE Company, San Jose, California
	Stress analysis report on file atGE Company, San Jose, California
İ	0C22A6253 Rev. 1
1	Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
	OCZ2A6254 Rev 1
L	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 North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Oata 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 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 Oata Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.
	6/14 1991 Jume PEver NC 1231, Ohio
	Date Inspector's Signature National Board, State, Province And No.

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

^{1 -} If Postweid Heal-Treated,

^{2 -} List other internal or external pressure with coincident temperature when applicable,

#### FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

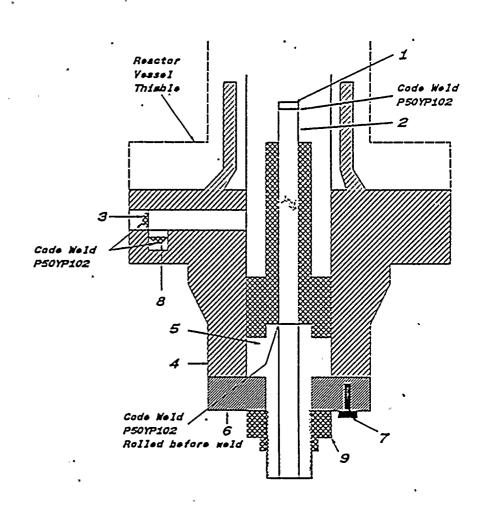
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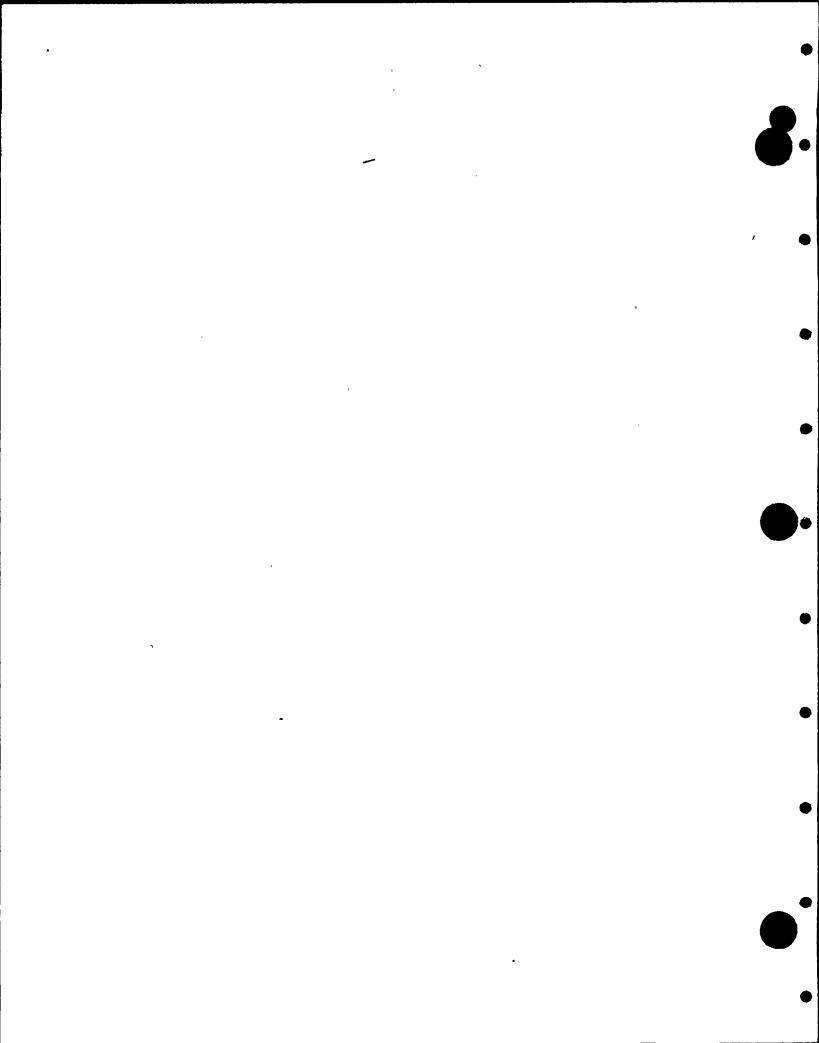
4					217	7 Castle H	<u>ayne Roa</u>	ad, Wilmi	<u>nqton, </u>	North Carolir	<u>าล 2840</u>	<u>1</u>	
- (						( Name	and Addr	ess of NPT	Certif	icate Holder	)		
		(b)	Hanufactured	for :	_WNP 2	Ric	hland, W	ashingtor	7 99352	?			
					( Name	and Addres:	of H-Cer	rtificate	Holder	for completed	nuclear	component	)
	2:	Iden	tification -	Certif	icate Holder	's S/N of I	Part : _ <i>A</i>	18913		Nat'l Bd. No.	. N/A	<u> </u>	

