

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

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

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
822-G001C MS-RV-2C MS-RV-2C	WPPSS * Crosby Crosby	B22-G001C-P1 N63790-00-0134 N63790-03-0048 ** (N63790-00-0048) **	N/A N/A N/A	N/A N/A N/A	1983 1973 1980	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-2C. The replacement work was performed as follows:
 1) Removed existing relief valve Serial No N63790-00-0134 with set pressure of 1175 Psig at rated temperature of 575<sup>0</sup> F.

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

3) Installed replacement relief valve with Serial No N63790-03-0048 with set pressure of 1175 Psig at rated temperature of 575° F.

4) Installed VT-1 visually examined twelve (12) new nuts for the relief valve inlet joint. Note - None of the existing nuts were reused.
5) Installed sixteen (16) new bolts for the relief valve outlet joint. Note - None of the existing bolts were reused.

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

#### NOTES -

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

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0048 was installed is Main Steam (MS) piping system B22-G001C-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

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

4) The replacement relief valve Serial No N63790-03-0048 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0048 was previously modified (upgraded) to Serial No N63790-03-0048 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1700.

PLAN No 2-	170
EMERGY	
NORTHWEST	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other * Test Pressure: 1022 Psig Test Temperature: 215° F Component Design Pressure: 1250 Psig Temperature: 575° F	
<b>Remarks:</b> 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0048, 2) See attached NV- e Data Report for replacement relief valve Serial No N63790-00-0048, 3) * The test pressure and the test temperature on the relief v joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "Read sure Vessel Leakage Test".	aive
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement conforms	
to the rules of the ASME Code, Section XI.	
Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable	
Expiration Date: Not Applicable	
Prepared By Vuldip Such Signed By Vuldip Such	
Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)	-
Date71001Date710001	-
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of	
Johnston, Rhode Island have inspected the components described in this Owner's Report during the period _//24/0/ to and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report	
in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or Implied, concerning the examinations and corrective measures described in this Owner's Report.	
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	
<u>Inspector's Signature</u> <u>Inspector's Signature</u> <u>Inspector's Signature</u> <u>Commissions</u> <u>7470</u> <u>7470</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>7476</u> <u>747</u>	2
Date 7/24/01	
	1

FORM NVR-1 REPORT OF REPA OF NUCLEAR PRESSURE F		PLAN NO." LACEMENT D	3
1. Work performed by: NWS Technologies, LLC	Purchase Or	hudi	VRO # 008
131 Venture Boulevard, Spartanburg, S           2. Work performed for:         Energy Northwest - Columbia Generating			
3/4. Owner - name, address and identification of nuclear power parts Station, North Power Plant Loop, Richland, WA 99352-0968		Northwest - Colum	nbia Generating
5. a: Repaired pressure relief device: Main Steam Safety Reli b: Name of manufacturer: Crosby Valve & Gage Co.	ef Valve		······································
c: Identifying nos. old s/n: N63790-00-0048 HB-65-BP-FN new s/n: N63790-03-0048	N/A ste		
(type) (mfr's S/N)	(NB#) (serv	vice) (size)	) <u>1980</u> (yr.built)
d: Construction Code: ASME Sec. III Div. 1 1971 (name/section/division) (edition)	(addenda)	1567 & 1711 (Code Cases(s))	1
6. ASME Code Section XI applicable for inservice inspection:	1989	N/A	(Code Class)
7. ASME Code Section XI used for repairs, replacements:	(edition) 1989	(addenda) N/A	(Code Case(s)) N/A
8. Construction Code used for repairs, replacements:	(edition) 1971	(addenda) N/A	(Code Case(s)) N/A
9. Design responsibilities: N/A	(edition)	(addenda)	(Code Case(s))
<ol> <li>Description of work (include name and identifying number of replacemer</li> <li>Remarks: See attachment 1.</li> </ol>	t parts): See a	ttachment 1.	
CERTIFICATE OF COMP			
I.       Cesar V. Sierra       certify that to the best of my knowle         report are correct and the repair, modification or replacemtn of the         conforms to Section XI of the ASME Code and the National Board I         National Board Certificate of Authorization No.         632       to use th         619/00       NWS Technologies, LLC	dge and belief t	devices described e "VR" and "NR" r expires April 3, expires April 9, Mar	above ules. 2003.
CERTIFICATE OF INSPE		· · · · · · · · · · · · · · · · · · ·	
I. Carl R. Enos holding a valid commission issued by Vessel Inspectors and certificate of competency issued by the jurisd by Hartford Steam Boiler Inspection & Insurance Co. of Hartford or replacement described in this report on $6/19/200$ and state this repair, modification or replacement has been completed in acco Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer concerning this repair, modification or replacement described in this nor my employer shall be liable in any manner for any personal injurarising from or connected with this inspection.	liction of <u>T</u> d, CT have in that to the bes rdance with Se makes any war report Euthern	ennessee and spected the repai t of my knowledge ction XI of the of t manty, expressed	l employed r, modification e and belief, he ASME or implied,
6/19/00 Care R. Eren NE			

1. Work performed by:	NWS Technologies, LLC 131 Venture Boulevard, Spartanburg,	Purchase Order # SC 29301	C31331 WRO # 008
2. Work performed for:	Energy Northwest - Columbia Generati	ng Station	
3/4. Owner - name, ad Generating Station,	dress and identification of nuclear power North Power Plant Loop, Richland, WA	plant: <u>Energy Northwo</u> 99352-0968	est - Columbia
Vaive S/N: N63	790-03-0048	· · · · · · · · · · · · · · · · · · ·	
The S/N for this va indicate the modific	lve was <u>N63790-00-0048</u> T cation of the valve to a flexi-disc d	he two middle digits esign.	were changed to

## 11. Description of work:

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

WNP-2 machined the nozzle to the new flexi-disc dimensions.

NWS machined the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00. Disc S/N:

N97499-34-0030 and

Nozzle S/N:

(pre mod s/n N93184-42-0104)

N97498-42-0104

were installed in the valve.

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

Other parts replaced during the repair include: Disc Holder Spiral Pins (2): MC 54407794 Eductor Gasket: MC 56230461 Inlet Studs (2): H/C: <u>N</u> B7 HBW

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve failed the steam seat tightness test, was jacked and lapped to restore seat integrity and successfully seat tightness tested on steam.

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

	¢'	MS RV- 1A- PLAN NO. 2-1709
CROSBY	CROSBY VALV WREN	
As Required by	FOR SAFETY AND SAFETY RELI y the Provisions of the ASM DATA REPORT fety and Safety Relief Valv	E Code Rules
1. Manufactured By Crosby Valve		
	Name and Address	
Model No.HB-65-BP-FN Order General H	No. <u>N94275</u> Contract Da Electric Company, 175 C	te 4/24/79 National Board No. N/A
2. Manufactured For San Jose.	<u>CA 95125</u>	Drder No. 205-AJ986
3. Owner Washington Public Po	Name and Address ower Supply System, Ric Name and Address	hland, Washington 99352
4. Location of Plant Hanford		Washington99352
		0-0048Drawing No. DS-A-63790 Rev
Type         Safety Relief           Safety, Safety Relief, P.           Power Actuated	Orifice Size K ilot, Inc	miles sim miching inch
6. Set Pressure (psig) 117	75	<u> </u>
894 214		Rated Temperature
Stamped Capacity 004,514		Blowdown (psig) 2% to 11%
Hydrostatic Test (psig) Inlet		975 psig (Assembled Valve) 1100 psig (Body Only)
Pressure Retaining Pieces	(Applica	ble to Valves for Closed Systems Only
	Serial No.	Material Specification
Bar Stock & Forgings a. Monorrages	Identification	Including Type or Grade
Body	N93183-35=0067	ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	N93407-35-0030	ASTM A105-71 Gr. II ASME SA105 Gr. II
b. MEXXEDOXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
SCORE Disc Insert	N93185-34-0079	ASME SA637 Gr. 718
Nozzle	N93184-33-0052	ASME SA182 Gr. F316
Disc Holder*K55484-35-0083		AMS 5662B
	K62856-35-0086	ASTM A105-71Gr. II
Spring Washers K62858-35-00	30 K62857-35-0051	ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0055	ASME SA193 Gr. B6
Spindle Point K62873-35-004	48 *N89720-34-0065	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K62858-35-0030	*N89722-0004	ASTM A304-66 Gr. 4161H
d. Bolting		2 X 0 0 3 8 0 1 1
e. XKREKSCHERKE K62873-35-0044	B N93213-0048	Stellite #6
Thrust Bearing Adapter	N93409-32-0050	ASME SA193 Gr. B6
Bonnet Stud(I	17) N93207-0573 thru (	2584 ASME SA193-71 Gr. B7
	87) N93210-0793 thru (	804 ASME SA194 Gr. 2H
	76) N93216-0575 thru (	
Inlet Stud Nut (B	W8) N93218-0579 thru (	D590 ASTM A194-71 Gr. 2H — ASME SA194 Gr. 2H
Adjusting Bolt Button	N93411-33-0056	ASME SA193 Gr. B6

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dification co	nsists of replaces	ent of the Dis	c Insert, Noz	zle, Bonnet Stud Nu	uts,
insting Rolt	and Thrust Bearing	g Adapter, rem	achining of t	the Body, Spring Was	shers.
met. and Sni	ndle Assembly, and	adding an Adj	usting Bolt H	Button Assembly. No	ew
rialization i	s required unless	indicated by a	n asterisk.		
iginal namep]	ate removed and ne	w nameplate at	tached.	;	-
-0			····	NL3790-00	-0048
		CERTIFICATE OF	COMPLIANCE		
					-
We certify the	at the statements ma	ade in this repo	ort are correc	ct and that this value	ve conforms
to the rules	of construction of 1	the ASME Code IC	or Nuclear Pow	ver Plant Components	ε 1711
III, Div. 1,_		m, Addenda <u>RU</u>	(Date)	Code Case No. 1567	
Data 11-5-	20 Signe	d Crosby Valve	& Gage Co.	by R.G. Cara	vart
	<u> </u>	(N Certificat	te Holder)	<b>-</b>	
Own ASME Cart	ificate of Authoriz	ation No.	1878	to use the	NV
OUT ASME CEIL	TITCALE OF MUCHOLIN.				
symbol expire	s <u>September 30, 198</u>	33•			
	(Date)				
		CERTIFICATION	OF DESIGN	·	
	. •				
Design inform	ation on file at	Crosby Valve	& Gage Compa	ny	<u></u>
0	is manage (Class 1	orly) on file a	r Crosb	v Valve & Gage Comp	ZINY
				· · · · · · · · · · · · · · · · · · ·	
Design specif	ications certified	by Bove	P. Brooks		
PF State	California		Reg. No.	13655	
-	1	 	Greenlaw		·····
PE State	Massachusetts		Reg. No	14784	
•			•		
<sup>1</sup> Signature no	ot required - list r	name only.	<del>.</del>		ar guilte y
				was she with the set	
					· · · · · · · · · · · · · · · · · · ·
	C	ERTIFICATE OF SH	HOP INSPECTION	Ŷ	i I
					•
I, the unders	signed, holding a va	alid commission	issued by the	e National Board of	Boiler and
Pressure Ves	sel Inspectors and 1	the State or Pro	ovince of <u>Mag</u>	ssachusetts	
and employed	by Factory Mutual S	vstems* 0	[ <u>Norwood</u> , !	lassachusetts	4,1900
Louis deserves	ed the pump, or value	ve, described in	h this Data R		
nave inspect	at to the best of m	y knowledge and	beller, the	N Certificate Holder	nes over Plant
and state the	this pump, or valve	, in accordance	with the ASri	e code for nacroar r	
and state the constructed					
and state the			eter per bic	employer makes any w	arrant, .
and state the constructed of Components.	nis certificate. ne	ither the Inspe	CLOI HOI HIS		
and state the constructed Components. By signing t	his certificate, ne implied, concernin	g the equipment	described in	this Data Report.	rurtner-
and state the constructed Components. By signing t expressed or more neither	implied, concernin	g the equipment his employer s	described in hall be liabl	e in any manner for	any
and state the constructed Components. By signing t expressed or more neither	implied, concernin	g the equipment his employer s	described in hall be liabl	this Data Report. e in any manner for ising from or connect	any
and state the constructed Components. By signing t expressed or more neither	implied, concernin r the Inspector nor ury or property dam	g the equipment his employer s	described in hall be liabl	e in any manner for	any
and state the constructed Components. By signing the expressed or more, neithe personal inj	implied, concernin r the Inspector nor ury or property dam	g the equipment his employer s age or a loss o	described in hall be liabl	e in any manner for	any
and state the constructed Components. By signing t expressed or more, neithe personal inj this inspect	<pre>implied, concernin r the Inspector nor ury or property dam ion.</pre>	g the equipment his employer s age or a loss o	described in hall be liabl	this Data Report. e in any manner for ising from or connec	any

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

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

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

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

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001C MS-RV-3C MS-RV-3C	WPPSS * Crosby Crosby	B22-G001C-P1 N63790-00-0138 N63790-03-0124 ** (N63790-00-0124) **	N/A N/A N/A	N/A N/A N/A	1983 1973 1981	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-3C. The replacement work was performed as follows: 1) Removed existing relief valve Serial No N63790-00-0138 with set pressure of 1185 Psig at rated temperature of 575° F.
  - Performed VT-1 visual examination on twelve (12) new nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
     Installed replacement relief valve with Serial No N63790-03-0124 with set pressure of 1185 Psig at rated temperature of 575° F.
  - 4) Installed VT-1 visually examined twelve (12) new nuts for the relief valve inlet joint. Note None of the existing nuts were reused.

5) Installed sixteen (16) new bolts for the relief valve outlet joint. Note - None of the existing bolts were reused.

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

#### NOTES -

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

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0124 was installed is Main Steam (MS) piping system B22-G001C-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

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

4) The replacement relief valve Serial No N63790-03-0124 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0124 was previously modified (upgraded) to Serial No N63790-03-0124 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1704.

	PLAN No 2-1
	ENERGY
	NORTHWEST
FORM N	IIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
	vdrostatic       Pneumatic       Nominal Operating Pressure       Other       *         t Pressure: 1022 Psig       Test Temperature: 215° F         nponent Design Pressure: 1250 Psig       Temperature: 575° F
Data Report for replace	ed NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0124, 2) See attached NV-1 ment relief valve Serial No N63790-00-0124, 3) * The test pressure and the test temperature on the relief valve ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 *Reacto st*.
	CERTIFICATE OF COMPLIANCE
to the rules of the A Type Code Symbol	statements made in this Owner's Report are correct and this replacement conforms SME Code, Section XI. Stamp: Not Applicable prization No.: Not Applicable Applicable
· Prepared By	Singh - Program Lead Engineer (PLE) 7/10/01 Date Signed By Kuldip Singh - Program Lead Engineer (PLE) 7/10/01 Date 7/10/01
	CERTIFICATE OF INSERVICE INSPECTION
Vessei Inspectors a Johnston, Rhode Isla period //2/2/2 Owner has perform in accordance with By signing this cert implied, concerning Furthermore, neither	holding a valid commission issued by the National Board of Boller and Pressure and the State of Washington and employed by Factory Mutual Insurance Company of the have inspected the components described in this Owner's Report during the med examinations and taken corrective measures described in this Owner's Report the requirements of the ASME Code, Section XI. tificate neither the Inspector nor his employer makes any warranty, expressed or g the examinations and corrective measures described in this Owner's Report. er the Inspector nor his employer shall be liable in any manner for any personal liamage or a loss of any kind arising from or connected with this inspection.
njury or property o	
J. M. J.	r's Signature Commissions 7486 wIS I) National Board, State, and Endorsements
nispocie	
Data 7/24/1	·/

FORM NVR-1 REPORT OF REPAIL OF NUCLEAR PRESSURE R	R 🖾 REPLÁ	CEMENT E	
1. Work performed by: <b>NWS Technologies, LLC</b> 131 Venture Boulevard, Spartanburg, SC	Purchase Orde C 29301		יסן (גין דיי WRO # 008
2. Work performed for: Energy Northwest - Columbia Generating			
3/4. Owner - name, address and identification of nuclear power pla Station, North Power Plant Loop, Richland, WA 99352-0968		orthwest - Colum	nbia Generating
5. a: Repaired pressure relief device: Main Steam Safety Relie b: Name of manufacturer: Crosby Valve & Gage Co. c: Identifying nos. old s/n: N63790-00-0124	fValve		
HB-65-BP-FN new s/n: N63790-03-0124	N/A steam	n 6x10	) 1981
	(NB#) (service	e) (size)	(yr.built)
d: Construction Code: ASME Sec. III Div. 1 1971	<u>N/A</u>	1567 & 1711	1
(name/section/division) (edition)	(addenda) (	Code Cases(s))	(Code Class)
6. ASME Code Section XI applicable for inservice inspection:	1989	N/A	N/A
	(edition)	(addenda)	(Code Case(s))
<ol><li>ASME Code Section XI used for repairs, replacements:</li></ol>	1989	<u>N/A</u>	N/A
8. Construction Code used for repairs, replacements:	(edition)	(addenda)	(Code Case(s))
o. Construction Code used for repairs, replacements:	1971	<u>N/A</u>	N/A
	(edition)	(addenda)	(Code Case(s))
9. Design responsibilities: N/A     10. Opening pressure: 1185 psig     Set-pressure adjustment made at: NWS Technologies, LI     11. Description of work (instude some and id unit)			
10. Opening pressure: 1185 psig		g <u>steam</u> ichment 1.	
10. Opening pressure:       1185 psig         Set-pressure adjustment made at:       NWS Technologies, LI         11. Description of work (include name and identifying number of replacement         12. Remarks:       See attachment 1.         CERTIFICATE OF COMPL         1.       Cesar V. Sierra         certify that to the best of my knowled         report are correct and the repair, modification or replacement of the p         conforms to Section XI of the ASME Code and the National Board Ir         National Board Certificate of Authorization No.       632       to use the         612       NWS Technologies, LLC       Use the	- JANCE lige and belief the	e statements ma evices described VR" and "NR" m pires April 3, pires April 9,	l above ules. 2003.
10. Opening pressure:       1185 psig Set-pressure adjustment made at:       NWS Technologies, LI         11. Description of work (include name and identifying number of replacement         12. Remarks:       See attachment 1.         CERTIFICATE OF COMPL         1.       Cesar V. Sierra         certify that to the best of my knowled report are correct and the repair, modification or replacemtn of the p conforms to Section XI of the ASME Code and the National Board In National Board Certificate of Authorization No.         632       to use the Board Certificate of Authorization No.         81       to use the Authorization         641       NWS Technologies, LLC         Date       NWS Technologies, LLC         CERTIFICATE OF INSPECT	A parts): See atta	e statements ma evices described VR" and "NR" m pires April 3, pires April 9,	l above ules. 2003. 2003. nager. QA
10. Opening pressure:       1185 psig         Set-pressure adjustment made at:       NWS Technologies, LI         11. Description of work (include name and identifying number of replacement         12. Remarks:       See attachment 1.         12. Remarks:       See attachment 1.         14. Cesar V. Sierra       certify that to the best of my knowled         report are correct and the repair, modification or replacemtn of the p         conforms to Section XI of the ASME Code and the National Board In         National Board Certificate of Authorization No.         81       to use the         61/9/00       NWS Technologies, LLC         Date       NWS Technologies, LLC         I. Carl R. Enos       holding a valid commission issued by         Vessel Inspectors and certificate of competency issued by the jurisdid by       Hartford Steam Boiler Inspection & Insurance Co. of Hartford or replacement described in this report on	Aparts): See atta	e statements ma vices described VR" and "NR" n bires <u>April 3</u> , pires <u>April 9</u> , <u>Mar</u> bard of Boiler an <b>nessee</b> and bected the repai	above ules. 2003. 2003. hager, QA Title d Pressure d employed ir, modification e and belief
10. Opening pressure:       1185 psig         Set-pressure adjustment made at:       NWS Technologies, LI         11. Description of work (include name and identifying number of replacement         12. Remarks:       See attachment 1.         12. Remarks:       See attachment 1.         14. Cesar V. Sierra       certify that to the best of my knowled         report are correct and the repair, modification or replacemtn of the p         conforms to Section XI of the ASME Code and the National Board Ir         National Board Certificate of Authorization No.         632       to use the         631       to use the         632       to use the         633       to use the         634       to use the         635       to use the         636       NWS Technologies, LLC         Date       NWS Technologies, LLC         Repair Organization       Authoiz         CERTIFICATE OF INSPEC       Authoiz         1.       Carl R. Enos       holding a valid commission issued by         Vessel Inspectors and certificate of competency issued by the jurisdition or replacement described in this report on       6/19/00 and state         this repair, modification or replacement has been completed in according the state of the state	Aparts): See atta	e statements ma vices described VR" and "NR" n bires <u>April 3</u> , pires <u>April 9</u> , <u>Mar</u> bard of Boiler an <b>nessee</b> and bected the repai	above ules. 2003. 2003. hager, QA Title d Pressure d employed ir, modification e and belief
10. Opening pressure:       1185 psig         Set-pressure adjustment made at:       NWS Technologies, LI         11. Description of work (include name and identifying number of replacement         12. Remarks:       See attachment 1.         12. Remarks:       See attachment 1.         14. Cesar V. Sierra       certify that to the best of my knowled report are correct and the repair, modification or replacemtn of the p conforms to Section XI of the ASME Code and the National Board Ir National Board Certificate of Authorization No.         632       to use the National Board Certificate of Authorization No.         631       to use the National Board Certificate of Authorization No.         632       to use the National Board Certificate of Authorization No.         633       to use the National Board Certificate of Authorization No.         64       to use the National Board Certificate of competency issued by the jurisdition or replacement described in this report on <u>6/19/00</u> and state this repair, modification or replacement has been completed in accord cord and the National Board Inspection Code "VR" and "NR" rules.	A parts): See atta	e statements ma evices described VR" and "NR" m pires <u>April 3,</u> pires <u>April 9,</u> <u>Mar</u> pard of Boiler ar <u>nnessee</u> and pected the repai of my knowledge ion XI of the of t	above ules. 2003. 2003. hager, QA Title d Pressure d employed ir, modification e and belief, the ASME
10. Opening pressure:       1185 psig         Set-pressure adjustment made at:       NWS Technologies, LI         11. Description of work (include name and identifying number of replacement         12. Remarks:       See attachment 1.         12. Remarks:       See attachment 1.         14. Cesar V. Sierra       certify that to the best of my knowled         report are correct and the repair, modification or replacemtn of the p         conforms to Section XI of the ASME Code and the National Board Ir         National Board Certificate of Authorization No.         81       to use the         WWS Technologies, LLC         MWS Technologies, LLC         NWS Technologies, LLC         Date       NWS Technologies, LLC         Repair Organization       Authoiz         I.       Carl R. Enos         holding a valid commission issued by         Vessel Inspectors and certificate of competency issued by the jurisdid by         Hartford Steam Boiler Inspection & Insurance Co. of Hartford or replacement described in this report on       6/i9/co         or replacement described in this report on       6/i9/co         and the National Board Inspection Code "VR" and "NR" rules.         By signing this certificate, neither the undersigned nor my employer of the signing this certificate, neither the undersigned nor my employer of the signing this certificate, neither	LIANCE dge and belief the dge and belief the pressure relief de respection Code " e "VR" stamp exp e "NR" stamp ex	e statements ma evices described VR" and "NR" rr pires <u>April 3</u> , pires <u>April 9</u> , <u>Mar</u> pard of Boiler ar <u>nnessee</u> and pected the repai of my knowledge ion XI of the of t	above ules. 2003. 2003. nager, QA Title d Pressure d employed ir, modification e and belief, the ASME or implied
10. Opening pressure:       1185 psig         Set-pressure adjustment made at:       NWS Technologies, LI         11. Description of work (include name and identifying number of replacement         12. Remarks: See attachment 1.         12. Remarks: See attachment 1.         14. Cesar V. Sierra         certify that to the best of my knowled         report are correct and the repair, modification or replacemtn of the p         conforms to Section XI of the ASME Code and the National Board Ir         National Board Certificate of Authorization No.         632       to use the         NWS Technologies, LLC         Date       NWS Technologies, LLC         Repair Organization       Authorization         Vessel Inspectors and certificate of competency issued by the jurisdide by Hartford Steam Boiler Inspection & Insurance Co. of Hartford Steam Boiler Inspection Code "VR" and "NR" rules.         By signing this certificate, neither the undersigned nor my employer is concerning this repair, modification or replacement described in this is nor my employer shall be liable in any manner for any personal injury	Aparts): See atta	e statements ma evices described VR" and "NR" m pires April 3, pires April 9, Mar bard of Boiler ar nnessee and bected the repai of my knowledge ion XI of the of t	above ules. 2003. 2003. 2003. nager, QA Title d Pressure d employed ir, modification e and belief, he ASME or implied, undersigned
10. Opening pressure: 1185 psig Set-pressure adjustment made at: NWS Technologies, LI 11. Description of work (include name and identifying number of replacement 12. Remarks: See attachment 1. 12. Remarks: See attachment 1. 13. Cesar V. Sierra certify that to the best of my knowled report are correct and the repair, modification or replacemtn of the p conforms to Section XI of the ASME Code and the National Board Ir National Board Certificate of Authorization No. 14. Carl R. Enos NWS Technologies, LLC 15. Carl R. Enos holding a valid commission issued by Vessel Inspectors and certificate of competency issued by the jurisdi by Hartford Steam Boiler Inspection & Insurance Co. of Hartford or replacement described in this report on <u>6/i9/00</u> and state this repair, modification or replacement has been completed in accor Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer r concerning this repair, modification or replacement described in this hor my employer shall be liable in any manner for any personal injury ansing from or connected with this inspection.	Aparts): See atta	e statements ma evices described VR" and "NR" m pires April 3, pires April 9, Mar bard of Boiler ar nnessee and bected the repai of my knowledge ion XI of the of t	above ules. 2003. 2003. 2003. nager, QA Title d Pressure d employed ir, modification e and belief, he ASME or implied, undersigned