- (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson (b) Description of Part Inspected: Cylinder Tube & Flange
- (c) Applicable ASHE Code: Section III . Edition 1974 . Addenda Date W75 . Case No. N207 1361-2 Class 1
- 3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min. ( Brief description of service for which component was designed )

Sheet 2 of 2

- 1. Cap 166B9274P001 SA182 - F304 3/8° thick x 1 1/16° OD
- 2. Indicator Tube 166B9313P001 SA312 - TP316 3/4° sch 40 - seamless pipe 0.113' wall thickness 1.065' max, dia.
- 3. Plug 159A1176P001 SA182 - F304 1/4" thick x 0.812" OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8° thick x 2.875° dia.
- 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2" dia. on 4 1/8" bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.







1. Owner: Washington Public Power Supply System (WPPSS)

Address: 3000 George Washington Way, Richland, Washington

2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)
Address: Hanford Reservation, Benton County, Washington

Date: 7/28/94 Sheet: 1 of 1 Unit: WNP-2

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
  (b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	6736	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	GE	A9120	N/A	N/A	1991	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 6736. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9120

#### NOTES -

- 1) The existing Control Rod Drive (CRD) assembly Serial No 6736, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A9120, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A9120



FC	JHM NIS-2 OWNER'S HEP	'UK'I FUH HEPAIK	OH REPLACEMENTS (Back)	
Tests Conduct	ed: Hydrostatic Pneu Test Pressure: Psig Component Design Pres	<del></del>	Operating Pressure Other   Test Temperature: ° F Temperature: ° F	× N
. Remarks: See	attached N-2 Code Data Report for	the new Cylinder Tube Ar	d Flange (CT&F) assembly Serial No A9120	
			•	
		<del> </del>		
	CERT	TIFICATE OF COMP.	LIANCE	
We certify the	t the etotements made in ti	hie Owner'e Benort :	re correct and this replacement confo	orme
to the rules of	f the ASME Code, Section >		To correct and this topacononic come	JI 1113
	mbol Stamp: Not applicable			
	Authorization No.: Not application	able		
Expiration Da	fe: Not Applicable		0.4	
Prepared By	Rusip Sursb	Sianed Bv	KAmoen	
_	Kuldip Singh - Materials And Insp	pection	Manager, Materials And Inspection	
Date	7/28/94	Date	7-29-94	
	· · · · · · · · · · · · · · · · · · ·			
<del></del>				
<del></del>		<del></del>	·"	
	CERTIFICA	TE OF INSERVICE	INSPECTION	•
			National Board of Boiler and Pres	
			by Arkwright Mutual Insurance Compa ts have Inspected the components	
			s have inspected the components 94to7-29-94a	
			performed examinations and taken	
			ordance with the requirements of t	
ASME Code, S				
			oyer makes any warranty, expresse	
			es described in this Owner's Repo liable in any manner for any perso	
			or connected with this inspection	1 PG (
D. Alla			Dome a land	
The XXX	spector's Signature	Commission	National Board, State, and Endorseme	unte.
Date 7	29 - 94		Haboliai Doald, Sixto, and Engorsome	n IG

### 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

actured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

### 17 Caetla Hauna Boad, Wilmington, North Carolina, 28401

	( Name and Address of NPT Certificate Holder )
	(b) Manufactured for : WNP 2 Richland, Washington 99352  ( Name and Address of M Certificate Holder for completed nuclear component )
• _{2.}	Identification - Certificate Holder's S/N of Part : A9120 Nat'l Bd. No. N/A
	(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
	(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>
	(c) Applicable ASME Code: Section III . Edition 1974 . Addenda Date W'75 . Case No. N207 1361-2 Class 1
3.	REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.  ( Brief description of service for which component was designed )
	Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASHE 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>11/18/91</u>

Signed _GE - NEBG - NF & CM - QA

( NPT Certificate Holder )

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance	
certification of pesidu 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>Biorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>	
OC22A6254 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

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.

Geome P Event
Inspector's Signature NC 1231, Ohio, WC 3686 PA National Board, State, Province And No.

^{*}Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

### FORM N-2 ( back )

Shell:		T.S. ec. No.) (Min. of Ren	_	in. A	orrosion llowance	in. Oia	ft in.	Length ft
Seams:	Long'		н.т.'		R.T.		Effici	ency
	Girth		•					Courses
Heads:	(a) Material			T.S	(b) Ha	iterial	т	.s
Battom,	on ( Top , Ends ) Thick	Crown kness Radius		Elliptical Ratio	Concial Apex Angle			Side to Press. ( conv. or conc. )
	ovable, bolts us	sed			Other faster	ing		
Jacket	Closure:		u, Spec. No., T.S.	Size Number)			(Describe or attach	sketch)
			escribe as ogee as	nd weld, bar, etc. If	bar give dimensions, r			ft-1b
Design	pressure	1250	ps	i at	575	_°F at t	emp of	°F
ms 9 and	i 10 to be comp	leted for tube	sections					
Tube Sh	neets: Stations	sry. Haterial		Oia	le	Thickness	i in. A	tachment
	Floating	j. Haterial		Dia	(Subject to pressur	Thickness	in. A	(Weided, Bon
Tubes:	Haterial		0.0.	in. Thic	kness	inches or gage,	Number	Type
ms 11 -	14 incl. to be	completed for	iones chief	and of dealer	*		hast avalence	
	Material	T.S	Nominal Thickness	Co	rrosion	····	<del></del>	ength ft
Shell:	Material	T.S, c. No. ) ( Min. of Rang	Hominal Thickness Specified)	in. Al	rrosion lowance i	n, Öla	ft in. l	ength ft
Shell: Seams:	Material (Kind & Spe	T.S. c. No. ] (Min. of Rang	Hominal Thickness Specified) H.T.	in. Al	R.T.	n. Dia	ft in. l Efficie No. of	ength ft ency
Shell: Seams:	Material (Kind & Spe	T.S. c. No. ] (Min. of Rang	Hominal Thickness Specified) H.T.	in. Al	R.T.	n. Dia	ft in. l Efficie No. of	ength ft
Shell: Seams: Heads: . Loca	Material (Kind & Special Cong	T.S. c. No. ) (Min. of Rang Crówn ness Radius	Hominal Thickness Specified) H.T.	in. Al	R.T (b) Ha	n. Diaterial	ft in. l Efficie No. of T.	ength ft ency
Shell: Seams: Heads: . Loca Top.bot Channel	Material (Kind & Special Cong	T.S. c.No.) (Min. of Rang Crówn ness Radius	Nominal Thickness Specified) H.T.  H.T.  Knuck le Radius	In. Al	R.T (b) Ha  Concial Apex Angle	n. Diaterial	ft in. l Efficie No. of T. 1 Flat Diameter	congth ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft ft.
Shell: Seams: Heads: . Loca Top.bot Channel	Haterial (Kind & Special Cong (A) Haterial tion Thick tom, ends (A) Wable, bolts us	T.S. c.No.) (Min. of Rang Crówn ness Radius	Nominal Thickness Specified) H.T.  H.T.  Knuck le Radius	In. Al	R.T (b) Ha  Concial Apex Angle	terial Hemispherica Radius	ft in. l Efficie No. of T. 1 Flat Diameter	congthft
Shell: Seams: Heads: Loca Top.bot Channel If remo	Material (Kind & Spe Long (A) Material (A) Material (A) tion (A) Thick tom, ends	Crówn ness Radius	Nominal Thickness Specified) H.T. H.T.  Knuck le Radius (b)	T.SElliptical Ratio(c)	R.T (b) Ha  Concial Apex Angle	terial Hemispherica Radius fastening Orop	ft in. [ Efficie No. of T. I Flat Diameter	congthft
Shell: Seams: Heads: Loca Top.bot Channel If remo	Material (Kind & Special Cong Cong Cong Cong Cong Cong Cong Cong	T.S	Nominal Thickness Socched)  H.T.  Knuck le Radius  (b)	T.S Elliptical Ratio(c)	R.T (b) Ha  Concial Apex Angle	terial Hemispherica Radius fastening Orop	ft in. l Efficie No. of T.  I Flat     Diameter (Descript py Impact	Courses  Side to Press. ( conv. or conc. )  be or attach sketch)
Shell: Seams: Heads: Loca Top.bot Channel If remove	Material (Kind & Special Cong Cong Cong Cong Cong Cong Cong Cong	T.S	Hominal Thickness Socched) H.T.  Knuckle Radius  (b)	T.S Elliptical Ratio (c) pplicable.	R.T (b) Ha  Concial Apex Angle	terial	ft in. l Efficie No. of T.  I Flat     Diameter (Descript py Impact	congth
Shell: Seams: Heads: Loca Top.bot Channel If remov	Material (Kind & Special Cong Cong Cong Cong Cong Cong Cong Cong	T.S	Hominal Thickness Socched) H.T.  Knuckle Radius  (b)	T.S Elliptical Ratio (c) pplicable.	R.T (b) Ha  Concial Apex Angle Other	terial	ft in. I  Efficie  No. of  T.  I Flat	caurses
Shell: Seams: Heads: Loca Top.bot Channel If remov	Haterial (Kind & Spe  Long (Kind & Spe  Long (Haterial Long (Haterial Long Long Long Long Long Long Long Long	T.S	Hominal Thickness Socched) H.T.  Knuckle Radius  (b)	T.S Elliptical Ratio (c) si at pplicable.	R.T (b) Ha  Concial Apex Angle	terial	ft in. I  Efficie No. of T.  I Flat Diameter	cangth
Shell: Seams: Heads: Loca Top.bot Channel If remod Design pure below Safety	Material (Kind & Spe  Long  Girth  (a) Material _  tion Thick tom, ends  vable, bolts us  pressure  to be complete  Valve Gutlets:  Purpose (folet, Outlet, Drain)	T.S. c. No.) (Min. of Rang  Crówn ness Radius  ed (a)  d for all vess  Number  Number	Nominal Thickness Soeched) H.T.  H.T.  Knuck le Radius  (b)  els where a	T.S Elliptical Ratio(c) si at pplicable. Size Type Size Size	R.T. R.T. (b) Ha Concial Apex Angle Other	terial	ftin. L EfficieNo. ofT.  I FlatOiameter	caurses  Side to Press. ( canv. or canc. )  be or attach sketch)  ft-lb  ft-lb  How Attached
Shell: Seams: Heads: Loca Top.bot Channel If remo  Design   ms below Safety   Nozzles:	Material (Kind & Spe  Long  Girth  (a) Material _  tion Thick tom, ends  vable, bolts us  pressure  to be complete  Valve Gutlets:  Purpose (folet, Outlet, Drain)	T.S	Nominal Thickness Soeched) H.T.  H.T.  Knuck le Radius  (b)  els where a	T.S Elliptical Ratio (c) si at pplicable Size	R.T. R.T. (b) Ha Concial Apex Angle Other	terial	ftin. L EfficieNo. ofT.  I FlatOiameter	congthft