,,	: NWS Technologie 131 Venture Boulevard		Purchase Ord J. SC 29301	er #C31331 WRO # 00	
. Work performed for	Energy Northwest - Co	olumbia Genera	ating Station		
/4. Owner - name, ac Generating Station	dress and identification , North Power Plant Loo	of nuclear pow p, Richland, W	er plant: <u>Energy N</u> A 99352-0968	lorthwest - Columbia	
alve S/N: N63	790-03-0124				
he S/N for this va	lve was <u>N63790-(</u> cation of the valve to		The two middle design.	digits were changed to	)
1. Description of v					
1. Description of v	work: lisassembled. The n	ozzle was re	emoved and retu	rned to site with the	
1. Description of v The valve was o disc. WNP-2 machine	lisassembled. The n ed the nozzle to the r	new flexi-dis	c dimensions.		
1. Description of w The valve was of disc. WNP-2 machine NWS machined	lisassembled. The n ed the nozzle to the r the Disc Ring per C	new flexi-dis	c dimensions.		
1. Description of w The valve was of disc. WNP-2 machine NWS machined	lisassembled. The n	new flexi-dis	c dimensions.		
1. Description of w The valve was of disc. WNP-2 machined NWS machined Disc S/N:	lisassembled. The n ed the nozzle to the r the Disc Ring per C 197499-32-0019	new flexi-dis rosby Instruc	c dimensions. ction Manual CV	l No. 02-932-00.	0115)
1. Description of v The valve was o disc. WNP-2 machined NWS machined Disc S/N:	lisassembled. The n ed the nozzle to the r the Disc Ring per C 197499-32-0019 the valve.	new flexi-diso rosby Instruc and	c dimensions. ction Manual CV Nozzle S/N:	l No. 02-932-00. <b>N97498-45-0115</b>	0115)
1. Description of v The valve was o disc. WNP-2 machined NWS machined Disc S/N:	lisassembled. The n ed the nozzle to the r the Disc Ring per C 197499-32-0019	new flexi-diso rosby Instruc and	c dimensions. ction Manual CV Nozzle S/N:	l No. 02-932-00. <b>N97498-45-0115</b>	0115)
1. Description of w The valve was of disc. WNP-2 machined NWS machined Disc S/N: <u>N</u> were installed in Both disc and no	lisassembled. The n ed the nozzle to the r the Disc Ring per C 197499-32-0019 the valve.	new flexi-diso rosby Instruc and by NWS prio	c dimensions. ction Manual CV Nozzle S/N:	l No. 02-932-00. <b>N97498-45-0115</b>	0115)
1. Description of w The valve was of disc. WNP-2 machined NWS machined Disc S/N: <u>N</u> were installed in Both disc and no Other parts repla Disc Holder Spin	disassembled. The n ed the nozzle to the r the Disc Ring per Co 197499-32-0019 the valve. ozzle were polished to aced during the repa al Pins (2): MC 5	new flexi-dise rosby Instruc and by NWS prio iir include:	c dimensions. ction Manual CV Nozzle S/N:	l No. 02-932-00. <b>N97498-45-0115</b>	0115)
1. Description of w The valve was of disc. WNP-2 machined NWS machined Disc S/N: were installed in Both disc and no Other parts repla	disassembled. The n ed the nozzle to the r the Disc Ring per C 197499-32-0019 the valve. ozzle were polished f aced during the repa al Pins (2): MC 5	new flexi-dise rosby Instruc and by NWS prio iir include:	c dimensions. ction Manual CV Nozzle S/N:	l No. 02-932-00. <b>N97498-45-0115</b>	0115)

1 (			
6/19/00	NWS Technologies, LLC	Elas tierral	Manager, QA
Date	(repair organization)	(authorized representative)	(title)
6/19/00	Carl R. E	NB # 8460, A, N, I	TN# 2236
Date	Inspector's Signature		ndorsements), jurisdiction,& no.)

		PLAN	No. 2-1710
CROSBY	CROSBY VALV WREP	E B GAGE	COMPANY Runding Euro 7/10/0
FORM NV-1 FORM NV-1 FORM NV-1 FORM NV-1 FORM NV-1 FORM NV-1 FORM	DR SAFETY AND SAFETY REL the Provisions of the AS	IEF VALVES ME Code Rules	Q.C4
	DATA REPORT ty and Safety Relief Val		
1. Manufactured By Crosby Valve &	Gage Company, 43 Kendry	ick St., Wrentham, M	A 02093
Model No. <u>HB-65-BP-FN</u> Order N General E	o. <u>N94281</u> Contract   Lectric Company, 175 CA 95125	Date $\frac{4/24/79}{24}$ Nation	al Board No. <u>N/A</u>
3. Owner Washington Public Po	wer Supply System, R	ichland, Washingt	on 99352
4. Location of Plant Hanford R	eservation, Richland	, Washington 99:	352
5. Valve Identification <u>MPL #B22-</u>	F013 Serial No.N63790-	00-0124 Drawing No.	DS-A-63790 Re
5. Valve Identification <u>FTL #B22</u> Type Safety Relief Safety, Safety Relief, Pil	Orifice Size	R Pipe Size In nch Inch	let 6 Outlet
Power Actuated		5750	
6. Set Pressure (psig)	185	Rated Tem	perature
891 7	50 a 3 70 10 10 10 10	Blowdown (psig	2% to 11%
Stamped Capacity Hydrostatic Test (psig) Inlet	2270 0	975 psig (As 1100 psig (Bo cable to Valves for	dy Only)
Pressure Retaining Pieces	(Apd1:	LCADIE LO VAIVES IOL	
	Serial No.	Material	Specification Type or Grade
Bar Stock & Forgings	Identification	ASTM ALC	5-71 Gr. II 05 Gr. II
Body	<u>N93183-36-0087</u>	ASTM ALC	)5-71 Gr. II
Bonnet	N93407-36-0098	ASME SA	<u>05 Gr. II</u>
b. BRKEINSKENRAGEREE		ACME SA	537 Gr. 718
Soperation Disc Insert	N93185-37-0156		
Nozzle	N93184-33-0072	ASME SA	182 Gr. F316
Disc Holder K55484-31-0005	N89714-31-0008	AMS 566	2B
Spring Washers K62858-36-00	K62856-36-0116	ASME SA	105 Gr. II
Adjusting Bolt	N93410-33-0072		193 Gr. B6
Spindle Point K62873-37-0	136 N89720-43-0157	ASTM AS ASME_SA	64-71 Type 630 564 Type 630
c. Spring K62858-36-0081	NX2689-0126	ASTM A3	04-66 Gr. 4161
d Bolting			#6
Spindle Ball K62873-37-01		Stoody	
Thrust Bearing Adapter	N93409-32-0065	ASTM A	<u>193 Gr. B6</u> 93-71 Gr. B7 193 Gr. B7
	19) N93207-1522 thr		<u>193 Gr. B7</u> 194 Gr. 2H
Bonnet Stud Nut (.	187) N93210-1033 thr	ASTM A	194 Gr. 28 93-71 Gr. 87 193 Gr. 87
		11 LADD ASME S	193 Gr. B/
Inlet Stud (B	W21) N93216-1455 thr W22) N93218-1389 thr	ASTM A	194-71 Gr. 24 194 Gr. 2H

<ul> <li>Val.e originally built against Crosby Order No. <u>N51727</u>, Assembly No. <u>N56000</u>. Valve modification consists of replacement of the Disc Insert, Nozzle Bonnet Stud Nuts,</li> <li>Adjusting Bolt and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached. N63790-00-0124</li> </ul>
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, <u>1971</u> Edition, Addenda <u>No Addenda</u> , Code Case No. <u>1567 &amp; 1711</u> . Class <u>1</u> (Date) Date <u>1/-5-80</u> Signed Crosby Valve & Gage Co. by <u>C.G. Casarent</u> (N Certificate Holder) Our ASME Certificate of Authorization No. <u>1878</u> to use the <u>NV</u> symbol expires <u>September 30, 1983</u> . (Date)
CERTIFICATION OF DESIGN
Design information on file at Crosby Valve & Gage Company
Strange analysis report (Class 1 only) on file at Crosby Valve a Gage Company
Massachusetts 02093
Boyd P. Brooks
California Reg. No. 13033
W.D. Greeniaw
Stress feport certifica 57

<sup>1</sup>Signature not required - list name only.

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Massachusetts</u> and employed by <u>Factory Mutual Systems</u> <u>of Norwood</u>, <u>Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>i/i3</u>, 19<u>S//</u> and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components. By signing this certificate, neither the Inspector nor his employer makes any warrant, i i i provide the equipment described in this Data Report. Further-

By signing this certificate, neither the inspector not his employed many only active 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 Signed(	1/13 1951. John 22 11 1 mi	Commissions_	MA55 (Nat'1.	1265 Bd., State,	Prov. and No.)
	(Inspector)				

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



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

1. Owner: Energy Northwest	
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 9935	;2
2. Plant: Columbia Generating Station	
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 9935	52

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001A MS-RV-1A MS-RV-1A	WPPSS * Crosby Crosby	B22-G001A-P1 N63790-03-0122 N63790-03-0047 ** (N63790-00-0047) **	N/A N/A N/A	N/A N/A N/A	1983 1981 1981	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

- 7. Description Of Work Performed: Replaced existing relief valve MS-RV-1A. The replacement work was performed as follows: 1) Removed existing relief valve Serial No N63790-03-0122 with set pressure of 1175 Psig at rated temperature of 575<sup>0</sup> F.
  - 2) Performed VT-1 visual examination on twelve (12) new nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
  - 3) Installed replacement relief valve with Serial No N63790-03-0047 with set pressure of 1175 Psig at rated temperature of 575° F.
  - 4) Installed VT-1 visually examined tweive (12) new nuts for the relief valve inlet joint. Note None of the existing nuts were reused.

5) Installed sixteen (16) new bolts for the relief valve outlet joint. Note - None of the existing bolts were reused.

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

#### NOTES -

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

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0047 was installed is Main Steam (MS) piping system B22-G001A-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

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

4) The replacement relief valve Serial No N63790-03-0047 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0047 was previously modified (upgraded) to Serial No N63790-03-0047 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1699.

PLAN No 2-1
<b>EMERGY</b> NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
sts Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other * Test Pressure: 1022 Psig Test Temperature: 215° F Component Design Pressure: 1250 Psig Temperature: 575° F
emarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0047, 2) See attached NV-1 Data Report for replacement relief valve Serial No N63790-00-0047, 3) * The test pressure and the test temperature on the relief valve pint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R601 "React ure Vessel Leakage Test".
CERTIFICATE OF COMPLIANCE
Ve certify that the statements made in this Owner's Report are correct and this replacement conforms
o the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable
Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable
Prepared By Under Sups Signed By Under Sups
Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
DateDate
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of
Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $\frac{1}{24}$ to $\frac{7}{24}$ (0 ) and state to the best of my knowledge and belief, the
Owner has performed examinations and taken corrective measures described in this Owner's Report
in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or
implied concerning the examinations and corrective measures described in this Uwner's Report
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
1. M. Tanto Commissions 7486W/7486 NIS
Inspector's Signature National Board, State, and Endorsements
~ / Duchan
Date 1/24/01

PLAN No. 2-1711 FORM NVR-1 REPORT OF REPAIR REPLACEMENT OF NUCLEAR PRESSURE RELIEF DEVICES

		<u>, Š</u>			-7110101
	WS Technologie		Purchase O	rder #C31331 \	NRO # 008
2. Work performed for: E					
3/4. Owner - name, addres Station, North Power F	ss and identification of	nuclear power r		Northwest - Colum	bia Generating
<ol> <li>a: Repaired pressure re b: Name of manufacture c: Identifying nos.</li> </ol>	elief device: Main S	iteam Safety Re Sage Co.	ief Valve		
HB-65-BP-FN			N/A ste	eam <u>6 x 10</u>	1981
(type) d: Construction Code:	(n ASME Sec. III Div. 1 (name/section/division)	nfr's S/N) 1971 (edition)	(NB#) (se 	rvice) (size) <u>1567 &amp; 1711</u> (Code Cases(s))	(yr.built) 1
6. ASME Code Section XI			1989	N/A	(Code Class) N/A
7. ASME Code Section XI	used for repairs, repla	cements:	(edition) 1989	(addenda) N/A	(Code Case(s)) N/A
8. Construction Code used	for repairs, replaceme	ents:	(edition) 1971	(addenda) N/A	(Code Case(s)) N/A
9. Design responsibilities:	N/A		(edition)	(addenda)	(Code Case(s))
<ol> <li>Opening pressure: <u>11</u> Set-pressure adjustmer</li> <li>Description of work (inc</li> <li>Remarks: See attachme</li> </ol>	It made at: NW	S Technologies, number of replaceme		sing <u>steam</u> attachment 1.	
	CERTIFI	CATE OF COM	PLIANCE		
I, Cesar V. Sierra	certify that to the b	est of my knowl	edge and belief	f the statements ma	de in this
report are correct and the re conforms to Section XI of th National Board Certificate o National Board Certificate o	e ASME Code and the f Authorization No.	National Board 632 to use t	Inspection Cod	de "VR" and "NR" ru expires April 3,	iles. 2003.
	air Organization	Autho	victore	Man Man	ager, QA Title
	CERTIF	CATE OF INSP			
I, Carl R. Enos Vessel Inspectors and certifi by Hartford Steam Boiler or replacement described in this repair, modification or re Code and the National Board By signing this certificate, ne concerning this repair, modifi nor my employer shall be liad arising from or connected with	holding a valid com cate of competency is inspection & Insuran this report on	mission issued sued by the juris ce Co. of Hartfo 2/20 and stat completed in acc and "NR" rules nor my employe described in this any personal inju	by The National diction of rd, CT have e that to the be ordance with S difference with S report. Futher ry, property da	inspected the repair est of my knowledge ection XI of the of the arranty, expressed rmore, neither the u mage or loss of any	employed . modification and belief, he ASME or implied, pdersigned
$\frac{6/19/00}{\text{Date}}$	Inspector's Signature		B # 8460, A, N	N, I TN# 2236	

1. Work performed by: NWS Tech 131 Venture	nologies, LLC Purch Boulevard, Spartanburg, SC 2930	nase Order #C31331 WRO # 008
2. Work performed for: Energy North	west - Columbia Generating Station	n
3/4. Owner - name, address and iden Generating Station, North Power F	tification of nuclear power plant: Plant Loop, Richland, WA 99352-09	Energy Northwest - Columbia
Valve S/N: N63790-03-0047	, 	
The S/N for this valve was	63790-00-0047 The two r valve to a flexi-disc design.	middle digits were changed to
disc.	I. The nozzle was removed a to the new flexi-disc dimensi	
NWS machined the Disc Ring	g per Crosby Instruction Man	ual CVI No. 02-932-00.
Disc S/N: N97499-34-00 were installed in the valve.	029 and Nozzle	S/N: N97498-44-0114 (pre mod s/n N93184-44-0114)
Both disc and nozzle were po	olished by NWS prior to instal	llation.
Other parts replaced during the Disc Holder Spiral Pins (2): Eductor Gasket: Spindle: Inlet Studs (2):	MC 54407794 MC 56230461	(old S/N: K82137-34-0015)

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve failed the steam seat tightness test, was jacked and lapped to restore seat integrity and successfully seat tightness tested on steam.

6/19/00	NWS Technologies, LLC	lisantierrel	Manager, QA
Date	(repair organization)	(authorized representative)	(title)
<u>6/19/0</u> 0	Carl R.E.	1 / / / / / / / / / / / / / / / / / / /	TN# 2236
Daté	Inspector's Signature	Commissions (NB (incl en	dorsements), jurisdiction.& no.)