^{1 - #} Postweld Heat-Treated.

^{2 -} List other internal or external pressure with coincident temperature when applicable.

### FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

2117 Castle Hayne Road, Wilmington, North Carolina 28401

	•	( Name and Address of Mrt Certificate Horder ) .	
(h)	Manufactured for · WNP 2	Richland Washington 99352	

( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9120 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>

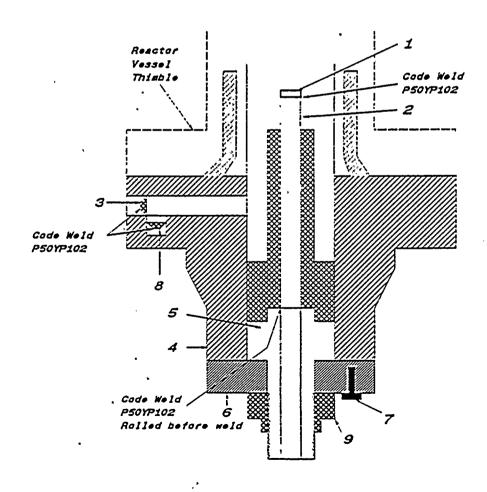
(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Oate W'75 , Case No. N207 1361-2 Class 1

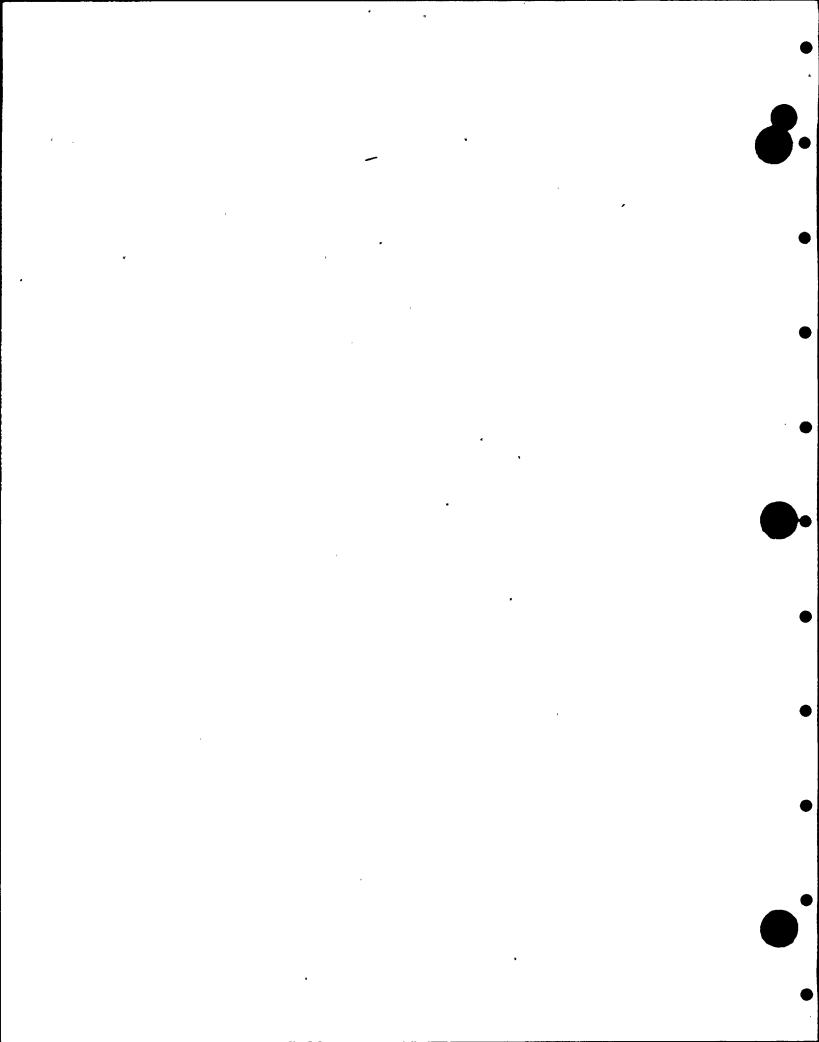
3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.