			Mularis Sunsh
CRC	ISBY "	ROSBY VALVE	B GAGE COMPAN'
		W R E N T H	AN, MASS PLAN NO.2
		Tün n	ET CONTRACT PLET IFITE T
	FORM NV-1 FOR As Required by th	SAFETY AND SAFETY RELIEF e Provisions of the ASME (	VALVES Q.C4 Code Rules
		DATA REPORT	
	Safety	and Safety Relief Valves	•••
		age Company, 43 Kendrick S Name and Address	
Model No. HB	-65-BP-FN Order No.	N94275 Contract Date tric Company, 175 Curt	<u>4/24/79National Board No.N/A</u> ner Ave.,
2. Manufactured	For San Jose, C	A 95125	Order No. 205-AJ986
			land, Washington 99352
		Name and Address	
4. Location of 1	Plant Hanford Rese	rvation, Richland, Was	hington 99352
5. Valve Identi	fication MPL #B22-F	<u>013</u> Serial No. <u>N63790-00-</u>	0047Drawing No. DS-A-63790
	ty Relief		Pipe Size Inlet 6 Outlet_
Safety,	Safety Relief, Pilo	lnch	Inch Inch Ir
	Actuated 1175		575°
	(psig) <u>1175</u>		Rated Temperature
Stamped Capa	city884,314	<u>a 3</u> 20verpressure	Blowdown (psig) 2% to 11%
	Test (psig) Inlet	2370 Outlet 1	75 psig (Assembled Valve) 100 psig (Body Only)
-		(Applicabl	e to Valves for Closed Systems
Pressure Retain	ing fieles	Serial No.	Material Specification
a. Rat Stock &	. Forgings	Identification	Including Type or Grade
		N93183-35-0066	ASTM A105-71 Gr. II ASME SA105 Gr. II
Body	-		ASTM A105-71 Gr. II ASME SA105 Gr. II
Bonnet	-	<u>N93407-35-0029</u>	ASME SAIDS GI. II
p. 202330522000	K Disc Insert	N93185-34-0078	ASME SA637 Gr. 718
22333377.1.000			
Nozzle	-	<u>N93184-32-0049</u>	ASME SA182 Gr. F316
Disc Holde:	r*K55484-35-0098 _		AMS 5662B
Spring Washe		K62857-35-0085	ASTM A105-71 Gr. II ASME SA105 Gr. II
Adjusting Bo	olt	N93410-33-0054	ASME SA193 Gr. B6
-	nt K62873-37-0148	•	ASTM A564-71 Type 630 ASME SA564 Type 630
c. Spring K628		*N89722-0003	ASTM A304-66 Gr. 416
d. Bolting			<u> </u>
	<sup>11</sup> K62873-37-0148	N93213-0215	<u> </u>
e. Treesian	ring Adapter	N93409-32-0049	Stoody #6 ASME SA193 Gr. B6
e. Treesian	ring Adapter d (BW5, Il	N93409-32-0049 7) N93207-0561 thru 05	Stoody #6           ASME SA193 Gr. B6           72         ASME SA193 Gr. B7
e. Thrust Bea	ring Adapter d (BW5, I1 d Nut (J8	N93409-32-0049 7) N93207-0561 thru 05 7) N93210-0781 thru 07	Stoody #6           ASME SA193 Gr. B6           72         ASME SA193 Gr. B7           92         ASME SA194 Gr. 2H
E Spindle Ba e. Thrust Bea Bonnet Stu	ring Adapter d (BW5, I1 d Nut (J8 (BW	N93409-32-0049 7) N93207-0561 thru 05	Stoody #6           ASME SA193 Gr. B6           72         ASME SA193 Gr. B7           92         ASME SA194 Gr. 2H           74         ASME SA193 Gr. B7

	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	······································
	· ··· ···· ···· ··· ··· ··· ··· ··· ··	Ander No NIO3600 Acc	embly No <u>N56000</u> . Valve
ive griginally	built against Crosby Costs of replacement of	Free Disc Insert Nozz	le. Bonnet Stud Nuts.
_ification cor	isists of replacement of	ter remachining of th	e Body, Spring Washers,
justing Bolt.	and infust bearing and	a an Adjusting Bolt Bu	tton Assembly. New
nnet, and Spir	dle Assembly, and addin	ng an Anjusting bolt bu	-Mi-Briec-
rialization is	required unless indica	aplate attached.	Energy Ging - 64/80 NW 3790.00.0047
iginal namepla	ate removed and new name	epiace attached.	NUE 190.00.004/
•	CERTI	FICATE OF COMPLIANCE	
We certify that	t the statements made in	this report are correct	and that this valve conforms Plant Components, Section
to the Tules Q	f construction of the AS	ME Code for Nuclear Powe	er Plant Components, Section
III. Div. 1.	1971 Edition, Ad	ldenda No Addenda , Co	ode case no. 150/ 6 1/11
Class		(Date)	ode Case No. 1567 6 1711
	<b>A D D D D D D D D D D</b>	when Meline & Case Co. by	. C.C. Caravane
Date 11-3.	80 Signed Cros	Certificate Holder)	<u></u>
	(N		To use the NV
Our ASME Certa	lficate of Authorization	No1878	to use the <u>NV</u>
symbol expires	<u>September 30, 1983</u>	•	
-	(Date)		
			· · · · · · · · · · · · · · · · · · ·
	· CER'	TIFICATION OF DESIGN	
Lesign inform	ation on file at <u>Cro</u>	osby Valve & Gage Compa	ny
Server opplys	is report (Class 1 only)	on file at Crosby Va	lve & Gage Company
Stress dualys			
<u>43 Kendri</u>	ck Street, Wrentham, Ma	assachusetts 02095	
Design specif	ications certified by	Boyd P. Brooks	
DE State	California	Reg. No	13655
Jeace	certified by	W.D. Greenlaw	
Stress report	Certified by	Dec. No.	14784
PE State	Massachusetts	Keg. NO	14704
	,	•	
Simature no	ot required - list name of	only.	
	CEPTIF'	ICATE OF SHOP INSPECTION	•
•		commission issued by the	National Board of Boiler and
I, the under	signed, noiding a value sel Inspectors and the S	tate of Frovince of thas	3661166666
	L. Footomy Vitual SVSTAT	Mex di Notwood	8338 <u>CIIU3CCC</u>
			port on
constructed	this pump, or valve, in	accordance with the ASM	Code for Nuclear Power Plant
Components.		•	
	·		
By signing t	his certificate, neither	the Inspector nor his	employer makes any warrant, ' this Data Report. Further-
expressed or	implied, concerning the	equipment described in	this Data Report. Further- in any manner for any
more, neithe	implied, concerning the r the Inspector nor his	employer shall be liable	tring from or connected with
personal inj	ury or property damage of	or a loss of any kind ar	ising from or connected with
this inspect	ion.		NTADELATION GENY
Date	19 19 81.	Fight 1	STERNING UNLI
	THE DULLANCE	Commissions M	ASS 126 F
Signed	An Durine	COUNTISSIONS	t'1. Bd., State, Prov. and No.)
1	7 (Inspector)	/	
	Magufasturare Mutu	al Insurance Company -	Mutual Boiler & Machinery Div.
	OSTON MANULACTUIELS MULU	we sugarance comband .	

ZX00380111



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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer' <b>s</b> Serial No	National Board No	Other I.D.	<b>Year</b> Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001B MS-RV-3B MS-RV-3B	WPPSS * Crosby Crosby	B22-G001B-P1 N63790-03-0051 N63790-03-0053 ** (N63790-00-0053) **	N/A N/A N/A	N/A N/A N/A	1983 1981 1980	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-3B. The replacement work was performed as follows:
 1) Removed existing relief valve Serial No N63790-03-0051 with set pressure of 1185 Psig at rated temperature of 575<sup>o</sup> F.

Performed VT-1 visual examination on twelve (12) new nuts for the relief valve inlet joint. VT-1 visual examination results acceptable.
 Installed replacement relief valve with Serial No N63790-03-0053 with set pressure of 1185 Psig at rated temperature of 575<sup>0</sup> F.

4) Installed VT-1 visually examined twelve (12) new nuts for the relief valve inlet joint. Note - None of the existing nuts were reused.

5) Installed sixteen (16) new bolts for the relief valve outlet joint. Note - None of the existing bolts were reused.

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

#### NOTES -

Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
 The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0053 was installed is

Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

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

4) The replacement relief valve Serial No N63790-03-0053 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0053 was previously modified (upgraded) to Serial No N63790-03-0053 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1701.

PLAN No 2-
ENERGY
NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
sts Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       *         Test Pressure: 1022 Psig       Test Temperature: 215° F         Component Design Pressure: 1250 Psig       Temperature: 575° F
emarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0053, 2) See attached NV-1 Data Report for replacement relief valve Serial No N63790-00-0053, 3) * The test pressure and the test temperature on the relief value bint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 "React sure Vessel Leakage Test".
CERTIFICATE OF COMPLIANCE
Ve certify that the statements made in this Owner's Report are correct and this replacement conforms o the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable Prepared By
DateDateDate
CERTIFICATE OF INSERVICE INSPECTION
the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Rhode Island have inspected the components described in this Owner's Report during the period to to and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or
mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal njury or property damage or a loss of any kind arising from or connected with this inspection.
<u>A. M. Torre</u> Commissions <u>7480w</u> 7486 wIS I. Inspector's Signature National Board, State, and Endorsements
Date 7/24/01
7 7

F(	ORM NVR-1 RE OF NUCLE	PORT OF RE		X REP	PLACE	10. 2-1 MENT 🖾	
1. Work performed by:	NWS Technolo 131 Venture Boulev			urchase Or 9301	rder #	C31331 V	7/15/5, VRO # 008
2. Work performed for:							
3/4. Owner - name, add		n of nuclear pow	er plant		Northwe	est - Columi	bia Generating
<ol> <li>a: Repaired pressure b: Name of manufact c: Identifying nos. HB-65-BP-F</li> </ol>	urer: Crosby Valve old s/n: N6	in Steam Safety & Gage Co. 3790-00-0053 63790-03-0053		······································			
(type)		(mfr's S/N)	- <u>N/.</u> (NB		vice)	<u>6 x 10</u> (size)	
d: Construction Code	ASME Sec. III Di	• •	•	"/ (ser N/A	•	(size) & 1711	(yr.built) 1
	(name/section/divisi	on) (editio	) – – –	(addenda)	(Code C	ases(s))	(Code Class)
6. ASME Code Section 2	KI applicable for inse	rvice inspection:	_	1989		N/A	N/A
7. ASME Code Section )	(I used for repairs, re	eplacements:	-	(edition) 1989		idenda) N/A	(Code Case(s)) N/A
8. Construction Code us	ed for repairs, replac	ements:		(edition) 1971	•	ldenda) N/A	(Code Case(s))
			-	(edition)		Idenda)	N/A (Code Case(s))
9. Design responsibilities	:: <b>N/A</b>			(,	(	,	
Set-pressure adjustr 11. Description of work ( 	include name and identify	NWS Technologi			sing <u>st</u>	eam	
	CER			NCE			
I, Cesar V. Sierra	certify that to t	he best of my kn	owledge	and belief	the state	ements mad	le in this
report are correct and the	repair, modification	or replacemtn of	the ore	ssure relief	devices	described -	above I
conforms to Section XI of National Board Certificate	of Authorization No.	the National Bo 632 to u	ard Insp	ection Cod	le "VR" a		
National Board Certificate				/R" stamp ( N <b>P</b> * stam <u>p (</u>		April 3, 2 April 9, 2	
6/19/00 NWSTO	chnologies, LLC	$\rho_{c}$	In sh				
	lepair Organization	A	uthorized	representative	<u>1/</u>	<u>Mana</u>	ager. QA Title
	CER	TIFICATE OF IN		/	_		
I. Carl R. Enos	holding a valid	commission issu	ed by T	ne National	Board o	of Boiler and	Pressure
Vessel Inspectors and cer	tificate of competend	cy issued by the	urisdicti	on of 1	Tenness	ee and	employed
by Hartford Steam Boile	er Inspection & Insu	Irance Co. of Ha	rtford, C	T_have in	nspected	the repair.	modification
or replacement described this repair modification or		6/19/00 and	state tha	it to the bes	st of my	knowledge	and belief,
this repair, modification or Code and the National Bo	ard Inspection Code	"VR" and "NR" r	accorda	nce with Se		or the of th	e ASME
By signing this certificate,	neither the undersign	ned nor my empl	over ma	kes anv wa	irrantv e	xpressed c	
concerning this repair, mo	dification of replacen	nent described in	this rep	ort. Futheri	more ne	ither the ur	
nor my employer shall be l arising from or connected	able in any manner	for any personal	injury, p	roperty dar	nage or	loss of any	kind
6/19/00 (2	zil R. G		NR #	3460, A.N	I The	# 2236	
Date	Inspector's Signat	ure				ments), jurisa	

		laciment (1011)	
1. Work performed by: NWS Tec 131 Venture	hnologies, LLC Boulevard, Spartanbu	Purchase Orde rg, SC 29301	r # C31331 WRO # 008
2. Work performed for: Energy North	hwest - Columbia Gene	rating Station	
3/4. Owner - name, address and ide Generating Station, North Power	ntification of nuclear por Plant Loop, Richland, V	wer plant: <u>Energy No</u> VA 99352-0968	orthwest - Columbia
Valve S/N: <u>N63790-03-005</u>	3		
The S/N for this valve was indicate the modification of the	N63790-00-0053 e valve to a flexi-disc	The two middle d c design.	igits were changed to
11. Description of work:			
The valve was disassemble disc.	d. The nozzle was r	emoved and return	ned to site with the
WNP-2 machined the nozzl	e to the new flexi-di	sc dimensions.	
NWS machined the Disc Rin Disc S/N: N97499-32-0	ng per Crosby Instru 0020 and		
	anu	Nozzle S/N:	N97498-50-0145
were installed in the valve.			(pre mod s/n N93184-50-0145)
Both disc and nozzle were p	olished by NWS pri	or to installation.	
Other parts replaced during Disc Holder Spiral Pins (2):	MC 54407794		
Eductor Gasket:	MC 56230461		
Inlet Studs (5):		B7 KMY, 1 stud - <u>N</u>	I B7 HBW
			<u>.</u>

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

6/19/00	NWS Technologies, LLC	Viera lerral	Manager, QA
Date	(repair organization)	(authorized representative)	(title)
6/10/	A DO Q		(
<u>ס / ר / ס</u> Date	Cach T. Tr	NB # 8460, A, N, I	TN# 2236
Date	Inspector's Signature	Commissions (NB (incl e	indorsements), jurisdiction & no.)

, J		KLAN NO. 2-1116 MS-RV-3B
CROSBY	CROSBY VALVE WRENTHA	B GAGE COMPANY
As Required by t	DR SAFETY AND SAFETY RELIEF V/ the Provisions of the ASME Coc DATA REPORT ty and Safety Relief Valves	TIVES Q.C44D
1. Manufactured By Crosby Valve 6	Gage Company, 43 Kendrick St.	Wrentham, MA 02093
	Name and Address N94275 Contract Date 4	/24/79 National Board No. N/A
		r Ave., Order No. 205-AJ986
2. Manufactured For San Jose C	A 95125	
3. Owner Washington Public Su	pply System, Richland, Wa	shington 99352
	Name and meaters	
4. Location of PlantHanford R	eservation, Attinand, Was	53 Deautes No. DS-A-63790 Rev.
5. Valve Identification <u>MPL #B22-</u>	F013 Serial No. <u>N63790400-00</u>	TRATIK NO. DO OSTO IN
TypeSafety Relief	Orifice Size R Pi	pe Size Inlet 6 Outlet 10 Inch Inch Inch
Safety, Safety Relief, Pil Power Actusted		0
6. Set Pressure (psig) 1185	· · · · · · · · ·	575 <sup>0</sup> Rated Temperature
801 70		Blowdown (psig) 27 to 117
Stamped CapacityUJI,7-		Blowdown (psig) 27 to 117 975 psig (Assembled Valve) 00 psig (Body Only)
Hydrostatic Test (psig) Inlet_	Outlet(Applicable	to Valves for Closed Systems Onl
Pressure Retaining Pieces		Material Specification
n - One-h f Engeloge	Serial No. Identification	Including Type or Grade
Bar Stock & Forgings a. SECTREX	N93183-35-0072_	ASTM A105-71 Gr. II ASME SA105 Gr. II
Body		ASTM A105-71 Gr II ASME SA105 Gr. II
Bonnet	<b>N93407-35-0035</b>	
b. Bacchtopicciccicompitat	: <b>N93185-34-0085</b>	ASME SA637 Gr. 718
Sopparentate Disc Insert		ASME SA182 Gr. F316
Nozzle	<u></u>	
Disc Holder*K55484-35-0082	*N89714-34-0089 K62856-35-0091	AMS 5662B ASTM A105-71 Gr. II
Spring Washers K62858-35-003	TOATS AT ANT	ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0060	ASME SA193 Gr. B6 ASTM A564-71 Type 630
-	*N89720-34-0085	ASIM AS64-71 Type 630
SpindlePoint K62873-35-005	*N89722-0011	ASTM A304-66 Gr. 4161H
c. Spring K62858-35-0035 d. Bolting		2X00380127
Spindle Ball e. unerxident K62873-35-0053	N93213-0053	Stellite #6
Thrust Bearing Adapter	<b>N93409-32-0055</b>	ASME SA193 Gr. B6
	BW5) N93207-0633 thru 064	4 ASME SA193 Gr. B7
	J87) N93210-0853 thru 086	ASTM A193-71 Gr. B7
	<u>8W6) N93216-0635 thru 064</u> BW8) N93218-0639 thru 065	ACT 410/-71 Cr 28
Inlet.Stud Nut		
Alteration Pole Button	N93411-33-0062	ASME SA193 Gr. B6

Valve originally built against Crosby Order No. N103600, As modification consists of replacement of the Disc Insert, No Adjusting Bolt, and Thrust Bearing Adapter, remachining of Bonnet, and Spindle Assembly, and adding an Adjusting Bolt serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.	the Body, Spring Washers, Button Assembly. New
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this report are correct to the rules of construction of the ASME Code for Nuclear Por III, Div. 1, 1971 Edition, Addenda No Addenda (Date) Class 1 (Date) Date //-5-20 Signed Crosby Valve & Gage Co. (N Certificate Holder) Our ASME Certificate of Authorization No. 1878 symbol expires September 30, 1983 (Date)	Code Case No. 1567 & 1711 . by M. G. Casavant
CERTIFICATION OF DESIGN	
Design information on file at <u>Crosby Valve &amp; Gage</u>	Company
Design information on file at erect, Stress analysis report (Class 1 only) on file at <u>Crosby Va</u>	lve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093	
43 Kendrick Street, Wreninam, massachusells 02075	
Design specifications certified by Boyd P. Brooks	13655
Design specifications certifies of       PE State     California   Reg. No	
W. D. Greenlaw	
PE State Massachusetts Reg. No.	14/04
1 Signature not required - list name only.	FIR INTERNATION ONLY

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Massachusetts</u> and employed by Factory Mutual Systems\* of <u>Norwood</u>, <u>Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>11/21</u>, 19<u>60</u> and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date Commissions MASS 1266 (Nat'l. Bd., State, Prov. and No.) Signed (Inspec

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

ZX00380128



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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
822-G001C MS-RV-1C MS-RV-1C	WPPSS * Crosby Crosby	B22-G001C-P1 N63790-03-0046 N63790-03-0045 ** (N63790-00-0045) **	N/A N/A N/A	N/A N/A N/A	1983 1981 1981	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-1C. The replacement work was performed as follows: 1) Removed existing relief valve Serial No N63790-03-0046 with set pressure of 1165 Psig at rated temperature of 575° F.

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

3) Installed replacement relief valve with Serial No N63790-03-0045 with set pressure of 1165 Psig at rated temperature of 575° F.

4) Installed VT-1 visually examined twelve (12) new nuts for the relief valve inlet joint. Note - None of the existing nuts were reused.

5) Installed sixteen (16) new bolts for the relief valve outlet joint. Note - None of the existing bolts were reused.

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

#### NOTES -

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

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0045 was installed is Main Steam (MS) piping system B22-G001C-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

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

4) The replacement relief valve Serial No N63790-03-0045 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0045 was previously modified (upgraded) to Serial No N63790-03-0045 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1698.

PLAN NORTHWEST	lo 2-171
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
Fests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other         Test Pressure: 1022 Psig       Test Temperature: 215° F         Component Design Pressure: 1250 Psig       Temperature: 575° F	<u>.</u>
Remarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0045, 2) See attached To Data Report for replacement relief valve Serial No N63790-00-0045, 3) * The test pressure and the test temperature on the r joint was recorded during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 ssure Vessel Leakage Test".	elief valve
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement confort to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Itel Of Supply         Kuldip Singh - Program Lead Engineer (PLE)         Date       10001	<b>'LE</b> )
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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period	of the port
Date 7/11/01 Commissions 74/6 w/7486 wF	L) ts

PLAN NO. 2-1713 FORM NVR-1 REPORT OF REPAIR REPLACEMENT X OF NUCLEAR PRESSURE RELIEF DEVICES 1. Work performed by: NWS Technologies, LLC C31331 WRO # 008 Purchase Order # 131 Venture Boulevard. Spartanburg, SC 29301 2. Work performed for: Energy Northwest - Columbia Generating Station 3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968 5. a: Repaired pressure relief device: Main Steam Safety Relief Valve b: Name of manufacturer: Crosby Valve & Gage Co. c: Identifying nos. old s/n: N63790-00-0045 HB-65-BP-FN new s/n: N63790-03-0045 N/A steam 6 x 10 1981 (type) (mfr's S/N) (NB#) (service) (size) (yr.built) ASME Sec. III Div. 1 d: Construction Code: 1971 N/A 1567 & 1711 1 (name/section/division) (edition) (Code Cases(s)) (addenda) (Code Class) 6. ASME Code Section XI applicable for inservice inspection: 1989 N/A N/A (edition) (addenda) (Code Case(s)) 7. ASME Code Section XI used for repairs, replacements: 1989 N/A N/A (edition) (addenda) (Code Case(s)) 8. Construction Code used for repairs, replacements: 1971 N/A N/A (edition) (addenda) (Code Case(s)) 9. Design responsibilities: N/A 10. Opening pressure: 1165 psig Set-pressure adjustment made at: NWS Technologies, LLC using steam 11. Description of work (include name and identifying number of replacement parts): See attachment 1. 12. Remarks: See attachment 1. CERTIFICATE OF COMPLIANCE certify that to the best of my knowledge and belief the statements made in this 1. Cesar V. Sierra report are correct and the repair, modification or replacemtn of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2003. National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2003. **NWS Technologies, LLC** Manager, QA Date Repair Organization Authonzed representative Title CERTIFICATE OF INSPECTION holding a valid commission issued by The National Board of Boiler and Pressure 1. Carl R. Enos Vessel Inspectors and certificate of competency issued by the jurisdiction of and employed Tennessee by Hartford Steam Boiler Inspection & Insurance Co. of Hartford, CT have inspected the repair, modification or replacement described in this report on 19/00 and state that to the best of my knowledge and belief. this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied. concerning this repair, modification or replacement described in this report. Futhermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection. 6

1. Work performed by: NWS Technolog 131 Venture Bouleva		Purchase Ord SC 29301	ier#C31331 WRO # 008
2. Work performed for: Energy Northwest - C	olumbia Generatir	ng Station	
3/4. Owner - name, address and identification Generating Station. North Power Plant Loc	of nuclear power op. Richland, WA 9	plant: <u>Energy N</u> 99352-0968	forthwest - Columbia
Valve S/N: N63790-03-0045			
The S/N for this valve was <u>N63790-</u> indicate the modification of the valve to	00-0045 Th o a flexi-disc de	ne two middle ( esign.	digits were changed to
The S/N for this valve was <u>N63790-</u> indicate the modification of the valve to 11. Description of work: The valve was disassembled. The r disc.	o a flexi-disc de	esign.	
<ul> <li>indicate the modification of the value to</li> <li>11. Description of work:</li> <li>The value was disassembled. The r</li> <li>disc.</li> <li>WNP-2 machined the nozzle to the</li> </ul>	o a flexi-disc de nozzle was rem new flexi-disc d	esign. oved and retu dimensions	rned to site with the
<ul> <li>indicate the modification of the valve to</li> <li>11. Description of work:</li> <li>The valve was disassembled. The r</li> <li>disc.</li> <li>WNP-2 machined the nozzle to the</li> <li>NWS machined the Disc Ring per C</li> </ul>	o a flexi-disc de nozzle was rem new flexi-disc d rosby Instructio	esign. oved and retu limensions. on Manual CVI	rned to site with the No. 02-932-00.
<ul> <li>indicate the modification of the valve to</li> <li>11. Description of work:</li> <li>The valve was disassembled. The r</li> <li>disc.</li> <li>WNP-2 machined the nozzle to the</li> <li>NWS machined the Disc Ring per C</li> </ul>	o a flexi-disc de nozzle was rem new flexi-disc d rosby Instructio	esign. oved and retu dimensions	rned to site with the No. 02-932-00. <b>N97498-44-0108</b>
<ul> <li>indicate the modification of the valve to</li> <li>11. Description of work:</li> <li>The valve was disassembled. The r</li> <li>disc.</li> <li>WNP-2 machined the nozzle to the</li> <li>NWS machined the Disc Ring per C</li> </ul>	o a flexi-disc de nozzle was rem new flexi-disc d rosby Instructio	esign. oved and retu limensions. on Manual CVI	rned to site with the No. 02-932-00.

Disc Holder Spiral Pins (2): MC 54407794 Eductor Gasket: MC 56230461

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

1 1		A L R	
	VS Technologies, LLC	Cesan decimal	Manager, QA
Date (re	pair organization)	(authorized representative)	(title)
6/19/	$\bigcirc \land \land \land \land \bigcirc$		
<u>e/1 (/@</u> 0	Carl R.C.	NB # 8460, A, N, I	TN# 2236
Date	Inspector's Signature	Commissions (NB (incl en	dorsements), jurisdiction.& no.)

•	· · · ·	- RV- 18- PLAN NO. 2-1713
CROSBY	CROSBY VALVE WRENTHA	B GAGE COMPANY M. MASS Kurdup S 7/10/
	R SAFETY AND SAFETY RELIEF VAND SAFETY RELIEF VAND SAFETY RELIEF VAND SAFETY RELIEF VANDE COC	
	DATA REPORT	
Safet	y and Safety Relief Valves	FOR INFORMATION UNLY
1. Manufactured By Crosby Valve 6		Wrentham, MA 02093
	Name and Address	/24/79 National Board No. N/A
General Ele	ectric Company, 175 Curtr	ner Ave
2. Manufactured For San Jose, (		Order No. 205-AJ986
3. Owner Washington Public Por		and, Washington 99352
	Name and Address	
4. Location of Plant Hanford Res	servation, Richland, Wash	nington 99352
S. Valve Identification MPL #B22-	F013Serial No. N63790-00-00	045Drawing No. DS-A-63790 Rev. C
Type Safety Relief Safety, Safety Relief, Pilo		pe Size Inlet 6 Outlet 10 Inch Inch Inch
Power Actuated	•	
6. Set Pressure (psig) 1	150	575°F
865 725		Rated Temperature
Stamped Capacity865,725		
Hydrostatic Test (psig) Inlet	<u></u>	75 psig (Assembled Valve) 00 psig (Body Only)
Pressure Retaining Pieces	(Applicable	to Valves for Closed Systems Only)
	Serial No.	Material Specification
Bar Stock & Forgings	Identification	Including Type or Grade
		ASTM A105-71 Gr. II
Body	<u>N93183-35-0064</u>	ASME SAIDS Gr. II ASTM A105-71 Gr. II
Bonnet	<u>N93407-35-0027</u>	ASME SA105 Gr. II
d. <b>Exensiver</b> kinkkikkik	. <b></b>	
MARKANAKANA Disc Insert	N93185-34-0076	ASME SA637 Gr. 718
Nozzle	N93184-32-0047	ASME SA182 Gr. F316
• • • • •		AMS 5662B
Disc Holder*K55484-35-0092	<u></u>	ASTM A105-71 Gr. II
Spring Washers K62858-35-0027		ASME SA105 Gr. II
Adjusting Bolt	N93410-33-0052	ASME SA193 Gr. B6
Spindle Point K62873-37-0146	N89720-43-0143	ASME SA564 Type 630
c. Spring K62858-35-0027	NX2689-0123	ASTM A304-66 Gr. 4161H
		7 X 0 0 3 8 0 0 9 3
d. Bolting Spindle Ball e. Monoccianos K62873-37-0146	N93213-0213	Stoody #6
	N93409-32-0047	ASME SA193 Gr. B6
Thrust Bearing Adapter	7) N93207-0537 thru 0548	ASTM 6193-71 Gr. 87
	37) N93210-0757 thru 0768	
		ASTM A193-71 Gr. B/
	NG) N93216-0539 thru 0550 NB) N93218-0543 thru 0554	
	3	Adme daly4 di. In
Adjusting Bolt Button	N93411-32-0043	ASME SA193 Gr. B6

modification consists of replacement of the Disc Insert, Nozzle, Bonnet Stud Nuts, Adjusting Bolt, and Thrust Bearing Adapter, remachining of the Body, Spring Washers, Bonnet, and Spindle Assembly, and adding an Adjusting Bolt Button Assembly. New Serialization is required unless indicated by an asterisk. Original nameplate removed and new nameplate attached.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, <u>1971</u> Edition, Addenda <u>No Addenda</u> , Code Case No. <u>1567 &amp; 1711</u> . Class <u>(Date)</u> Date <u>11-5-80</u> Signed Crosby Valve & Gage Co. by <u>C.G. Castavank</u> (N Certificate Holder) Our ASME Certificate of Authorization No. <u>1878</u> to use the <u>NV</u> symbol expires <u>September 30, 1983</u> . (Date)
CERTIFICATION OF DESIGN
Design information on file at Crosby Valve & Gage Company
Stress analysis report (Class 1 only) on file at Crosby Valve & Gage Company
43 Kendrick Street, Wrentham, Massachusetts 02093
Design specifications certified by Boyd P. Brooks
PE State California Reg. No. 13655
Stress report certified by W.D. Greenlaw
PE State Massachusetts Reg. No14784
<sup>1</sup> Signature not required - list name only.
CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Massachusetts</u> and employed by <u>Factory Mutual Systems*</u> of <u>Norwood, Massachusetts</u> have inspected the pump, or valve, described in this Data Report on <u>1/9</u> , 19 <u>67</u> and state that to the best of my knowledge and belief, the N Certificate Holder has. constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.
By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the equipment described in this Data Report. Further- more, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
DateI9_19_6/ SignedCommissionsMASS/266 (Inspector)

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

ZX00380214



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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer' <b>s</b> Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001D MS-RV-4D MS-RV-4D	WPPSS * Crosby Crosby	B22-G001D-P1 N63790-03-0060 N63790-03-0061 ** (N63790-00-0061) **	N/A N/A N/A	N/A N/A N/A	1983 1980 1980	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-4D. The replacement work was performed as follows: 1) Removed existing relief valve Serial No N63790-03-0060 with set pressure of 1205 Psig at rated temperature of 575° F.

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

3) Installed replacement relief valve with Serial No N63790-03-0061 with set pressure of 1205 Psig at rated temperature of 575° F.

4) Installed VT-1 visually examined twelve (12) new nuts for the relief valve inlet joint. Note - None of the existing nuts were reused.
5) Installed sixteen (16) new bolts for the relief valve outlet joint. Note - None of the existing bolts were reused.

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

#### NOTES -

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

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0061 was installed is Main Steam (MS) piping system B22-G001D-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

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

4) The replacement relief valve Serial No N63790-03-0061 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0061 was previously modified (upgraded) to Serial No N63790-03-0061 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1703.

	PLAN No 2-17
	<b>EMERGY</b> NORTHWEST
FOR	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
	Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       *         Test Pressure: 1022 Psig       Test Temperature: 215° F       Component Design Pressure: 1250 Psig       Temperature: 575° F
Data Report for re	attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0061, 2) See attached NV-1 placement relief valve Serial No N63790-00-0061, 3) * The test pressure and the test temperature on the relief valv during ASME Section XI pressure test which was performed in accordance with PPM No OSP-RPV-R801 *Reactor je Test*.
	CERTIFICATE OF COMPLIANCE
We certify that	the statements made in this Owner's Report are correct and this replacement conforms
o the rules of t	the ASME Code, Section XI. hbol Stamp: Not Applicable
l ype Code Syn Certificate Of A	Authorization No.: Not Applicable
Expiration Date	e: Not Applicable
Prepared By	Kuldip Singh - Program Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
riepareu by	Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)
Date	7/10/01 Date 7/10/01
- <u> </u>	
	CERTIFICATE OF INSERVICE INSPECTION
Vessel Inspect Johnston, Rhode	ned, holding a valid commission issued by the National Board of Boiler and Pressure fors and the State of Washington and employed by Factory Mutual Insurance Company of a Island have inspected the components described in this Owner's Report during the form to 7/1/0/ and state to the best of my knowledge and belief, the
Owner has per	formed examinations and taken corrective measures described in this Owner's Report
By elaning this	with the requirements of the ASME Code, Section XI. s certificate neither the Inspector nor his employer makes any warranty, expressed or
implied conce	rning the examinations and corrective measures described in this Owner's Report.
Furthermore 1	neither the inspector nor his employer shall be liable in any manner for any personal erty damage or a loss of any kind arising from or connected with this inspection.
15	commissions 7486 WI
100	spector's Signature National Board, State, and Endorsements
In	
In: Date 7/11	101

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F(	ORM NVR-1 OF NUC	REPORT C	OF REPAI	R 🖾 REP	LATN NO. Z LACEMENT J ICES Kar	
1. Work performed by:	NWS Techno 131 Venture Bo			Purchase Or 29301	der #C31331	WRO # 008
2. Work performed for:						
3/4. Owner - name, add Station, North Powe	ress and identific	ation of nucle	ar power pla	······	Northwest - Colu	mbia Generating
5. a: Repaired pressure b: Name of manufact	urer: Crosby V		Co.	f Valve	<u> </u>	
c: Identifying nos.		N63790-00-0				
	N new s/n:				<u>am 6x1</u>	0 1980
(type) d: Construction Code	ASME Sec. I	(mfr's S/N II Div 1	I) ( 1971	•	vice) (size	(j)
	(name/section/c		(edition)	N/A (addenda)	1567 & 1711 (Code Cases(s))	
6. ASME Code Section 2	KI applicable for i	nservice inspe	. ,	• -,		(Code Class)
				1989 (edition)	N/A (addenda)	(Code Case(s))
7. ASME Code Section >	(I used for repair	s, replacemen	ts:	1989	N/A	(Code Case(s)) N/A
9 Construction Onde un				(edition)	(addenda)	(Code Case(s))
8. Construction Code use	ed for repairs, rep	placements:		1971	<u>N/A</u>	N/A
				(edition)	(addenda)	(Code Case(s))
9. Design responsibilities	: <u>N/A</u>					
<ol> <li>Description of work (</li> <li>12. Remarks: See attach</li> </ol>			nologies, LL		ing <u>steam</u> ttachment 1.	
	certify that repair, modificat the ASME Code of Authorization of Authorization chnologies, LLu epair Organization	ion or replace and the Natio No. 632 No. 81 C	my knowled mtn of the p nal Board In to use the to use the <i>Licen</i> Authorn	ge and belief ressure relief spection Code "VR" stamp e "NR" stamp e <i>UCCPC</i> ed representative	e "VR" and "NR" expires <u>April 3</u> expires <u>April 9</u> Ma	d obour
		ERTIFICATE				
I. Carl R. Enos Vessel Inspectors and cer by Hartford Steam Boile or replacement described	r Inspection & I	tency issued to nsurance Co	by the jurisdi of Hartford	ction of <u>T</u> . CT have in	spected the repa	d employed ir, modification
this repair modification or	replacement bas	6/19/00	2 and state	inat to the bes	t of my knowledg	e and belief,
this repair, modification or Code and the National Boa	ard Inspection Co	de "VR" and '	ieu in accori 'NR'' mies	uance with Se	cuon XI of the of	the ASME
By signing this certificate,	neither the under	signed nor my	r employer n	nakes any wa		
concerning this repair, mol	pilication or repla	cement descri	ibed in this r	eport Futhern	nore neither the	
nor my employer snall be i	lable in any mani	her for any per	sonal injury	property dan	hage or loss of ar	iv kind
arising from or connected	with this inspectio	on.			J	,
<u>6/19/20</u> (	Val R.	Eur		# 8460. A. N.		
	Inspector's Si	gnature	Com	missions (NB (inc	d endorsements) juri	Soliction & no 1

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I. Work perform	ed by: NWS Technologie		Purchase Ord	er # C31331 WRO # 008
	131 Venture Boulevard	1. Spartanbur	g, SC 29301	
. Work perform	ed for: Energy Northwest - Co	lumbia Gener	ating Station	
3/4. Owner - nan	ne, address and identification of	of nuclear pow	ver plant: Energy N	orthwest - Columbia
Generating S	tation, North Power Plant Loop	p, Richland, W	/A 99352-0968	
/alve S/N:	N63790-03-0061			
	· · · · · · · · · · · · · · · · · · ·			
-				
the S/N for th	is valve was N63700_0	10-0061	بمالملم تمسيم ببعاد مطلا	dimika uun ala suu su
	is valve was <u>N63790-0</u>		The two middle	digits were changed to
	is valve was <u>N63790-0</u> odification of the valve to		The two middle of the sign.	digits were changed to
ndicate the m	odification of the valve to		The two middle of the state of the second se	digits were changed to
ndicate the m	odification of the valve to	a flexi-disc	: design.	-
ndicate the m 1. Description The valve v	odification of the valve to	a flexi-disc	: design.	-
ndicate the m 1. Description The valve v disc.	odification of the valve to n of work: vas disassembled. The n	o a flexi-disc ozzle was re	emoved and retu	-
ndicate the m 1. Description The valve v disc. WNP-2 mad	odification of the valve to n of work: vas disassembled. The n chined the nozzle to the r	o a flexi-disc ozzle was re new flexi-dis	emoved and retu cdimensions.	rned to site with the
ndicate the m 1. Description The valve v disc. WNP-2 mad	odification of the valve to n of work: vas disassembled. The n chined the nozzle to the r	o a flexi-disc ozzle was re new flexi-dis	emoved and retu cdimensions.	rned to site with the
ndicate the m 1. Description The valve v disc. WNP-2 mad	odification of the valve to n of work: vas disassembled. The n	o a flexi-disc ozzle was re new flexi-dis	emoved and retu cdimensions.	rned to site with the No. 02-932-00.
ndicate the m 1. Description The valve v disc. WNP-2 mad NWS mach	odification of the valve to n of work: vas disassembled. The n chined the nozzle to the r ned the Disc Ring per Cu	o a flexi-disc ozzle was re new flexi-dis rosby Instru	emoved and retu contractions dimensions. ction Manual CV	rned to site with the No. 02-932-00. <b>N97498-33-0068</b>
ndicate the m 1. Description The valve v disc. WNP-2 mad NWS mach Disc S/N:	odification of the valve to n of work: vas disassembled. The nu chined the nozzle to the r ned the Disc Ring per Cu N97499-32-0015	o a flexi-disc ozzle was re new flexi-dis rosby Instru	emoved and retu contractions dimensions. ction Manual CV	rned to site with the No. 02-932-00.
ndicate the m 1. Description The valve v disc. WNP-2 mad NWS mach Disc S/N: were installe	odification of the valve to n of work: vas disassembled. The n chined the nozzle to the r ned the Disc Ring per Cu	o a flexi-disc ozzle was re new flexi-dis rosby Instru and	emoved and retu c dimensions. ction Manual CV Nozzle S/N:	rned to site with the No. 02-932-00. <b>N97498-33-0068</b>

Disc Holder Spiral Pins (2):	MC 54407794
Eductor Gasket:	MC 56230461
Inlet Studs (1):	H/C: <u>N</u> B7 HBW

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

4/19/00	NWS Technologies, LLC	alan ,	litral	Manager, QA
' Date	(repair organization)	(authorized rep	resentative	(title)
6/19/00	O ADO	,		
0/11/00	Carl N. Eng	$\overline{\mathcal{D}}$	NB # 8460, A, N, I	TN# 2236
Date	Inspector's Signature		Commissions (NB (incl en	ndorsements), jurisdiction.& no.)