( Brief description of service for which component was designed )

Sheet 2 of 2

- 1. Cap 166B9274P001 SA182 - F304 3/8" thick x 1 1/16" OD
- Indicator Tube 16689313P001 SA312 - TP316 3/4* sch 40 - seamless pipe 0.113* wall thickness 1.065* max. dia.
- 3. Plug 159A1176P001 SA182 • F304 1/4° thick × 0.812° OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8° thick x 2.875° dia.
- 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 1' thick x 5.0' OD x 1.75' ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2° dia. on 4 1/8° bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38* thick x 1.307* dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.







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

1. Owner: Washington Public Power Supply System (WPPSS)

Date: 7/28/94

Sheat: 1 of 1

Address: 3000 George Washington Way, Richland, Washington 2. Plant: Washington Public Power Supply System (WPPSS) Nuclear Power Plant (WNP)

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

- 3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
- (b) Repair Organization P.O. No. Job No. etc.: Washington Public Power Supply System (WPPSS)
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
  - (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1980 Edition with Winter 1980 Addenda, Code Case: N-308
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7183	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	GE	A9173	N/A	N/A	1992	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7183. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Performed PT examination on the existing Cylinder Tube And Flange (CT&F) assembly. PT examination results unacceptable
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9173

#### NOTES -

- 1) The existing Control Rod Drive (CRD) assembly Serial No 7183, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A9173, ASME Section III, Code Class 1, 1974 Edition with Winter
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A9173



	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
8	Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X No Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
9.	Remarks: See attached N-2 Code Data Report for the new Cylinder Tube And Flange (CT&F) assembly Serial No A9173
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI
	Type Code Symbol Stamp: Not applicable
	Certificate Of Authorization No.: Not applicable
	Expiration Date: Not Applicable
ı	Prepared By Kuldip Singh - Materials And Inspection Manager, Materials And Inspection
	Date 7 28 94 Date 7-29-94
ı	
ı	CERTIFICATE OF INSERVICE INSPECTION
	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 Arkwright Mutual Insurance Company (Factory Mutual Engineering Association) of Norwood, Massachusetts have inspected the components
١	described in this Owner's Report during the period 5-26-94 to 7-29-94 and
١	state to the best of my knowledge and belief, the Owner has performed examinations and taken
1	corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI
1	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
j	implied, concerning the examinations and corrective measures described in this Owner's Report.
į	Furthermore, neither the inspector nor his employer shall be 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	$\sim 0.7 - 0.0$
	Dan Hogeanth Commissions 9556W NBI
	Arispector's Signature National Board, State, and Endorsements  Date 7-29-94
1	Date
١	)

#### LE HOLDERS' DATA REPORT FOR NUCL AR PART AND APPURTENANCES* FORM N-2 NPT CERTIFI( As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Hanufactured & 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 Holder )

(b)	Manufactured for :	WNP 2	Richland, Washington 99352
,			and Address of H Certificate Holder for completed nuclear component )

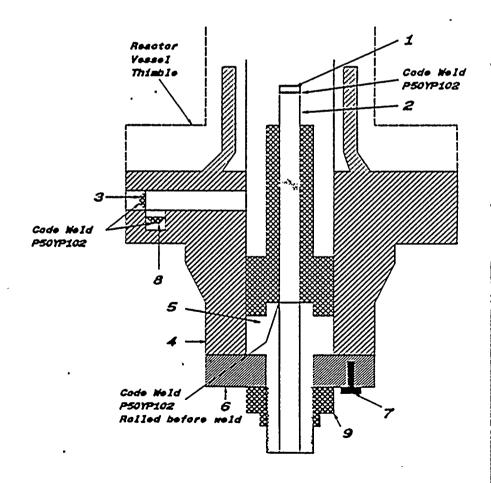
- __ Nat'l Bd. No. ___N/A Identification - Certificate Holder's S/H of Part : <u>A9173</u>
  - (a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson
  - (b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>
  - (c) Applicable ASHE Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1
- 3. REHARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 psi. min. ( Brief description of service for which component was designed )