PLAN NO. 2-1-114

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		V. 20	1 p Seu
		faces	13p Sev. 7/10/0
			<b></b>
		& GAGE COMPANY	
CROSBY			
	WRENTR	AM, MA55	
<i>r</i>			
FORM NV-) FO As Resulted by (	DR SAFETY AND SAFETY RELIEF the Provisions of the ASME C	V/IVES G.C -44D ode Rules	
	DATA REPORT		
Safe	ty and Safety Relief Valves		
. Henufactured By Crosby Valve 6	Gage Company, 43 Kendrick S	t., Frenthan, MA 02093	
	Name and Address		
Hodel No. HB-65-32-FN Order N	o. N94275 Contract Date	4/24/79 National Board No. N/A	
General Elec Manufactured For <u>San Jose, CA</u>	stric Company, 175 Curth 95125	Oreer No. 205-A1986	
79	as and Asgress		
. Owner Washington Public Pow	er Supply Syster, Richl	and, Kashington 99352	
	Name and Augurass		
. Location of Plant Eanford Rese			
. Valve lientification MPL_#B22-		OCCIDENTIAL NO. DC-1-67700 Bar	r       -
. Valve least1f1Cation FPL /KZZ-	-PUI 3261381 NO. NO 1790-00-		
- · · · · ·			
Iver Safety Relief	Orifice Size_R	Pipe Size inlet 6 Gutlet 10	
- · · · · ·	Orifice Size_R	Pipe Size Inlet 6 Gutlet 10 inch inch inch	
Type <u>Safety Relief</u> Salety, Salety Ballef, Pil	Orifice Size_R	Pipe Size Inlet 6 Gutlet 10 inch inch inch	
Type <u>Safety Relief</u> Saiety, Saiety Relief, Pil Power Actuated 6, Set Pressure (paig) <u>1205</u>	Orifice Size <u>F</u> Ot. Inch	Pipe Size inlet <u>6</u> Gutlet <u>10</u> inch inch inch <u>\$750</u> Kated Temperature	
Type <u>Safety Relief</u> Saiety, Saiety Relief, Pil Power Actuated 6, Set Pressure (paig) <u>1205</u>	Orifice Size <u>R</u> Inch 0 3 20vergressure	Pipe Size inlet 6 Gutlet 10 inch inch inch F kated Temperature Sloudown (psiz) 22 to 112	
Type <u>Safety Relief</u> Saiety, Saiety Relief Power Actuated 6. Set Pressure (paid) 1205 Stamped Capacity 906,621	Orifice Size <u>R</u> Inch 0 3 20vergressure	Pipe Size inlet 6 Gutlet 10 inch inch inch F kated Temperature Sloudown (psiz) 22 to 112	
Type <u>Safety Relief</u> Salety, Salety Relief Power Actuated S. Set Pressure (peig) 1205 Stamped Capacity 906,621 Nydrostatic Test (peig) Inlet_	Orifice Size <u>R</u> Inch 0 3 20vergressure	Pipe Size inlet <u>6</u> Gutlet <u>10</u> inch inch inch <u>\$750</u> Kated Temperature	
Type <u>Safety Relief</u> Saiety, Saiety Relief Power Actuated 6. Set Pressure (paid) 1205 Stamped Capacity 906,621	Orifice Size <u>F</u> ot. inch <u>9 3 20verpressure</u> <u>2370</u> Outlet 1 (Applicebi	Pipe Size Inlet 6 Gutlet 10 Inch Inch Inch F kated Temperature Slowdown (nsiz) 22 to 112 975 psig (Assembled Valve) 100 psig (Endy Only) to Taives for Closed Systems Only	
Type <u>Safety Relief</u> Saiety, Safety Relief Power Actuated 6. Set Pressure (pais) <u>1205</u> Stamped Capacity <u>906,621</u> Hydrostatic Test (paig) Inlet_ Pressure Retaining Pieces	Orifice Size_R	Pipe Sizeinlet 6Gutlet 10 inch inch inch F kated Temperature Slowdown (nsiz) 27 to 117 975 psig (Assembled Valve) 100 rsig (Endy Only) e to Taives for Closed Systems Only Material Specification	
Type <u>Safety Relief</u> Salety, Salety Relief Power Actuated S. Set Pressure (peig) 1205 Stamped Capacity 906,621 Nydrostatic Test (peig) Inlet_	Orifice Size <u>F</u> ot. inch <u>9 3 20verpressure</u> <u>2370</u> Outlet 1 (Applicebi	Pipe Sizeinlet 6Gutlet 10 inch inch inch F kated Temperature Slowdown (nsiz) 27 to 117 975 psig (Assembled Valve) 100 psig (Body Only) a to Taives for Closed Systems Only Haterial Specification including Type or Grade	
Type	Orifice Size_ <u>R</u> et. inch <u>9_3_20verpressure</u> <u>2370</u> Outlet] (Applicabl Serial No. Identification	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
Type <u>Safety Relief</u> Saiety, Safety Relief Power Actuated 6. Set Pressure (pais) <u>1205</u> Stamped Capacity <u>906,621</u> Hydrostatic Test (paig) Inlet_ Pressure Retaining Pieces	Orifice Size_ <u>R</u> inch inch <u>9 3 20verpressure</u> <u>7370</u> Outlet <u>1</u> (Applicabl Serial No. Identification <u>N93183-35-0080</u>	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
Type <u>Safety Relief</u> Saiety, Saiety Relief Sover Actuated S. Set Pressure (psis) <u>1205</u> Stamped Capacity <u>906,621</u> Hydrostatic Test (psis) Inlet_ Pressure Retaining Pieces <u>Ray Stock</u> & Porgings a. XMATING	Orifice Size_ <u>R</u> et. inch <u>9_3_20verpressure</u> <u>2370</u> Outlet] (Applicabl Serial No. Identification	Pipe Size inlet <u>6</u> Gutlet <u>10</u> inch inch inch inch <u>\$750</u> F kated Temperature Slosdown (nsiz) <u>27 to 117</u> 975 psig (Assembled Valve) 100 vsig (Endy Only) r to Taves for Closed Systems Only Material Specification Including Type or Grade ASTM A105-71 Gr. II	
Type <u>Safety Relief</u> Salety, Safety Relief Salety, Safety Relief, Pil Power Actuated 6. Set Pressure (peig) 1205 Stamped Capacity 906.621 Hydrostatic Test (peig) Inlet_ Pressure Retaining Pieces Bar Stock & Forgings a. XXXIII (CAR & Forgings body Bonnet b. BDIXINGEXEXPENDINGS	Orifice Size_ <u>R</u> inch inch <u>9_3_20verpressure_</u> <u>2370</u> Outlet] (Applicabl Serial No. Identification <u>N93183-35-0080</u> N93407-35-0043	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
Type <u>Safety Relief</u> Saiety, Saiety Relief Sover Actuated S. Set Pressure (psis) <u>1205</u> Stamped Capacity <u>906,621</u> Hydrostatic Test (psis) Inlet_ Pressure Retaining Pieces <u>Ray Stock</u> & Porgings a. XMATING	Orifice Size_ <u>R</u> inch inch <u>9 3 20verpressure</u> <u>7370</u> Outlet <u>1</u> (Applicabl Serial No. Identification <u>N93183-35-0080</u>	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
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Type <u>Safety Relief</u> Saiety, Safety Relief Sover Actuated S. Set Pressure (paid) <u>1205</u> Stamped Capacity <u>906,621</u> Hydrostatic Test (paid) Inlat_ Pressure Retaining Pieces Bar Stock & Forgings Nother States Body Bonnat b. <u>BOIXERGENERS</u> Disc Insert Kozzie	Orifice Size_ <u>R</u> inch inch <u>0 3 20verpressure</u> <u>2370</u> Outlet <u>1</u> (appliceb) Serial No. Identification <u>N93183-35-0080</u> <u>N93185-34-0093</u> <u>N93184-33-0065</u>	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
Type <u>Safety Relief</u> Saiety, Safety Relief Sover Actuated S. Set Pressure (paid) <u>1205</u> Stamped Capacity <u>906,621</u> Hydrostatic Test (paig) Inlat_ Pressure Retaining Pieces Bar Stock & Forgings Sody Bonnet b. BOTXINGUERER Disc Insert	Orifice Size_R et 	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
Type <u>Safety Relief</u> Salety, Salety Relief Solety, Salety Relief, Pil Power Accusted S. Set Pressure (psid) <u>1205</u> Stamped Capacity <u>906.621</u> Hydrostatic Test (psig) Inlat_ Pressure Retaining Pieces <u>Rer Stock &amp; Forgings</u> <u>NONY MODELECOUNTRY</u> Bonnet b. <u>BORXEGOUNDOUNTRY</u> DOUNTRYCHART Disc Insert Kozzle Disc Holder*K55184-35-0087	Orifice Size_ <u>R</u> inch inch <u>a</u> 3 20verpressure <u>2370</u> Outlet (Applicable Serial No. Identification <u>N93183-35-0080</u> <u>N93185-34-0083</u> <u>N93184-33-0065</u> <u>en89714-34-0117</u> <u>K6286-35-0099</u>	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
Type	Orifice Size_R et et et et et et et coulet (applicable Serial No. Léantification <u>N93183-35-0080</u> <u>N93407-35-0043</u> <u>N93185-34-0093</u> <u>N93184-33-0065</u> <u>et89714-34-0117</u> K62856-35-0099 3 K62857-35-0064	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
Type	Orifice Size_R et 	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
Type	Orifice Size_R et 	Pipe Sizeinlet 6Gutlet 10 inch	
Type	Orifice Size_R et 	Pipe Size inlet 6 Gutlet 10 inch inch inch inch 	
TypeSafety_Relitf Saiety, Saietv Helsei, Pil Power Actuated S. Set Pressure (psid) 1205 Stamped Capacity906,621 Hydrostatic Test (psig) Inlat Pressure Bataining Piaces Bar Stock & Porgings Body Bonnet b. MONINGERER Disc Insert Kozzie Disc Holder*K55184-35-0087 Spring Mashers K62858-35-004 Adjusting Bolt Spindle Point K62873-35-00 c. Spring K62858-35-0043	Orifice Size_E inch ot. ot. ot. ot. ot. ot. ot. ot.	Pipe Sizeinlet 6Gutlet 10 inch	
TypeSafety_Relitf Saiety, Saietv Helsei, Pil Power Actuated S. Set Pressure (psid) 1205 Stamped Capacity906,621 Hydrostatic Test (psig) Inlat Pressure Bataining Piaces Bar Stock & Porgings Body Bonnet b. MONINGERER Disc Insert Kozzie Disc Holder*K55184-35-0087 Spring Mashers K62858-35-004 Adjusting Bolt Spindle Point K62873-35-00 c. Spring K62858-35-0043	Orifice Size_E inch ot. ot. ot. ot. ot. ot. ot. ot.	Pipe Sizeinlet 6Gutlet 10 inch	
TypeSafety_Relitf Saiety, Safety Helief, Pil Power Actuated S. Set Pressure (paid) 1205 Stamped Capacity906,621 Hydrostatic Test (paid) Pressure Bataining Piaces Bar Stock & Porgings Body Bonnet B. BOXINGERER Disc Insert Nozale Disc Holder*#K55184-35-0087 Spring Mashers K62358-35-004 Adjusting Bolt Spindle Point K62873-35-006 C. Spring K62858-35-0043 4. Bolting Spindle Ball (Signate Ball	Orifice Size_E	Pipe Sizeinlet 6 Gutlet 10 inch	
Type	Orifice Size_E	Pipe Size inlet 6 _Gutlet 10 inch inch inch inch	
Type <u>Safety Relief</u> Salety, Safety Relief Salety, Safety Relief, Pil Power Actuated S. Set Pressure (peig) <u>1205</u> Stamped Capacity <u>906.621</u> Nydrostatic Test (peig) Inlet_ Pressure Retaining Pisces Bar Stock & Forgings a. XXVI2000 Bonnet b. BDIXINGENERY Disc Insert Nozzie Disc Holder*R55184-35-0087 Spring Mashers K52858-35-004 Adjusting Bolt Spindle Point K52873-35-006 C. Spring K62858-35-0043 d. Bolting Spindle Ball e. XXVI200000000000000000000000000000000000	Orifice Size_E	Pipe Size Inlet 6 Gutlet 10 Inch	
Type <u>Safety Relief</u> Salety, Safety Relief Salety, Safety Relief, Pil Power Accusted S. Set Pressure (peig) <u>1205</u> Stamped Capacity <u>906,621</u> Nydrostatic Test (psig) Inlet_ Pressure Retaining Pieces Bar Stock & Forgings Nody Bonnet b. BOYXENDEXENDERING NOTHERNEY Dist Insert Nozzie Dist Holder*K55484-35-0087 Spring Washers K62858-35-0043 4. Joining Solt Spindle Point K62873-35-006 C. Spring K62858-35-0043 4. Joining Spindle Ball Spindle Ball Spindle Reli K62873-35-006 Thrust Bearing Mapper Bonnet Stud (117, B Bonnet Stud Nut (117, B	Orifice Size_E	Pipe Size Inlet 6 _Gutlet 10 Inch	
Type <u>Safety Relit</u> Saiety, Saietv Malaei, Pal Power Actuated S. Set Pressure (peig) <u>1205</u> Stamped Capacity <u>906,621</u> Nydrostatic Test (psig) Inlet_ Pressure Mataining Pieces Bar Stock & Forgings Mody Bonnet b. BOYXENDEXENDENTING NOXYEMPETER Disc Holder*K55184-35-0087 Spring Mashers K62858-35-0043 Adjusting Bolt Spindle Point K62873-35-0063 4. Bolting Spindle Ball Spindle Ball Spindle Ball Spindle Stud <u>(117, B</u> Bonnet Stud <u>(117, B</u>	Orifice Size_E	Pipe Size inlet 6 Gutlet 10 inch inch inch inch inch	
Type <u>Safety Relit</u> Saiety, Saietv Malaei, Pal Power Actuated S. Set Pressure (peig) <u>1205</u> Stamped Capacity <u>906,621</u> Nydrostatic Test (psig) Inlet_ Pressure Mataining Pieces Bar Stock & Forgings Mody Bonnet b. BOYXENDEXENDENTING NOXYEMPETER Disc Holder*K55184-35-0087 Spring Mashers K62858-35-0043 Adjusting Bolt Spindle Point K62873-35-0063 4. Bolting Spindle Ball Spindle Ball Spindle Ball Spindle Stud <u>(117, B</u> Bonnet Stud <u>(117, B</u>	Orifice Size_E	Pipe Size inlet 6 Gutlet 10 inch inch	
Type <u>Safety Relit</u> Saiety, Saietv Malaei, Pal Power Actuated S. Set Pressure (peig) <u>1205</u> Stamped Capacity <u>906,621</u> Nydrostatic Test (psig) Inlet_ Pressure Mataining Pieces Bar Stock & Forgings Mody Bonnet b. BOYXENDEXENDENTING NOXYEMPETER Disc Holder*K55184-35-0087 Spring Mashers K62858-35-0043 Adjusting Bolt Spindle Point K62873-35-0063 4. Bolting Spindle Ball Spindle Ball Spindle Ball Spindle Stud <u>(117, B</u> Bonnet Stud <u>(117, B</u>	Orifice Size_E	Pipe Size inlet 6 Gutlet 10 inch inch inch inch inch	

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

CERTIFICAT	E OF	COMP	LIANCE
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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,\_ Edition, AddenaaNo Addenda \_, Code Case No. \_ 1567 & 1971 1 (Date) Class by OP.a. \_\_\_\_\_Signed\_Crosby Valve & Gage Co. Date 11-5-80 æ (N Certificate Holder) ×v Our ASME Certificate of Authorization No. 1878 to use the symbol expires September 70, 1983 (Date?

CERTIFICATION OF DESIGN

Valve & Gage Company
file at Crosby Valve & Gage Company
husetts 02093
Bovd P. Brooks
Reg. No13655
W.D. Greenley
Reg. No14784

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 Inspectrue and the State or Province of <u>Massachusetts</u> and employed by <u>Factory Nutual Systems</u> of <u>Norwood</u>, <u>Massachusetts</u> have inspected the pump. or valve, described in this Data Report on <u>P2-9</u>, 19<u>00</u> and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, er valve, in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date Commissions MARS 1266 (Nat'l. Bd., State, Prov. and No. ) Signed ££ E Str \*Arkwright-Boston Hanufacturers Hutual Insurance Company - Mutual Boiler & Machinery Div. MAB FOR INFOR 5 6 4

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

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

3. (a) Work Performed By: Energy Northwest

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

- (c) Type Code Symbol Stamp: Not Applicable
- (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer' <del>s</del> Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001B MS-RV-1B MS-RV-1B	WPPSS * Crosby Crosby	B22-G001B-P1 N63790-03-0139 N63790-03-0140 ** (N63790-00-0140) **	N/A N/A N/A	N/A N/A N/A	1983 1976 1994	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-1B. The replacement work was performed as follows: 1) Removed existing relief valve Serial No N63790-03-0139 with set pressure of 1165 Psig at rated temperature of 575° F.

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

Installed replacement relief valve with Serial No N63790-03-0140 with set pressure of 1165 Psig at rated temperature of 575<sup>o</sup> F.
 Installed VT-1 visually examined twelve (12) new nuts for the relief valve inlet joint. Note - None of the existing nuts were reused.

5) Installed sixteen (16) new bolts for the relief valve outlet joint. Note - None of the existing bolts were reused.

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

#### NOTES -

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

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0140 was installed is Main Steam (MS) piping system B22-G001B-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

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

4) The replacement relief valve Serial No N63790-03-0140 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0140 was previously modified (upgraded) to Serial No N63790-03-0140 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1707.

Date: 07/10/01 Sheet: 1 Of 1 Unit: Not Applicable

		PLAN No 2-171
	ENERGY	
	NORTHWEST	
FORM	NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLAC	EMENTS (Back)
	ydrostatic Pneumatic Nominal Operating Pressure: 1022 Psig Test Temperation pmponent Design Pressure: 1250 Psig Temperature:	ture: 215 <sup>0</sup> F
Data Report for replac	ched NVR-1 Code Data Report for replacement relief valve Serial No N637 cement relief valve Serial No N63790-00-0140, 3) * The test pressure and ng ASME Section XI pressure test which was performed in accordance wi rest".	the test temperature on the relief valve
	CERTIFICATE OF COMPLIANCE	
No cortify that the	statements made in this Owner's Report are correct and	<b>I this</b> replacement <i>conforms</i>
o the rules of the	ASME Code, Section XI.	
	bl Stamp: Not Applicable horization No.: Not Applicable	
Sertificate Of Auti Expiration Date: N		
	ALC DOL AL	Nh COL
Prepared By	Juday Surph Signed By Auto Jip Singh - Program Lead Engineer (PLE) Kuldip Singh	- Program Lead Engineer (PLE)
	7/10/01 Date	nlaur
Date		
	CERTIFICATE OF INSERVICE INSPECTION	,
Vessel Inspectors Johnston, Rhode Is period //25/ Owner has perfor	I, holding a valid commission issued by the National Boa and the State of Washington and employed by Factory Mut and have inspected the components described in this Ov $\mathcal{O}/$ to $2/11/O/$ and state to the best of my med examinations and taken corrective measures descri-	tual Insurance Company of vner's Report during the knowledge and belief, the
By signing this ce implied, concerni Furthermore. neit	h the requirements of the ASME Code, Section XI. Artificate neither the Inspector nor his employer makes an ng the examinations and corrective measures described ther the Inspector nor his employer shall be liable in any damage or a loss of any kind arising from or connected	in this Owner's Report. manner for any personal
M	Commissions 7486	17486 WIIS
Inspec	ctor's Signature National B	oard, State, and Endorsements
////	11/	
Date		

FORM NVR-1 REPORT OF RE OF NUCLEAR PRESSUR	PAIR RE RE	IXI REP	AN NO PLACEMI VICES		_
1. Work performed by: <b>NWS Technologies, LLC</b> 131 Venture Boulevard, Spartanburg	F	urchase Or	der #(	C31331 V	VRO # 008
2. Work performed for: Energy Northwest - Columbia Genera	ating St	ation			
3/4. Owner - name, address and identification of nuclear power Station, North Power Plant Loop, Richland, WA 99352-09			Northwest	- Columi	bia Generating
<ul> <li>5. a: Repaired pressure relief device: <u>Main Steam Safety F</u></li> <li>b: Name of manufacturer: <u>Crosby Valve &amp; Gage Co.</u></li> </ul>		alve			
c: Identifying nos. old s/n: N63790-01-0140 HB-BP-65-DF new s/n: N63790-03 0140					
	N/	A ste	am	6 x 10	1994
d' Construction Codo: ASME See ULD:	(NB	/ (	/ice)	(size)	(yr.built)
(name/section/division)		N/A	1567 &		1
(conor	n)	(addenda)	(Code Cas	es(s))	(Code Class)
6. ASME Code Section XI applicable for inservice inspection:	-	1989	N/	Ά	N/A
7. ASME Code Section XI used for repairs, replacements:	_	(edition) 1989	(adde N/	•	(Code Case(s)) N/A
8. Construction Code used for repairs, replacements:	_	(edition) 1971	(adde N/	,	(Code Case(s)) N/A
9. Design responsibilities: N/A		(edition)	(adde	nda)	(Code Case(s))
<ol> <li>Description of work (include name and identifying number of replace</li> <li>12. Remarks: See attachment 1.</li> </ol>	ment par	ts): <u>See a</u>	ttachment	1.	
6/19/DD NWS Technologies, LLC	wledge he pres rd Insp e the "V e the "K	and belief t	devices de "VR" and xpires	Scribed a "NR" rul April 3, 2 April 9, 2	above es. 003.
CERTIFICATE OF INS	PECTI				
Carl R. Enos holding a valid commission issued Vessel Inspectors and certificate of competency issued by the inspectors and certificate of competency issued by the inspector set inspectors and certificate of competency issued by the inspector set inspector set in	d by Th	e National I			
by Hartford Steam Boller Inspection & Insurance Co. of Hart	ford, C	T have in	spected th	e renair	modification
or replacement described in this report on $\frac{6}{19}$ and statistic repair, modification or replacement has been expendent.	ate tha	t to the best	t of my kno	owiedae a	and belief
	~~~ <i>~</i>	ice with Sec	tion XI of	the of the	ASME
By signing this certificate, neither the undersigned nor my employ oncerning this repair, modification or replacement described in the or my employer shall be liable in any manner for any persent	er mak	es any war	ranty, expl	ressed or	implied.
or my employer shall be liable in any manner for any personal in rising from or connected with this inspection.	ijury, pr	operty dam	iore, neithi age or los	er the uni s of any l	dersigned kind
Dare	The second s	460. A.N.			
maperior 2 Signature	Commiss	ions (NB linc)	endorsemer	nts) jurisa:	tion & co

	FORM NVR-1 At	ttachment (1 of 1)		
1. Work performed by: NWS Tec 131 Ventur	chnologies, LLC e Boulevard, Spartanbu	Purchase Orde rg, SC 29301	er # C31331 WRO # 008	
2. Work performed for: Energy Nor	thwest - Columbia Gene	rating Station		
3/4. Owner - name, address and ide Generating Station, North Powe	entification of nuclear po r Plant Loop, Richland, V	wer plant: <u>Energy No</u> NA 99352-0968	orthwest - Columbia	
Valve S/N: N63790-03-014		,		
The S/N for this valve was	e valve to a flexi-dise	The two middle o c design.	ligits were changed to	
The valve was disassemble disc.	ed. The nozzle was i	removed and retur	ned to site with the	
WNP-2 machined the nozz NWS machined the Disc R Disc S/N: N97499-32-	ing per Crosby Instru	sc dimensions. uction Manual CVI Nozzle S/N:	No. 02-932-00. N97498-33-0072	
were installed in the valve. Both disc and nozzle were	polished by NWS pr	ior to installation.	(pre mod s/n N93184-33-0072)	
Other parts replaced during	the repair include:			
Disc Holder Spiral Pins (2):	MC 54407794			
Eductor Gasket:	MC 56230461			
inlet Studs (3):	H/C: <u>N</u> B7 GQH			

After reassembly, the valve set-pressure was certified using steam as the lift medium. The valve failed the steam seat tightness test, was jacked and lapped to restore seat integrity and successfully seat tightness tested on steam.

		/	
	NWS Technologies, LLC	lisan firmal	Manager, QA
Date	(repair organization)	(authorized representative)	(title)
6/10/	O A A B B		(
0/19/00	Carl R. Enc	NB # 8460, A, N, I	TN# 2236
Date	Inspector's Signature	Commissions (NB (incl er	ndorsements), jurisdiction,& no.)

			PLAN NO	2-1715
/	, 1	CROSBY VAL	VE & GAGE COMPA	
	CROSBY		ENTHAM, MA	7/14/41
J.	CAUDI		<b>Q</b> .	C44C-1
				E
		SAFETY AND SAFET		
	As Required by	the Provisions of the A DATA REPORT	SME Coue Rules	
	Saf	ety and Safety Relief V	alves	
	1. Manufactured by Crosby Valve & Ga	ge Company 43 Kendrick St. W	rentham, MA 02093	-
	(Name ar	nd Address of N Certificate mold	er) ite <u>24 JAN 1994</u> National Boa	ard No
I	2. Manufactured for WASHINGTON PUE	SLIC POWER SUPPLY SYSTE	M RICHLAND.WGrder No.238	3136 C/N 02
		POWER SUPPLY SYSTEM F	ICHLAND, WA	
		(Name and Address)	and an a store printing the second state of the second state of the second state of	
	4. Location of Plant <u>HANFORD # 2</u>		-01-0140_ Drawing No.DS-A	63790-1 REV 0
	5. Valve Identification <u>B22-F013</u>	Serial No. <u>_N03790</u>	Pipe Size Inlet 6	Outlet 10
Ē	Type <u>MAIN STEAM</u> (Safety, Safety Relief, Pilot, Power		(Inch) (Inch)	(inch)
• E	(delety, edict, nemet, edit			
	6. Set Pressure1165.0	565 	moerature	
		565 Rated Te AT.STM.@_3 % Overpress	moerature	HRU 11
	6. Set Pressure 1165.0 Stamped Capacity 876878 LB./HR.S	565 Rated Te AT.STM.@_3 % Overpress 70 Complete Valve	mperature ure <u>Blowdown (psig) 2.T</u> <u>1100</u>	HRU 11
	6. Set Pressure1165.0 Stamped Capacity 876878 LB./HR.S Hydrostatic Test (PSIG) Inlet237	565 Rated Te AT.STM.@_3 % Overpress 70 Complete Valve workmanship comply with ASN	mperature ure <u>          Blowdown (psig)       2_T</u> <u>          1100                        </u>	HRU 11
	<ul> <li>6. Set Pressure <u>1165.0</u></li> <li>Stamped Capacity <u>876878 LB./HR.S</u> Hydrostatic Test (PSIG) Inlet <u>237</u></li> <li>7. The material, design, construction and Class <u>1</u> Edition <u>1971</u>, Addenda I</li> </ul>	565 Rated Te AT.STM.@_3 % Overpress 70 Complete Valve workmanship comply with ASN	mperature ure <u>          Blowdown (psig)        2  T</u> <u> </u>	HRU 11
	<ul> <li>6. Set Pressure <u>1165.0</u></li> <li>Stamped Capacity <u>876878 LB./HR.S</u> Hydrostatic Test (PSIG) Inlet <u>237</u></li> <li>7. The material, design, construction and Class <u>1</u> Edition <u>1971</u>, Addenda I</li> </ul>	565 Rated Te AT.STM.@_3 % Overpress 70 Complete Valve workmanship comply with ASM DateNO, Case Serial No. Identification N93183-47-0130	mperature ure == Blowdown (psig)2_T 1100 E Code, Section III. No Material Specification Including Type or Grade ASTM A105 GR.II	HRU 11
	<ul> <li>6. Set Pressure <u>1165.0</u></li> <li>Stamped Capacity <u>876878 LB./HR.S</u> Hydrostatic Test (PSIG) Inlet <u>237</u></li> <li>7. The material, design, construction and Class <u>1</u> Edition <u>1971</u>, Addenda I</li> </ul>	565 Rated Te AT.STM.@_3 % Overpress 70 Complete Valve workmanship comply with ASM DateNO, Case Serial No. Identification	mperature ure <u>Blowdown (psig)</u> 2.T <u>1100</u> E Code, Section III. No. <u></u> Material Specification Including Type or Grade	HRU 11
	<ul> <li>6. Set Pressure <u>1165.0</u></li> <li>Stamped Capacity <u>876878 LB./HR.S</u> Hydrostatic Test (PSIG) Inlet <u>237</u></li> <li>7. The material, design, construction and Class <u>1</u> Edition <u>1971</u>, Addenda I</li> </ul>	565 Rated Te Rated Te AT.STM.@_3 % Overpress Complete Valve workmanship comply with ASM Date_NOCase Serial No. IdentificationCase	mperature ure == Blowdown (psig)2_T 1100 IE Code, Section III. No Material Specification Including Type or Grade  ASTM A105 GR.II  ASTM A105 GR.II	6
	<ul> <li>6. Set Pressure <u>1165.0</u></li> <li>Stamped Capacity <u>876878 LB./HR.S</u> Hydrostatic Test (PSIG) Inlet <u>237</u></li> <li>7. The material, design, construction and Class <u>1</u> Edition <u>1971</u>, Addenda I</li> </ul>	565 Rated Te AT.STM.@_3 % Overpress 70 Complete Valve workmanship comply with ASM Date_NOCase Serial No. IdentificationCase	mperature ure == Blowdown (psig)2_T 	6
	<ul> <li>6. Set Pressure <u>1165.0</u></li> <li>Stamped Capacity <u>876878 LB./HR.S</u> Hydrostatic Test (PSIG) Inlet <u>237</u></li> <li>7. The material, design, construction and Class <u>1</u> Edition <u>1971</u>, Addenda I</li> </ul>	565 Rated Te AT.STM.@_3 % Overpress 70 Complete Valve workmanship comply with ASM DateNO Case Serial No. Identification Case Serial No. Identification Case Case N93183-47-0130 N93183-47-0130 N93183-52-0204 N93185-52-0204 N93186-41-0060 N93187-40-0007 N93410-33-0007 N96461-34-0015	mperature ure == Blowdown (psig)2.T 	6
	<ul> <li>6. Set Pressure <u>1165.0</u></li> <li>Stamped Capacity <u>876878 LB./HR.S</u> Hydrostatic Test (PSIG) Inlet <u>237</u></li> <li>7. The material, design, construction and Class <u>1</u> Edition <u>1971</u>, Addenda I</li> </ul>	565 Rated Te AT.STM.@_3 % Overpress 70 Complete Valve workmanship comply with ASM DateNO Case Serial No. Identification Case Serial No. Identification N93183-47-0130 N93183-47-0130 N93183-47-0058  N93184-53-0167 N93185-52-0204 N93186-41-0060 N93410-33-0007	mperature ure == Blowdown (psig)2.T 	6
	6. Set Pressure 1165.0 Stamped Capacity 876878 LB./HR.S Hydrostatic Test (PSIG) Inlet 237 7. The material, design, construction and Class 1 Edition 1971, Addenda I a. Castings Body Bonnet b. Bar Stock & Forgings Support Rods Nozzle Disc Spring Washers Adjusting Bolt Spindle c. Spring d. Bolting e. Other Pieces DISC HOLDER	565 Rated Te AT.STM.@_3 % Overpress 70Complete Valve workmanship comply with ASN DateNOCase Serial No. IdentificationCase Serial No. IdentificationCase	mperature ure == Blowdown (psig)2.T 1100 E Code, Section III. No Material Specification Including Type or Grade <u>ASTM A105 GR.II</u> <u>ASTM A105 GR.II</u> <u>ASTM A105 GR.II</u> <u>ASME SA182 GR.F31</u> <u>ASME SA637 GR.718</u> <u>ASTM A105 GR.II</u> <u>ASTM A304 GR.4161</u> <u></u> <u>AMS5662B(INCONEL</u> )	6 6 H
ľ	6. Set Pressure 1165.0 Stamped Capacity 876878 LB./HR.S Hydrostatic Test (PSIG) Inlet 237 7. The material, design, construction and Class 1 Edition 1971, Addenda I a. Castings Body Bonnet b. Bar Stock & Forgings Support Rods Nozzle Disc Spring Washers Adjusting Bolt Spindle c. Spring d. Bolting e. Other Pieces DISC HOLDER SPINDLE BALL ADJI BOLT BUTTON	565 Rated Te AT.STM.@_3 % Overpress 70Complete Valve workmanship comply with ASN DateNOCase Serial No. IdentificationCase Serial No. IdentificationCase	mperature ure == Blowdown (psig)2.T  IE Code, Section III. No Material Specification Including Type or Grade <u>ASTM A105 GR.II</u> <u>ASTM A105 GR.II</u> <u>ASME SA182 GR.F31</u> <u>ASME SA637 GR.718</u> <u>ASTM A105 GR.II</u> <u>ASTM A564 TYPE 63</u> <u>ASTM A304 GR.4161</u>	6 6 H
ľ	6. Set Pressure 1165.0 Stamped Capacity 876878 LB./HR.S Hydrostatic Test (PSIG) Inlet 237 7. The material, design, construction and Class 1 Edition 1971, Addenda I a. Castings Body Bonnet b. Bar Stock & Forgings Support Rods Nozzle Disc Spring Washers Adjusting Bolt Spindle c. Spring d. Bolting e. Other Pieces DISC HOLDER SPINDLE BALL ADJI BOLT BUTTON	565 Rated Te AT.STM.@_3 % Overpress 70Complete Valve workmanship comply with ASN DateNOCase Serial No. Identification Case Serial No. Identification Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case Case 	mperature Jire == Blowdown (psig)2.T 	6 6 H
ľ	6. Set Pressure1165.0 Stamped Capacity <u>876878 LB./HR.S</u> Hydrostatic Test (PSIG) Inlet237 7. The material, design, construction and Class1Edition_1971_Addenda I a. Castings Body Bonnet b. Bar Stock & Forgings Support Rods Nozzle Disc Spring Washers Adjusting Bolt Spindle c. Spring d. Bolting e. Other Pieces DISC HOLDER SPINDLE BALL ADJ BOLT BUTTON THRUST BEARING ADAPTE	565 Rated Te AT.STM.@_3 % Overpress 70Complete Valve workmanship comply with ASN DateNOCase Serial No. IdentificationCase Serial No. IdentificationCase	mperature Jire == Blowdown (psig)2.T  IE Code, Section III. No Material Specification Including Type or Grade <u>ASTM A105 GR.II</u> <u>ASTM A1</u>	6 6 H

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<ul> <li>An of a physical state speed and a state of a state of the state of th</li></ul>	
We certify that the statements made in this report are correct.	
AAO COLINÀ mar me araremana mara an ana sat	
Date 27 Man 94 Signed Crosby Valve & Gage Company Manufacturer	by former fing
•	
Certificate of Authorization No. 1878 expires 30 SEP 95.	
CERTIFICATE OF SHOP INSPEC	LIION
1, the undersigned, holding a valid commission issued by the National Board	of Boiler and Pressure Vessel
here increased the equilibrium of the second	
has constructed thisequipment in accordance with the applicable Subsectio	nd belief, the Manufacturer ns of ASME Section III y warranty, expressed or implied, her the Inspector nor his employer a loss of any kind arising from or y Mutual System
Mutual Insurance Company insee also clear the destruction of the problem	y warranty, expressed or implied,
concerning the equipment described in this Data Report. Furthermore, neither shall be liable in any manner for any personal injury or property damage or the shall be liable in any manner for any personal injury or property damage.	her the Inspector nor his employer
shall be liable in any manner for any personal injury or property damage of a connected with this inspection.	
Factor	y Mutual System
Date $3/27$ 19.27	
Signed M PCK Commissions MG M	at'i. Bd., State, Prov. and No.)
(inspector)	

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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
B22-G001C MS-RV-5C MS-RV-5C	WPPSS * Crosby Crosby	B22-G001C-P1 N63790-00-0135 N63790-03-0136 ** (N63790-00-0136) **	N/A N/A N/A	N/A N/A N/A	1983 1973 1973	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing relief valve MS-RV-5C. The replacement work was performed as follows:
 1) Removed existing relief valve Serial No N63790-00-0135 with set pressure of 1205 Psig at rated temperature of 575<sup>o</sup> F.

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

Installed replacement relief valve with Serial No N63790-03-0136 with set pressure of 1205 Psig at rated temperature of 575<sup>0</sup> F.
 Installed VT-1 visually examined twelve (12) new nuts for the relief valve inlet joint. Note - None of the existing nuts were reused.

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

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

#### NOTES -

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

2) The existing ASME Code Stamped piping system in which the replacement relief valve Serial No N63790-03-0136 was installed is Main Steam (MS) piping system B22-G001C-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

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

4) The replacement relief valve Serial No N63790-03-0136 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements.

5) \*\* The replacement relief valve Serial No N63790-00-0136 was previously modified (upgraded) to Serial No N63790-03-0136 by NWS Technologies, LLC, 131 Venture Boulevard, Spartanburg, SC 29301. The modification (upgrading) work was performed in accordance with NWS Technologies, LLC VR and NR programs and is documented in ASME Section XI Plan No 2-1705.

Date: 07/10/01 Sheet: 1 Of 1 Unit: Not Applicable

PLAN NO 2-1 EMERGY
Northwest
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
sts Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       *         Test Pressure: 1022 Psig       Test Temperature: 215° F         Component Design Pressure: 1250 Psig       Temperature: 575° F
emarks: 1) See attached NVR-1 Code Data Report for replacement relief valve Serial No N63790-03-0136, 2) See attached "Rep replacement To Nuclear Components And Systems In Nuclear Power Plants" Certification Report (QC 292A) for relief valve Serial N 20-00-0136, 3) See attached NV-1 (Pre - Modification) Code Data Report for relief valve Serial No N56000-02-0043, 4) * The test ure and the test temperature on the relief valve inlet joint was recorded during ASME Section XI pressure test which was performed dance with PPM No OSP-RPV-R801 "Reactor Pressure Vessel Leakage Test".
CERTIFICATE OF COMPLIANCE
Ve certify that the statements made in this Owner's Report are correct and this replacement conforms
o the rules of the ASME Code, Section XI.
Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable
Expiration Date: Not Applicable
Prepared By     Muldip Singh - Program Lead Engineer (PLE)     Signed By     Muldip Singh - Program Lead Engineer (PLE)       Date     71001     Date     71001
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $(-25-0)/$ to $(-7/10/0)/$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report
in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate rientici the inspected the 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.
AT ATTO THE WITHOUNT
Inspector's Signature Commissions 7486W/7466 N E 2 National Board, State, and Endorsements
Inspector's Signature  Date 7/11/0/  Commissions 7/18/2/0/74/2 N I 2 National Board, State, and Endorsements

FORM NVR-1 REPORT OF REI OF NUCLEAR PRESSUR	PAIR 🗖 🛛 REPL	ACEMENT Z	
1. Work performed by: NWS Technologies, LLC 131 Venture Boulevard, Spartanburg	Purchase Ord	er#C31331 V	/RO # 008
2. Work performed for: Energy Northwest - Columbia General	iting Station		
3/4. Owner - name, address and identification of nuclear power Station, North Power Plant Loop, Richland, WA 99352-096	er plant: <u>Energy N</u> 58	orthwest - Columb	bia Generating
5. a: Repaired pressure relief device: Main Steam Safety F b: Name of manufacturer: Crosby Valve & Gage Co. c: Identifying nos. old s/n: N63790-00-0136 HB-65-BP-FN new s/n: N63790-03-0136			1973 DD
(type) (mfr's S/N)			$-\frac{-1971}{2}/\omega/\omega$
d: Construction Code: ASME Sec. III Div. 1 1971	(NB#) (servid N/A	ce) (size) 1567 & 1711	(yr.built) CR
(name/section/division) (edition		(Code Cases(s))	(Code Class)
6. ASME Code Section XI applicable for inservice inspection:	1989	N/A	N/A
	(edition)	(addenda)	(Code Case(s))
<ol><li>ASME Code Section XI used for repairs, replacements:</li></ol>	1989	N/A	N/A
8. Construction Code used for repairs, replacements:	(edition)	(addenda)	(Code Case(s))
the second could be a for repairs, replacements.		<u>N/A</u>	N/A
9. Design responsibilities: N/A	(edition)	(addenda)	(Code Case(s))
10. Opening pressure:       1205 psig         Set-pressure adjustment made at:       NWS Technologie         11. Description of work (include name and identifying number of replace	and the second se	ng <u>steam</u> tachment 1.	
12. Remarks: See attachment 1.			
National Board Certificate of Authorization No.     81     to us       6/19/00     NWS Technologies, LLC     Edite       Date     Repair Organization     Authorization	wledge and belief the the pressure relief d and Inspection Code the "VR" stamp ex the "NR" stamp ex the "NR" stamp ex the the "NR" stamp ex the the "NR" stamp ex the the state of the state of the state the state of the state of the state of the state the state of the state of t	evices described a "VR" and "NR" ru xpires <u>April 3, 2</u> xpires <u>April 9, 2</u>	above les. 2003.
CERTIFICATE OF INS	SPECTION		
Vessel Inspectors and certificate of competency issued by the juby Hartford Steam Boiler Inspection & Insurance Co. of Har	risdiction of <u>Te</u> tford, CT have ins	ennessee and spected the repair	employed modification
or replacement described in this report on 6/19/00 and s	tate that to the hest	of my knowlodge	and halist
this repair, modification or replacement has been completed in a Code and the National Board Inspection Code "VR" and "NR" rul	ccordance with Sec	tion XI of the of th	e ASME
By signing this certificate, neither the undersigned nor my emplo	les.	<b>k</b>	
concerning this repair, modification or replacement described in t	his report Euthon	ranty, expressed o	or implied,
nor my employer shall be liable in any manner for any personal in arising from or connected with this inspection.	njury, property dam	age or loss of any	kind
6/19/00 Qarl R. Eman	<u>NB # 8460, A, N,</u>		
Daté Inspector's Signature	Commissions (NB (incl	endorsements), juriso	liction & no.)

# FORM NVR-1 Attachment (1 of 1)

1. Work performed by: NWS Technologies, LLC Purchase Order # C31331 WRO # 008 131 Venture Boulevard, Spartanburg, SC 29301
2. Work performed for: Energy Northwest - Columbia Generating Station
3/4. Owner - name, address and identification of nuclear power plant: Energy Northwest - Columbia Generating Station, North Power Plant Loop, Richland, WA 99352-0968
Valve S/N: N63790-03-0136
The S/N for this valve was <u>N63790-00-0136</u> The two middle digits were changed to indicate the modification of the valve to a flexi-disc design.
11. Description of work:
The valve was disassembled. The nozzle was removed and returned to site with the disc.
WNP-2 machined the nozzle to the new flexi-disc dimensions.
NWS machined the Disc Ring per Crosby Instruction Manual CVI No. 02-932-00.
Disc S/N. <u>N97499-32-0017</u> and Nozzle S/N: <u>N97498-44-0107</u>
were installed in the valve.
Both disc and nozzle were polished by NWS prior to installation.
Other parts replaced during the repair include: Disc Holder Spiral Rins (2): MC 54407704

Other parts replaced during the repair include:Disc Holder Spiral Pins (2):MC 54407794Eductor Gasket:MC 56230461Inlet Studs (3):H/C: <u>N</u> B7 KMY

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

17			
6/19/00 Date	NWS Technologies, LLC (repair organization)	(authorized representative)	Manager, QA
6/19/00 Date	Carl R.	NB # 8460, A, N, I	(title) TN# 2236 ndorsements), jurisdiction.& no.)

		PLAN NO. 2-1716	
		CROSBY VALVE & GAGE COMPANY	
	I	$C R O S B Y_{1}$ WRENTHAM, MA Q.C292, REV.	A
	_ /	PLANJ NO. 2-1005 SHEET 1 OF 2	
		Quealp Sung's	
		REPAIR AND REPLACEMENT 3/10/94 7/10/01	
		TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS	
	1.	Work performed by Crosby Valve & Gage Company 43 Kendrick St. Wrentham. MA 02093	
		(Name and Address) (Repair organization's P.O. No., Job No., etc.). NV4000020	