Sheet 2 of 2

1. Cap 166B9274P001 SA182 - F304 3/8° thick x 1 1/16° OD

2. Indicator Tube 16689313P001 . SA312 - TP316 3/4° sch 40 - seamless pipe "0.113" wall thickness
"1.065" max. dia.

- 3. Plug 159A1176P001 SA182 - F304 1/4° thick x 0.812° OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37" thick x 9 5/8" OD
- 5. Base 137C5311P001 SA182 - F304 7/8° thick x 2.875° dia.
- 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2º dia. on 4 1/8º bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.



, • • . H • 

# 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

	1.	Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GENF & CM
		2117 Castle Hayne Road, Wilmington, North Carolina 28401 ( Name and Address of MPT Certificate Holder )
		(b) Manufactured for : WNP 2 Richland Washington 99352  ( Name and Address of N Certificate Holder for completed nuclear component )
	•	Identification - Certificate Holder's S/N of Part : A9173 Nat'l Bd. No. N/A
	۷٠	
		(a) Constructed According to Drawing No: 919D258G003 Rev 17 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 W75 . Case No. N207 1361-2 Class 1
	3.	REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.  ( Brief description of service for which component was designed )
		Sheet 1 of 2
		We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenance 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 ).
		Oate: 12/22/92 " Signed GE-NEBG-NF & CM-QA By SC ON Representive )
		Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPTN - 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>
i		OC22A6253 Rev. 1 Design specification certified by <u>Biom 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 North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 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, 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.
		Date   1992   A Lore Price   NC 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   No. 1231, Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio, WC 3686 PA   Ohio,
ļ		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".

FORM N-2 ( back )

Corrosion

Corresion

Elliptical Concial

Ratio

psi at __

Nomina 1

(Material, Spec. No., T.S. Size Number)

Nomina 1

1250 psi at ______ 575

(10nd & Spec. No.) (Min. of Range Specified)

Location ( Top Crown Knuckle Elliptical Concial Bottom, Ends ) Thickness Radius Radius Ratio Apex Angle

6irth _____ H.T. _

4. Shell: Material _____ T.S.

If removable, bolts used

Items 9 and 10 to be completed for tube sections

Seams: Long ____

6. Heads: (a) Material ___

7. Jacket Closure: ____

10. Tubes: Material ____

13. Heads: (a) Material

(a) Top.bottom.ends ____

14. Oesign pressure

If removable, bolts used (a)

(b) Channel

8. Design pressure

S/N A9173 Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers. Thickness ____ in. Allowance ____ in. Dia. ___ ft. ___ in. Length ___ ft. ___ ______ R.T. ______ Efficiency __ R.T. _____ No. of Courses ___ T.S. _____ (b) Haterial ____ T.S. _ Hemispherical Flat Side to Press. Olameter ( conv. or conc. ) Apex Angle Radius Other fastening (Describe as ogen and weld, ber, etc. If her give dimensions, if bolts, describe or sketch) Orop Veight ft-1b Charpy impact F at temp of ____ 9. Tube Sheets: Stationary. Haterial Oia. Thickness in. Attachment (Wind & Spec. No.) Oia. Thickness in. Attachment (Wind & Spec. No.) Thickness in. Attachment (Wind & Spec. No.) Thickness in. Attachment (Wind & Spec. No.) (Welded, Boiled) 0.0. ____ in. Thickness _____ inches or gage. Humber ____ Type _ (Str. or U) Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers. Nominal Corrosion

II. Shell: Material _____ T.S. ____ Thickness ___ in. Allowance ___ in. Dia. ___ ft. ___ in. Length ____ ft. ___ 12. Seams: Long ______ H.T. _____ R.T. ____ Efficiency _____ X

Girth _____ H.T. ____ R.T. ____ No. of Courses ______ ____ T.S. _____ (b) Material ___ ______ T.S. Hemispherical Flat Side to Press. Apex Angle Radius Diameter ( conv. or conc. ) Other fastening (Describe of attach street) Drop Veight Charpy Impact _____ F at temp of _____

[tems	below	to be	completed	i for all	vessels	where	applicable.

Crown Knuckle Location Thickness Radius Radius

(Xind & Spec, No.) (Min. of Pange Specified)

Size 15. Safety Valve Outlets: Number ____ Location

16. NOZZles: Purpose (Irrist, Outet, Diren) Die, of Size Туре

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

__ Lugs _____(Number) Legs Other (Ceachbe) _ Attached _

^{1 - #} Postweld Heat-Treated.