	2.	OwnerWASHINGTON PUBLIC POWER_RICHLAND,WA 99352-0968 (Name and Address)	
	2	Name and Identification of Nuclear Power PlantHANFORD #2	
	<u> </u>		
	4.	Address of Nuclear Power Plant	
	5.	a. Identifying Nos. <u>N63790-00-0136</u> 1973 (Mfr's Serial No.) (Nat'l Bd. No.) (Jurisdiction No.) (Other) (Year Built)	
F	l	b. Identification of component repaired or replacement component	
<u> </u>			
		Tests conducted: Hydrostatic (X) Pneumatic () Design Pressure () Pressure <u>2370.0</u> psi	
		Identification of SystemMAIN STEAM Applicable Section(s)III of ASME Code, 19 <u>71</u> Edition	
	ο.	Addenda <u>NO</u> Code Case	
	9.	Description of work	
		(Use of additional sheet(s) or sketch(es) is acceptable if correctly identified) ASME SEC.XI, 1980 EDITION WINTER 1980 ADDENDA.	
	10.	Remarks: THIS MODIFICATION CONSISTED OF THE FOLLOWING CHANGES: PART PART NO. MODIFIED TO PART NO.	
		BODY         N90118         N93183-42-0125           BONNET         N89717         N93407-43-0054           SPINDLE ASSY         K55465         K62873-33-0006	
		SPR.WASHER N89724 K62856-43-0202	
		SPR.WASHER         N89723         K62857-43-0202           SPRING ASSY         K55466         K62858-31-0005           PART         PART NO.         REPLACED WITH	
		NOZZLE         N89713         N93184-51-0153           DISC INSERT         N89715         N93185-52-0203	
		SPRING         NX2689         NX2689-0135           THR.BRG.ADAPT.N89725         N93409-34-0009	
1	2	ADJ.BOLT N89726 N93410-31-0003 ADJ.BOLT BUTT. COMMERCIAL N93411-33-0010	
		ADJ.BOLT ASSY COMMERCIAL K63618-31-0003	目

Certificate Holder's Serial No	<u>N63790-00-0136</u>	Q.C292, R SHEET 2 Of	
		And the State of t	
	ICATE OF COMPLIAN		
We certify that the statements made in this <u>MOD.</u> conforms to (repair/replacement)	report are correct and all design, the applicable section of the ASN	matenal, and workmanship on E Code.	
Signed Authorized Rep. of Repair Of	<u>QA Cra Manage</u> rganization) (Title)	(1)8(6)	1974
		and the second	
	FICATE OF INSPECTI	en en el servici y en el Alebra de Alebra en el Alebra de Alebra d Alebra de Alebra de A	
	ssion issued by the National Board	of Boiler and Pressure Vessel Factory Mutual	
the Contract of Designed of			
the Contract of Designed of	Massachusants and employed by ve inspected the repair or replacent to the best of my knowledge a	nent described in this report on the second belief, this repair or replace	
the Contract of Designed of	Massachusans and employed by ve inspected the repair or replacen hat to the best of my knowledge a nce with the applicable section of	ment described in this report o nd belief, this repair or replace the ASME Code.	
Inspectors and the State or Province of	Massachulants, and employed by ve inspected the repair or replacen nat to the best of my knowledge a nce with the applicable section of pector nor his employer makes am cribed in this report. Furthermore, onal injury or property damage or	nent described in this report o nd belief, this repair or replace the ASME Code. y warrant, expressed or implie neither the inspector nor his a loss of any kind arising from	
Inspectors and the State or Province of	Massachulants, and employed by ve inspected the repair or replacen nat to the best of my knowledge a nce with the applicable section of pector nor his employer makes am cribed in this report. Furthermore, onal injury or property damage or	nent described in this report o nd belief, this repair or replace the ASME Code. warrant, expressed or implie neither the inspector nor his	d, employe
Inspectors and the State or Province of	Massachulants and employed by ve inspected the repair or replacen- nat to the best of my knowledge a nce with the applicable section of pector nor his employer makes any cribed in this report. Furthermore, onal injury or property damage or Factor	nent described in this report o nd belief, this repair or replace the ASME Code. y warrant, expressed or implie neither the inspector nor his a loss of any kind arising from y Mutual Systems	d, employe
Inspectors and the State or Province of	Massachulants and employed by ve inspected the repair or replacen- nat to the best of my knowledge a nce with the applicable section of pector nor his employer makes any cribed in this report. Furthermore, onal injury or property damage or Factor	nent described in this report o nd belief, this repair or replace the ASME Code. y warrant, expressed or implie neither the inspector nor his a loss of any kind arising from y Mutual Systems	d, employe

PLAN NO. 2-1716 Kuldig Kengb 7/10/01

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

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		PLAN 1	W-2-1005
		C.	Idip Samo 5
· · · · · · · · · · · · · · · · · · ·			3/10/94
CROSBY		VALVE & GAGE VRENTHAM, MASS	
		VRENTHAM, MASS	FLON NO.2 TH
	7-1 FOR SAFETY AND SAF uired by the Provisions of th		Q.C44A
	DATA REPOR Salety and Salety Relig		
1. Manufactured By <u>Crosby Valve</u>	& Gage Co 43 Ker Name and Addres		lass. 02093
Model No. HB-65-BP-FN			6/28/71
2. Manufactured For San Jose, Ca	ctric Company alifornia ame and Address	Order No.	205-AD148
3. Owner Northern Indiana Pui		ailly Concepting Stati	on Rueleen T
4. Location of Plant _ Baileytown,	Name and Address		town, Indiana
4. Location of Plant			
5. Valve [dentification MPL #B-22-1			
Type <u>Safety Relief</u> Safety, Safety Relief, Pilot, Powe	Orifice Si	ze <u>R</u> Pipe Size int inch inch	let <u>6</u> Outlet <u>10</u>
6. Set Pressure (PSIG) 1205	a Actualeu	•••••	
		Rated Temp	erature F
Stamped Capacity906250	Lbs. Hr. c 7 Ov	erpressureBlowdown 2000	so <u>57</u>
Sat. Steam			
Hydrostatic Test (PSIG) inlet2	.370	Complete Valve 825	
7. The material, design, construction and	i workmanship comply with	ASME Code, Section III.	
Class 1 Edition	1971	_ Addenda DateSumme	r 1972
Pressure Containing or Pressure Reta	ining Components		-
	Senai No.	Valenal S	Decification
2.XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Identification	including Ty	
Body	N89711-32-0025	ASTM A-105- ASME SA-105	71 Gr. II Gr.II
BonnetZet XZOLA	N89717-32-0019	ASTM A-105- ASME SA-105	71 Gr. II Gr. II
b. Bar Stock and Forgings	•		
X DEAKARS Disc Insert	N89715-31-0029	<u>ASTM A-461-4</u> ASTM A-182-	65 Tvpe 630 71 F316
Nozzle	N89713-32-0027	ASTM A-182- ASME SA-182	7316
Disc Holder Top	N89714-32-0043 N89724-32-0046	AMS 5662 B ASTM A-105-	/I Gr. 11
Spring Washers Bottom	N89723-31-0002	ASME 3A-105 (	<u>Gr. II</u> 71 Gr. B6
Adjusting SURA Bolt	<u>N89726-34-0047</u>	ASME SA-193 (	Gr. 36
Spindle Point	N89720-32-0035	ASTM A-564-	7 <u>2 Type 630</u>
			A CONTRACTOR
			3-3-75

	Serial No. or	Material Specification
	[dentification	including Type or Grade
. Spring	NX2689-0048	ASTM A-304-66 Gr. 4161H
d. Bolting		
. INDER PARE ANOTA SCOPPOSE	XX XX	ASTM A-193-71 Gr. B7
Inlet Stud	N89727-0505 thru 0516	ASME SA-193 Gr. B7 ASTM A-194-71 Cl. 2H
Inlet Stud Nut	N89728-0509 thru 0520	ASME SA-194 C1. 2H ASTM A-193-/1 GE B/
Bonnet Stud	N89718-0509 thru 0520	ASME SA-193 GF. B7
Bonnet Stud Nut	N89719-0511 thru 0522	ASME SA-194 CI. 2H
OTHER PARTS		
Spindle Ball	N89721-0035	Stellite 6
BARS & FORGINGS		ASTM A-193-71 Gr. B6
Thrust Bearing Adapter	N89725-32-0032	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
Certificate of Authorization No.	331 expires Novemb	<u>er 9, 1974</u>
	CERTIFICATE OF SHOP INSPECTION	
I. the undersigned, holds Pressure Vessel Inspecto	ing a valid commission issued by the rs and the State or Province of	Mass. and employed by Waltham. Mass. have
inspected the equipment of state that to the best of m ment in accordance with the By signing this certificate pressed or implied, concer-	described in this Data Report on <u>single</u> ny knowledge and belief, the Manufac the applicable Subsections of ASME S ate, neither the inspector nor his emp erning the equipment described in this lover shall be liable in any manner for third arising from or connected with the	sturer has constructed this equip- Section III. bioyer makes any warranty. ez- s Data Report.Furthermore. neither or any personal injury or property

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# EMERGY IORTHWEST

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

### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 07/31/00 Sheet: 1 of 1 Unit: Not Applicable

PLAN No 2-1717

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

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable
- 4. Identification Of System: Reactor Feedwater (RFW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW-V-32A	Anchor Darling	1N-109	N/A	N/A	1975	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Performed on-line leak seal for packing leak (stuffing box side of the value) for value RFW-V-32A. The work was performed as follows:

Drilled and tapped one (1) hole into the valve stuffing box area to install 3/8" injector (shutoff) adapter. See Note 1.
 Installed one (1) 3/8" injector (shutoff) adapter in the valve stuffing box area. See Note 1.

#### NOTES -

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

<u> </u>	PLAN No 2-1717
E	MERGY
FORM NIS-2 OWNER'S REPOR	T FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic 🛄 Pneumati Test Pressure: Psig Component Design Pressure	Test Temperature: ° F
Remarks: None	•
CERTIFIC	CATE OF COMPLIANCE
Type Code Symbol Stamp: Not Applicable	<b>Dwner's Report are correct and this</b> replacement <b>conforms</b>
Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable	
Prepared By Kuldip Singh - Program Lead Engineer	(PLE) Signed By Kuldip Singh - Program Lead Engineer (PLE)
Date7 31 00	Date7]31[DV
CERTIFICATE	OF INSERVICE INSPECTION
<i>I, the undersigned, holding a valid commission of the state of</i>	on issued by the National Board of Boller and Pressure and employed by
described in this Owner's Report during the j	period to and
	the Owner has performed examinations and taken
state to the best of my knowledge and belief, corrective measures described in this Owner ASME Code, Section XI.	's Report in accordance with the requirements of the
state to the best of my knowledge and belief, corrective measures described in this Owner ASME Code, Section XI. By signing this certificate neither the Inspect implied, concerning the examinations and co Furthermore, neither the Inspector nor his en	's Report in accordance with the requirements of the for nor his employer makes any warranty, expressed or prrective measures described in this Owner's Report. Inployer shall be liable in any manner for any personal and arising from or connected with this inspection.
state to the best of my knowledge and belief, corrective measures described in this Owner ASME Code, Section XI. By signing this certificate neither the Inspect implied, concerning the examinations and co Furthermore, neither the Inspector nor his en	's Report in accordance with the requirements of the or nor his employer makes any warranty, expressed or prective measures described in this Owner's Report. Inployer shall be liable in any manner for any personal and arising from or connected with this inspection.



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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(50)-1 RCIC-RV-19T RCIC-RV-19T	WPPSS * Crosby Crosby	RCIC(50)-1-P1 N63028-00-0002 N63028-00-0007	N/A N/A N/A	N/A N/A N/A	1983 1980 1994	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

7. Description Of Work Performed: Replaced existing relief valve RCIC-RV-19T. The replacement work was performed as follows: 1) Removed existing relief valve RCIC-RV-19T, Serial No N63028-00-0002.

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

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

4) Performed VT-3 visual examination on the existing studs for the relief valve inlet joint. VT-3 visual examination results acceptable.

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

6) Installed replacement relief valve RCIC-RV-19T, Serial No N63028-00-0007.

7) Reinstalled VT-3 visually examined existing studs and nuts for the relief valve outlet joint.

8) Reinstalled VT-3 visually examined existing studs and nuts for the relief valve inlet joint.

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

10) Performed visual inspection for any obstruction to confirm open flow path for the relief valve outlet (discharge) port to satisfy ASME Section XI, IWC-5221(d) requirements.

#### NOTES -

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

2) The existing ASME Code Stamped piping system applicable to the replacement relief valve RCIC-RV-19T, Serial No N63028-00-0007 is Reactor Core Isolation Cooling (RCIC) piping system RCIC(50)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement relief valve RCIC-RV-19T, Serial No N63028-00-0007 is certified to comply with ASME Section III, Code Class 2, 1977 Edition with Summer 1977 Addenda requirements.

4) The existing relief valve Serial No N63028-00-0002 was originally procured for WNP-4 plant as 4MUS-V-133 but was approved for Columbia Generating Station (WNP-2) use as RCIC-RV-19T. The replacement relief valve N63028-00-0007 was procured under PO No 236808, Procurement Evaluation No 3455 for Columbia Generating Station (WNP-2) use.

Date: 07/17/01 Sheet: 1 Of 1 Unit: Not Applicable

P	PLAN No 2-171
ENERGY	
NORTHWEST	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Bac	k)
sts Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X O Test Pressure: 69 Psig Test Temperature: 83.4° F Component Design Pressure: 100 Psig Temperature: 170° F	ther
<b>emarks:</b> 1) See attached NV-1 Code Data Report for the replacement relief valve RCIC-RV-19T, Serial No N6302 mponent design pressure of 100 Psig and design temperature of 170° F is for the relief valve inlet piping.	8-00-0007.
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable	conforms
Expiration Date: Not Applicable Prepared By	ngineer (PLE)
DateDateDate	
	- <u></u>
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance C Johnston, Rhode Island have inspected the components described in this Owner's Report period _///// to and state to the best of my knowledge and Owner has performed examinations and taken corrective measures described in this Owner in accordance with the requirements of the ASME Code, Section XI.	during the d belief, the
In accordance with the requirements of the Admit. Code, occurring By signing this certificate neither the inspector nor his employer makes any warranty, ex 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 any injury or property damage or a loss of any kind arising from or connected with this inspe-	y personal
Inspector's Signature Commissions 74/0/174/6	MIS IS, ndorsements
Date 7/74/11/	

	•				
	•,			ALVE & GAGE CO	<u>OMPANY</u>
•	1	<u>CROSBY</u>	<u>n</u>	<u>RENTHAM, MA</u>	Q.C44D-1A
	_		PLAT	N NO. 2-1718	SHEET 1 OF 2
		FORM NV-1, N CERTIFICATE	HOLDERS' DATA REPORT FO	D CAEETY AND CAEETY	
		As Required by	y the Provisions of the ASME Co	de, Section III, Division 1	CELLEF VALVES
	<b>Г</b> ,				
	<b>.</b>	Manufactured by Crosby Valve (Nat	me and Address of N Certificate	it. Wrentham. MA_02093 Holder)	
	<u> </u>			Order No. 236808	
	2.	Manufactured for WASHIN	IGTON PUBLIC POWER SUPP (Name and Address of Purch		2
	3	Location of Installation NUC			
	Ŭ.		LEAR PROJECT NO.1 RICHL (Name and Add		
	4.		DS-CA63028 REV.B		1994
		(CRN)	(Drawing No.)		par Built)
	5.	ValveJO-25-WR	Identifying Nos		
		(Model No., Series No. TypeRELIEF	o.} Valve I.D./Tag No	(N Certificate Holder SPARE	's Serial No.)
		Orifice Size 1.363 Nomin	nal Inlet Size2	Outlet Size 3	
		Inch	Inch		h
	6.	Set Pressure 99		<u>120                                    </u>	
	•	Stamped Capacity 200 GPM WT	<u>R@70DEG@10</u> % Overpre	lieving Temperature essure <u>—</u> Blowdown (psig)_	10% OF SP
E	Ĺ	Hydrostatic Test (psig) Inlet	225 Outlet	100 e to Valves for Closed Syste	
Ē	PR	ESSURE RETAINING PIECES	RCIC-RV-19T, SIN		
				Waterial Specificat	12/01
			Serial No. Identification	Material Specificat Including Type or (	ion Grade
	a.	Castings Body	<u>_N93013-33-0007</u>	ASME SA351 GR	
	b.	Bonnet	N93015-33-0007		CE8M
		Ror Stock & Earginge		ASME SA351 GR	
		Bar Stock & Forgings Nozzle	<u>N93014-34-0012</u>	ASME SA351 GR	<u>.CF8M</u> PE 316
			<u>N93014-34-0012</u> <u>N88842-54-0065</u> N91025-30-4468	ASME SA351 GR	<u>.CF8M</u> PE 316
		Nozzle	N88842-54-0065	ASME SA351 GR	<u>.CF8M</u> PE 316 PE 316
		Nozzle Disc Spring Washers Adjusting Bolt	N88842-54-0065 N91025-30-4468 N91025-30-4478 N92376-54-0188	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY ASME SA193 GR	<u>.CF8M</u> PE 316 PE 316 PE 410 .B6
	с.	Nozzle Disc Spring Washers Adjusting Bolt Spindle Spring	N88842-54-0065 N91025-30-4468 N91025-30-4478	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY	<u>.CF8M</u> <u>PE 316</u> <u>PE 316</u> <u>PE 410</u> <u>.B6</u> .B6
	с. d. е.	Nozzle Disc Spring Washers Adjusting Bolt Spindle	<u>N88842-54-0065</u> N91025-30-4468 <u>N91025-30-4478</u> <u>N92376-54-0188</u> <u>N90142-81-0198</u>	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY ASME SA193 GR ASME SA193 GR	<u>.CF8M</u> <u>PE 316</u> <u>PE 316</u> <u>PE 410</u> <u>.B6</u> .B6
	c. d. e.	Nozzle Disc Spring Washers Adjusting Bolt Spindle Spring Bolting Other Pieces BONNET STUD	<u>N88842-54-0065</u> N91025-30-4468 <u>N91025-30-4478</u> <u>N92376-54-0188</u> <u>N90142-81-0198</u> <u>NX2770-0071</u>	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY ASME SA193 GR ASME SA193 GR ASTM A313 TYP	.CF8M PE 316 PE 316 PE 410 .B6 E 316 E 316
	c. d. e.	Nozzle Disc Spring Washers Adjusting Bolt Spindle Spring Bolting Other Pieces	N88842-54-0065 N91025-30-4468 N91025-30-4478 N92376-54-0188 N90142-81-0198 NX2770-0071	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY ASME SA193 GR ASME SA193 GR ASME SA193 GR	.CF8M PE 316 PE 316 PE 410 .B6 E 316 E 316
	c. d. e.	Nozzle Disc Spring Washers Adjusting Bolt Spindle Spring Bolting Other Pieces BONNET STUD	<u>N88842-54-0065</u> N91025-30-4468 <u>N91025-30-4478</u> <u>N92376-54-0188</u> <u>N90142-81-0198</u> <u>NX2770-0071</u>	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY ASME SA193 GR ASME SA193 GR ASTM A313 TYP	.CF8M PE 316 PE 316 PE 410 .B6 E 316 E 316
	c. d. e.	Nozzle Disc Spring Washers Adjusting Bolt Spindle Spring Bolting Other Pieces BONNET STUD	<u>N88842-54-0065</u> N91025-30-4468 <u>N91025-30-4478</u> <u>N92376-54-0188</u> <u>N90142-81-0198</u> <u>NX2770-0071</u>	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY ASME SA193 GR ASME SA193 GR ASTM A313 TYP	.CF8M PE 316 PE 316 PE 410 .B6 E 316 E 316
	c. d. e.	Nozzle Disc Spring Washers Adjusting Bolt Spindle Spring Bolting Other Pieces BONNET STUD	<u>N88842-54-0065</u> N91025-30-4468 <u>N91025-30-4478</u> <u>N92376-54-0188</u> <u>N90142-81-0198</u> <u>NX2770-0071</u>	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY ASME SA193 GR ASME SA193 GR ASTM A313 TYP	.CF8M PE 316 PE 316 PE 410 .B6 .B6 E 316 .B7 .2H
	c. d. e.	Nozzle Disc Spring Washers Adjusting Bolt Spindle Spring Bolting Other Pieces BONNET STUD	<u>N88842-54-0065</u> N91025-30-4468 <u>N91025-30-4478</u> <u>N92376-54-0188</u> <u>N90142-81-0198</u> <u>NX2770-0071</u>	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY ASME SA193 GR ASME SA193 GR ASTM A313 TYP	.CF8M PE 316 PE 316 PE 410 .B6 .B6 E 316 .B7 .2H
	c. d. e.	Nozzle Disc Spring Washers Adjusting Bolt Spindle Spring Bolting Other Pieces BONNET STUD	<u>N88842-54-0065</u> N91025-30-4468 <u>N91025-30-4478</u> <u>N92376-54-0188</u> <u>N90142-81-0198</u> <u>NX2770-0071</u>	ASME SA351 GR ASME SA479 TY ASME SA479 TY ASME SA479 TY ASME SA193 GR ASME SA193 GR ASTM A313 TYP	.CF8M PE 316 PE 316 PE 410 .B6 E 316 E 316

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	Q.C44D-1A SHEET 2 OF 2
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this report are correct and that this valve conforms to t construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1         Addenda_SUMMER 1977, Code Case No       (D         (Date)	
We certify that the statements made in this report are correct and that this valve conforms to t	
construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1 Addenda_SUMMER 1977, Code Case No	
(Date)	
Class2	
Date 13 Dec 94 Signed Crosby Valve & Gage Company by Laurence	
(N Certificate Holder)	e filme
Our ASME Certificate of Authorization No. <u>1878</u> to use the <u>NV</u> symbol expire	es <u>30 SEP 95.</u>
CERTIFICATE OF DESIGN	
Design information on file at <u>Crosby Valve &amp; Gage Company</u> Stress analysis report (Class 1 only) on file at	_
Design specifications certified by*VENKATACHALAN_MANI	_
PE State Reg No15065 Stress Report Certified by*	
PE State Reg No	
*Signature not required - list name only.	
CERTIFICATE OF SHOP INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Press	sure Vessel
Inspectors and the State or Province of <u>Massachusetts</u> and employed by <u>Arkwright Mutu</u> of <u>Norwood</u> . <u>Massachusetts</u> have inspected the pump, or valve, described in this Date	al Insurance Co.
$\rho_{\rm ec}$ $\beta_{\rm ec}$	
By signing this cartificate, neither the inspector nor his employer makes any warrant, expresse	a or anplied,
concerning the equipment described in this Data Report. Furthermore, neither the Inspector not shall be liable in any manner for any personal injury or property damage or a loss of any kind a	
Factory Mutual Systems	
Date $\frac{12/13}{11}$ , $19\frac{54}{11}$	
CERTIFICATE OF SHOP INSPECTION         1, the undersigned, holding a valid commission issued by the National Board of Boiler and Press         Inspectors and the State or Province of <u>Massachusetts</u> and employed by <u>Arkwright Mutur</u> of <u>Norwood, Massachusetts</u> have inspected the pump, or valve, described in this Data	v. and No.)
*Factory Mutual System	

· 3 <sup>c</sup>
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EMERGY
VORTHWEST

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

#### 1. Owner: Energy Northwest

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

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

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

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

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

7. Description Of Work Performed: Replaced end brackets associated with support MS-1009N. The replacement work was performed as follows:

- 1) Removed all four (4) existing end brackets.
- 2) Fabricated four (4) new replacement end brackets.
- 3) Made required welds.
- 4) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable.
- 5) installed four (4) new replacement end brackets and tube steel.

6) Made required welds.

- 7) Performed magnetic particle (MT) examination on the final welds. Magnetic particle (MT) examination results acceptable.
- 8) Performed VT-3 visual examination on the four (4) new replacement end brackets. VT-3 visual examination results acceptable.

#### NOTES -

- 1) \* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
- 2) \*\* ASME Section III, Code Class NF(2) for support MS-1009N

3) The existing ASME Code Stamped piping system applicable to support MS-1009N is Main Steam (MS) piping system MS(1)-4D-P3. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

Date: 07/17/00 Sheet: 1 of 1 Unit: Not Applicable

PLAN No 2-1719

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)         Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure OtherX Nome Test Temperature: ° F Component Design Pressure: Paig Temperature: ° F Component Design Pressure: Paig Temperature: ° F Remarks: None         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Expiration Not: Not Applicable         EXPIRE To Authorization Not: Not Applicable         Prepared By			<b>EMER</b> NORTHW	<b>IGY</b> VEST	
Test Pressure: Pag       Test Temperature: ° F         Component Design Pressure: Pag       Temperature: ° F         Remarks: None       CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable       Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable       Signed By       July Budy         Frepared By       Signed By       July Budy         Kuldip Singh - Program Lead Engineer (PLE)       Date       Jin Do         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the period of Market and these norrective measures described in this Owner's Report for and state to the base of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report In accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes 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	FC	RM NIS-2 OWNER	R'S REPORT FOR RI	EPAIRS OR REPLACEMEN	ITS (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         Multip Singh - Program Lead Engineer (PLE)         Nuldip Singh - Program Lead Engineer (PLE)         Date       1         Date       1         Law       1         Date       1         Law       1         Date       1         Law       1         Law       1         Date       1         Law       1         Date       1         Law       1         Date       1         Law       1         Date       1         Law       1         Law       1         Date       1         Law       1         Date       1         Law       1         Date       1         Date       1         Date       1         Date       1	ests Conducte	Test Pressure: P	isig	Test Temperature: °	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       July         Kuldip Singh - Program Lead Engineer (PLE)         Date       1         Date       1         Date       1         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the period Life of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or Implied, concerning the inspector nor his employer measures described in this Owner's Report.         In accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes 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 b	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       Guide Sumbol Stamp: Not Applicable         Nuldip Singh - Program Lead Engineer (PLE)       Signed By       Guide Sumbol Stamp: Not Applicable         Date       100       Date       100         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the period [1/2] to 2.12.12.11         Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in t					
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	<u></u>		CERTIFICATE OF	COMPLIANCE	
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of         Johnston, Rode Island have Inspected the components described in this Owner's Report during the         period (1/2/9/10)         to 7/1/10         and state to the best of my knowledge and beilef, the         Owner has performed examinations and taken corrective measures described in this Owner's Report         In accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         MUMMMMM         Commissions 7MUM 7M1C MIS IS	to the rules of Type Code Sy Certificate Of Expiration Da Prepared By <u>-</u>	t the ASME Code, S mbol Stamp: Not Ap Authorization No.: te: Not Applicable	Section XI. pplicable Not Applicable The back Engineer (PLE)	Signed ByKuldip Singh - Progr	Surph
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>UPPP</u> to <u>PIPP</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. MMMAMAMA					
Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the period <a href="https://www.components.com">www.com</a> and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         MMMAMM       Commissions		CE	RTIFICATE OF INSE	RVICE INSPECTION	
		tors and the State	of Washington and em	nployed by Factory Mutual Ins s described in this Owner's	urance Company of Report during the
	Vessel Inspec Johnston, Rhoo period <u>U</u> Owner has period in accordance By signing the Implied, conc Furthermore,	formed examinati with the requirem is certificate neithe erning the examina neither the inspect	ions and taken correc nents of the ASME Co er the Inspector nor hi ations and corrective tor nor his employer s	ctive measures described in ode, Section XI. is employer makes any war measures described in this shall be liable in any manne	this Owner's Report ranty, expressed or Owner's Report. r for any personal



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

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 09/14/20 Sheet: 1 of 1 Unit: Not Applicable

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

- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Reactor Feed Water (RFW) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RFW-V-32A	Anchor Darling	1N-109	N/A	N/A	1975		Yes, Code Class 1

7. Description Of Work Performed: Replaced existing stuffing box for valve RFW-V-32A. The replacement work was performed as follows:

1) Machined (counterbored) the replacement stuffing box to the required dimensions.

2) Performed liquid penetrant (PT) examination on the final machined (counterbored) surfaces of the replacement stuffing box. Liquid penetrant (PT) examination results acceptable.

3) Installed replacement pipe cap on the machined (counterbored) area of the new replacement stuffing box.

4) Made required weld.

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

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

7) Performed VT-1 visual examination on six (6) replacement studs for the stuffing box joint. VT-1 visual examination results

acceptable.

8) Performed VT-1 visual examination on six (6) replacement nuts for the stuffing box joint. VT-1 visual examination results acceptable.

9) Removed existing stuffing box from the valve.

10) Installed replacement stuffing box.

11) Installed VT-1 visually examined replacement studs and nuts for the stuffing box joint.

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

PLAN No 2-172 ENERGY NORTHWEST	20
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	e
Test Pressure: 937 Psig       Test Temperature: 522° F         Component Design Pressure: 2160 Psig       Temperature: 700° F         Pemarks: None       Page 100 Psig	
CERTIFICATE OF COMPLIANCE	
Ne certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By <u>Hudf</u> <u>Buy</u> Signed By <u>Hudf</u> <u>Bugh</u> Kuldip Singh - Program Lead Engineer (PLE) Date <u>91400</u> Date <u>91403</u>	
CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>S</u> / <u>3</u> / <u>0</u> to <u>9</u> / <u>2</u> / <u>0</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 in accordance with the requirements of the ASME Code, Section XI.	
Implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         Implied, Commissions       747600/748600/7486000/7486000000000000000000000000000000000000	



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

1. Owner: Energy Northwest	
Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99	352
2. Plant: Columbia Generating Station	

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No .: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: N-416-1

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(2)-1	WPPSS *	RCIC(2)-1-P1	N/A	N/A	1983	*****	Yes, Code Class 2
RCIC-V-60	Borg Warner	14013	N/A	N/A	1976	Replaced	Yes, Code Class 1
RCIC-V-60	Borg Warner	13997	N/A	N/A	1976	Replacement	Yes, Code Class 1
RCIC-V-759	Borg Warner	28706	N/A	N/A	1978	Replacement	Yes, Code Class 1
RCIC-V-760	Borg Warner	80133	N/A	N/A	1983	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced suction and discharge piping material for pump RCIC-P-3. The replacement work was performed as follows:

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

2) Removed existing valve RCIC-V-60, Serial No 14013.

3) Installed replacement piping material such as couplings, elbows, reducing inserts, tees and pipe.

4) Installed replacement valve RCIC-V-60, Serial No 13997.

5) Installed new valve RCIC-V-759, Serial No 28706.

6) Installed new valve RCIC-V-760, Serial No 80133.

7) Made required socket welds.

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

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

10) Installed new studs and nuts associated with pump RCIC-P-3 boited flanged joints.

11) Installed material such as U bolts and jam nuts for the new support.

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

#### NOTES

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

2) The existing ASME Code Stamped piping system in which valve RCIC-V-60, Serial No 13997, valve RCIC-V-759, Serial No 28706

and valve RCIC-V-760, Serial No 80133 were installed is Reactor Core isolation Cooling (RCIC) piping system RCIC(2)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The replacement valve RCIC-V-60, Serial No 13997 is certified to comply with ASME Section III, Code Class 1, 1971 Edition

with Winter 1973 Addenda requirements. ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application. 4) The new valve RCIC-V-759, Serial No 28706 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Summer

1975 Addenda requirements. ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.

5) The new valve RCIC-V-760, Serial No 80133 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda requirements. ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.

6) The liquid penetrant (PT) examination on the final welds was performed in accordance with the requirements of ASME Section III, Code Class 2, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

7) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

Date: 06/27/01 Sheet: 1 Of 1 Unit: Not Applicable

	PLAN No 2-1723
	<b>EMERGY</b> NORTHWEST
F	ORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conduc	ted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       None         Test Pressure: 80 Psig       Test Temperature: 64° F         Component Design Pressure: 125 Psig       Temperature: 170° F
Remarks: See EPN No RCIC-V-60 RCIC-V-759 RCIC-V-760	
	CERTIFICATE OF COMPLIANCE
to the rules Type Code Certificate (	hat the statements made in this Owner's Report are correct and this replacement conforms of the ASME Code, Section XI. Symbol Stamp: Not Applicable Of Authorization No.: Not Applicable Date: Not Applicable Signed By
Vessel ins Johnston, R period Owner has in accorda By signing implied, co	CERTIFICATE OF INSERVICE INSPECTION resigned, holding a valid commission issued by the National Board of Boiler and Pressure bectors and the State of Washington and employed by Factory Mutual Insurance Company of høde Island have inspected the components described in this Owner's Report during the described in this Owner's Report during the described in this Owner's Report during the and state to the best of my knowledge and belief, the performed examinations and taken corrective measures described in this Owner's Report ince with the requirements of the ASME Code, Section XI. this certificate neither the Inspector nor his employer makes any warranty, expressed or oncerning the examinations and corrective measures described in this Owner's Report. the neither the Inspector nor his employer shall be liable in any manner for any personal reporty damage or a loss of any kind arising from or connected with this inspection.
Date 7/	Inspector's Signature  Commissions <u>74764/7486 wI IS</u> National Board, State, and Endorsements

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l same ei Di-	ntRichland, Wash	nington 99352		
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Pump or Value I	JennificationNUCLEAF		76650, 2 Inch I I	
	Serial N	iumbers 13971 t	hru 13095 ( 25 s	VATVOR )
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		Prepared by Nuc	clear Valve Divisi	ion of Borg Warner
(Li National Bo	ard No			ion of Borg Warner
(a) Drawing No. (b) National Bo Design Conditio	ard No			ion of Borg Warner
(b) National Bo Design Conditio	ard No on s 3600 (Pressure)	psi <u>100</u>	••) °F	- -
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(b) National Bo Pesign Conditio The material, d	ard No on s 3600 (Pressure)	psi100 (Temperatur manship complies with A)	<sup>O</sup> F (7) SME Code Section III. Clas	- -
(b) National Bo Pesign Conditio The material, d	ard No ons 3600 (Pressure) esign, construction, and work	psi100 (Temperatur manship complies with A)	<sup>O</sup> F (7) SME Code Section III. Clas	- -
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(Li National Bo Design Condition The material, d Edition1 (a) Castings 1sc - 1sc - 1sc - 	ard No ons3600 (Pressure) esign, construction, and works 971 Adden := Date Mark No. - Code 1F171H16, ng - 71238	psi <u>100</u> (Temperatur manship complies with AS <u>Winter</u> '73 Material Spec. No.	•F SME Code Section III. Class Case No Manufacturer Rex Precision Metals Tech.	1
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			CERTIFICATION OF	NESICN	
De	sign	information on file at Nuclear V	alve Div. of Borg	Warner, 7500 Tyrone	Ave. Van Nuvs, Ca.
Śt		analysis report on file at NVD of 1	Borg Warner, 7500	Tyrone Ave., Van	Nuys, CA
De	5:20	specifications centilied by Dav1	d J. Murphy	(1) Prof. Eng. State	Wash. Reg. No. 12542
Sa		analysis report certified byByron	n Leonard Jr.	(1) Prof. Eng. State	CA Ber. No. 2123
		nature not required. List name only.			
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50	cen	tify that the statements made in this re-	mont are confect.		
			Nuclear Valve	Div.	$\bigcirc$
Da		Oct. 8 19.76 Signed	of Borg Warner	By form	- mane 1
		- -	(Menulacturer)	ľ	
(.c	rtifu	cate of Authorization No. N-1254	expiresOctob	er 27, 1978	
	<u></u>				
		CER	TIFICATE OF SHOP I	NSPECTION	
	1, d	he undersigned, holding a valid comm	ission issued by the Natio	onal Board of Boiler and P	ressure Vessel Inspectors
JU	:17 or	the State of Province ofCalif.	ornia and emp	played by Dept. of	Bldg. & Safety
			· · · · · · · · · · · · · · · · · · ·	have inspected the equipm	ent described in this Data
Re	Pon	on 0 19 76	_, and state that to the	best of my knowledge at	d belief, the Manufacturer
п. <b>1</b>	<b>s (</b> 01	astructed this equipment in accordance signing this petrificate, neither the l	e with the applicable boos	CELIGUA OF MOVIE COCE, 26	
	z the	equipment described in this Data Rep	ours, Furthermore, neither	the inspector nor his empl	over shiff be liable in any
:n.1		far any personal injury or property da	mage or a loss of any kind	arising from or connected	with s inspection.
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FORM NPV-1 MANUFACTU As Require	d by the Provisions of t	ike ASME Code Rules	6/28/01
Nuclear Valve D		- -	
••••	a Address of Manufacturer)	van Nuys, <u>ca.</u> Or	der No. 47713
Bovee & Crail/G. 2. Manufactured for P.O. Box 1040, F	lichland, Washing	ton 99352 Or	der No215-326
	(Name and Address)		128706
3. Owner WPPSS Hanford #2 Job		<u> - V-759, SII</u>	1 28 100
4. Location of Plant Richland, Wash			Y Clobe Velve
5. Pump or Velve Identification Nuclear		76590-2, 3/4 Inch	
	umbers 28694 thru	u 28718 (25 Valves	5)
(a) Drawing No76590-2	Prepared byNucle	ear Valve Division	of Borg Warn
(b) National Board NoN/A			
(b) National Board No. N/A 3600	100	٥£	
5. Design Conditions 3600 (Pressure)	psi100 (Temperatu		1
5. Design Conditions 3600 (Pressure) 7. The material, design, construction, and wor	kmanship complies with A	SME Code Section III. Cla	ss <u> </u>
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Mark No.	Material Spor. No.	Manufacturer	Remarks	F
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Design information on file at NVD of Bor	g Warner, 7500	Tyrone Ave., Van N	Nurs CA 91409	
			Wash. Res. No. 12542	
Stress analysis report on life at David Design specifications certified by David	J. Murphy	(1) Prof. Eng. State (1) Prof. Eng. State	CA Reg. No. 11338	
Stress analysis report certified by	<u>2m E. 8111</u>	(1) Fluit 2.16-04.04		1
1) Signature not required. List name only.				Į L
We certify that the statements made in this rep	ort are correct.		• •	1
we certify diet and transfer	Nuclear Valve		a ficure	
We certify that the statements made in this rep Date <u>March 9</u> 19 78 Signed	(Manufacturer)	0)	•	
Certificate of Authorization No. <u>N-1254</u>	espires Octobe	<u>r 27, 1978</u>		
Certificate of Authorization No.				_
		INSPECTION		
	<b>INFIGATE OF SHOP</b>			
l, the undersigned, holding a valid commi	action leaved by the Nat	tional Board of Boiler and	Pressure Vessel Inspectors	
1, the undersigned, holding a valid contait and/or the State of Province of <u>Califo</u>	ornia and e	nployed by Limbermen	's Mutual Casualty	1
Long Grove, IIIInois		have inspected the equip	ment described in this Data and belief, the Manufacturer	Ì
March 9 10 /0	and state that to the sub-	ne best of my knowledge osections of ASME Code, S	and belief, the Manufacturer lection III.	!
Report on <u>Harden</u> has constructed this equipment in accordance By signing this certificate, neither the Ir ing the equipment described in this Data Rep	spector nor his employ	er makes any warranty, exp the inspector nor his only	ployer shall be liable in any	:
By signing this certificate, hertici the in ing the equipment described in this Data Rep manner for any personal injury or property dan	arge or a loss of any ki	nd arising from or connects	ed with this inspection.	-
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Menufactured by <u>Muc1</u> Menufactured for <u>Was</u>	A Required by the Provision Lear Valve Div., Borg (Name and Address of N Cel shington Public Power (Name and Address of Furcheser	Warner, 7500 Tyrone Tilicate Holder) Supply Systems, Ri	Ave., V 3000 Geo Ichland,	an Nuys, C rge Washin Washington	alif. 6/20
L Location of Installation $\frac{1}{2}$ . L Pump or Valve <u>Y</u> (G)	Richland, Washingto	an WPPSS Hanford #			
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Series No. (5)		anadian stration (d) Drawing		IR North	
or Type		No. No.	(e) Class	f) Nar'ı. Bd. No.	(g) Year Built
(1)1500#	80129 thru N	/A 76590-2	1	N/A	1983
(1) <u>1900</u>	80135	<u>/R 70390-2</u>	1	N/A	1983
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(5)	RCIC-V-160	SIN ROI33			
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	Brief description of services sure rating of the	a media is stated a			******
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Design Conditions3 Cold Warking Pressure Pressure Retaining Pieces Merk No. (a) Cestings	(Pressure) ps/ (Temp 3600 ps/ et 100°F	100 *F or Valve Pres	sanedi LOV.	N/A	
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Design Conditions3 Cold Warking Pressure Pressure Retaining Pieces Merk No. (a) Cestings	1600psi(Temp 3600psi at 100°F. Material Spec. No.	100 *F or Valve Pres	-gnedi slow . ssure Class . rer	N/A	
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\* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in fams 1; 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

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Mark No.	Material Spec. No.	Manufacturer	Remarks
Bolting N/A	•	•	
	<u> </u>		
(d) Other Parts			
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ertify that the stateme	CERTIFICATE OF Inta made in this report are correc Code for Nuclear Power Plant Cor	t and that this pump, or valve, or mponents. Section #, Div. <u>L.</u> Editi	
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By signing this certificate, nerther 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 lund ansing from or connected with this inspection,

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

1. Owner: Energy Northwest

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCIC(2)-1	WPPSS *	RCIC(2)-1-P1	N/A	N/A	1983	Replacement	Yes, Code Class 2
RCIC-V-91	Velan	941014-4	N/A	N/A	1994		Yes, Code Class 1

7. Description Of Work Performed: Installed external bypass for valve RCIC-V-31, Serial No 0126. The replacement work was performed as follows:

1) Installed new piping material such as pipe, pilot boss.

2) Installed new valve RCIC-V-91, Serial No 941014-4.

3) Made required welds.

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

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

#### NOTES -

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

The existing ASME Code Stamped piping system in which the new valve RCIC-V-91, Serial No 941014-4 and external by pass for valve RCIC-V-31, Serial No 0126 was installed is Reactor Core Isolation Cooling (RCIC) piping system RCIC(2)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.
 The new valve RCIC-V-91, Serial No 941014-4 is certified to comply with ASME Section III, Code Class 1, 1989 Edition with no

Addenda requirements. ASME Section III, Code