^{2 -} List other internal or elemnal 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: Washington Public Power Supply System (WPPSS)

Date: 7/28/94

Address: 3000 George Washington Way, Richland, Washington

Sheet: 1 of 1

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

Unit: WNP-2

Address: Hanford Reservation, Benton County, Washington

3. (a) Work Performed By: Washington Public Power Supply System (WPPSS), 3000 George Washington Way, Richland, WA
(b) Repair Organization P.O. No, Job No, etc.: Washington Public Power Supply System (WPPSS)

4. Identification Of System: Control Rod Drive (CRD)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	GE	7357	N/A	N/A	1975	Replaced	Yes, Code Class 1
CT&F	GE	A9169	N/A	N/A	1992	Replacement	Yes, Code Class 1

- 7. Description Of Work Performed: Overhauled Control Rod Drive (CRD) assembly Serial No 7357. The overhaul work was performed as follows
  - 1) Disassembled Control Rod Drive (CRD) assembly for overhaul
  - 2) Replaced existing Cylinder Tube And Flange (CT&F) assembly which was damaged during installation
  - 3) Reassembled Control Rod Drive (CRD) parts and installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9169

#### NOTES -

- 1) The existing Control Rod Drive (CRD) assembly Serial No 7357, ASME Section III, Code Class 1, 1971 Edition with no Addenda
- 2) The new Cylinder Tube And Flange (CT&F) assembly Serial No A9169, ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda
- 3) The entire Control Rod Drive (CRD) assembly is now identified by the new Cylinder Tube And Flange (CT&F) Serial No A9169



FURM NIS-2 OWNER'S HEP	JKI FUK KEPAIN	AS OH HEPLACEMENTS (BBCK)
Tests Conducted: Hydrostatic Pneun Test Pressure: Psig Component Design Press		al Operating Pressure Other X M Test Temperature: ° F Temperature: ° F
Remarks: See attached N-2 Code Data Report for t	he new Cylinder Tube A	And Flange (CT&F) assembly Serial No A9169
		. •
CERTI	FICATE OF COM	PLIANCE
We certify that the statements made in th		are correct and this replacement conforms
to the rules of the ASME Code, Section XI Type Code Symbol Stamp: Not applicable	I	
Certificate Of Authorization No.: Not applicat	ble	
Expiration Date: Not Applicable		
Prepared By Vuclib Suib Kuldip Singh - Materials And Inspe	Signed By _	RAMOL_
Kuldip Singh - Materials And Inspe	ection	Manager, Materials And Inspection
Date 7/28/54	Date	7-29-94
CERTIFICAT	TE OF INSERVICE	E INSPECTION
I, the undersigned, holding a valid commi	ssion issued by th	ne National Board of Boiler and Pressure
Vessel Inspectors and the State of Washin		
(Factory Mutual Engineering Association) of No described in this Owner's Report during t	brwood, massachuse The period 5-2.	eus nave inspected the components 8· 94 to 1- 29 - 94 and
state to the best of my knowledge and be	lief, the Owner has	s performed examinations and taken
corrective measures described in this Ow	ner's Report in ac	cordance with the requirements of the
ASME Code, Section XI By signing this certificate neither the insp	ector nor his emp	lover makes any warranty. expressed or
implied, concerning the examinations and	d corrective measu	ures described in this Owner's Report.
Furthermore, neither the inspector nor his injury or property damage or a loss of any		
An What	0	ons 9556 W NBI
The poctor's Signature	Commissio	National Board, State, and Endorsements
Date 7-29.94		

# 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

1. Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufactured & Certified & Certified & Components Manufactured & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Certified & Cert	
( Name and Address of NFT Certificate Holder )  (b) Hanufactured for : WNP 2 Richland Washington 99352  ( Name and Address of H Certificate Holder for completed nucle  2. Identification - Certificate Holder's S/H of Part : A9169 Nat'l Bd. No.	
( Name and Address of N Certificate Holder for completed nucle 2. Identification - Certificate Holder's S/N of Part : <u>A9169</u> Nat'l Bd. No	
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(a) Company to the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Company of the Co	
(a) Constructed According to Drawing No: <u>919D258G003 Rev 17</u> Dwg. Prepared by <u>D.</u>	L. Peterson
(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>	•
(c) Applicable ASHE Code: Section III . Edition 1974 . Addenda Date <u>W75</u> . Case No	. N207 1361-2 Class 1
3. REHARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.	-
( Brief description of service for which component was designed )	·.
•	Sheet 1 of 2
Ve certify that the statements in this report are correct and this vessel part or appurtenal conforms to the rules of construction of the ASKE Code Section III. (The applicable Design Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification is responsible for furnishing a separate Design Specification and Stress Report if the apputhe component Design Specification and Stress Report).	ned Specification and Stress ation Holder for appurtenances
Date: 12/22/92 : Signed <u>GE - NEBG - NF &amp; CM - OA</u> By	M.
( NPT Certificate Holder ) SC QA	Representive )
Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : No.	<u>PTN - 1151</u>
Certification of Design for Appurtenance	]
Design information on file atGE Company, San Jose, California	
Stress analysis report on file atGE Company , San Jose , California	
OC2ZA6253 Rev. 1 Design specification certified by <u>Biom Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No.	. 15570
DC2ZA6254 Rav 1 Strass 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 Mational Board of Boiler and Pressur State or Province of North Carolina and employed by Department of Labor of State of 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 consaccordance with the ASNE Code Section III.	f North Carolina have

*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".

Inspector's Signature

connected with this inspection.

NC 1231, Ohio, WC 3686 PA
National Board, State, Province And No.

FORM N-2 ( back )

Durch Suits

Items 4-8 Incl. to be compl	eted for single wall vessels,	jackets vessels, or shells of	heat exchangers. 7/28/54
(19nd & Spec.	No.) (Min. of Range Specified)		ft in. Length ft
	1 _		Efficiency
Girth	H.T		No. of Courses
6. Heads: (a) Material	T.s	(b) Material	T.S
(a)	ess Radius Radius Ratio		Diameter ( conv. or conc. )
If removable, policy use	d (Maserial, Spec, No., T.S. Size Numb	wr)	/ Describe of attach stratch t
7. Jacket Closure:	( Describe as ages and weld, be	v, etc. If her give dimensions, if botts, describe	or stellch)
		D C	rop Veight ft-1b
8. Design pressure		°F a	t temp of F
Items 9 and 10 to be comple	ted for tube sections		
9. Tube Sheets: Stationar	y. Haterial	Dia Thickn	ess in. Attachment
Floating.	(Mnd & Souc. No.) 'Haterial	(Subject to pressure) Dia Thickn	ess in. Attachment(Welded, Soled
****			. Number Type
·			(Str. or U)
Items II - 14 incl. to be c	completed for inner chambers of		of heat exchangers.
11. Shell: Haterial (Kind & Spec.	T.S Nominal Thickness in No.] (Min. of Pange Specified)	Corrosion n. Allowance in. Dia	ft in. Length ft
12. Seams: Long	н.т.	R.T.	Efficiency
Girth		´ a.t	No. of Courses
l3. Heads: (a) Material _	T.S	(b) Material	T.s
Location Thickn (a) Top.bottom.ends (b) Channel	ess Radius Radius Ratio	tical Concial Hemispher Apex Angle Radius	
[f removable, bolts use	d (a)(b)(c	)Other fastening	(Describe of attach stratch)
2		0.	rop Weightft-lb
	psi at	F a	t temp ofF
Items below to be completed	for all vessels where applicat	ble.	
15. Safety Valve Outlets:	Number	SizeL	ocation
16. Hazzles: Purpose (Inter, Ouder, Orain)	Number Clé. of Stop	Type Material Thicken	Reinforcement  Material , How Attached
17. [Inspection Manholes, Openings: Handholes, Threaded,	No. Size	Location Location Location	
	•		

## FORM N-2 NPT CERTIFI( >= HOLDERS' DATA REPORT FOR NUC .R PART AND APPURTENANCES* As required by the Provision of the ASHE Code Rules, Section III, Div. I

1. Hanufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)

### 2117 Castle Hayne Road, Wilmington, North Carolina 28401 ( Name and Address of NFT Certificate Holder )

8

(b) Hanufactured for : WNP 2 Richland, Washington 99352

( Name and Address of N Certificate Holder for completed nuclear component )

2. Identification - Certificate Holder's S/N of Part : A9169 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 919D258G003 Rev 17 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: <u>Cylinder Tube & Flange</u>

(c) Applicable ASHE Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 psi. min.

( Brief description of service for which component was designed )

Sheet 2 of 2

1. Cap 166B9274P001 SA182 - F304 3/8" thick x 1 1/16" OD

2-Indicator Tube 16689313P001 SA312 - TP316 3/4* sch 40 - seamless pipe -0.113* wall thickness J.065* max. dia.

- 3. Plug 159A1176P001 SA182 - F304 1/4" thick x 0.812" OD
- 4. Flange 919D610P001 (719E474) SA182 - F304 3.37° thick x 9 5/8° OD
- 5. Base 137C5311P001 SA182 - F304 7/8° thick x 2.875° dia.
- 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 1° thick x 5.0° OD x 1.75° ID
- 7. Cap Screw 117C4516P002 SA193 - B6 6 ea. 1/2º dia. on 4 1/8º bolt circle
- 8. Plug 175A7961P001 SA182 - F304 0.38° thick x 1.307° dia.
- 9. Nut 137C5934P001 XM - 19 SA479 1.30° thick x 2.62° dia.

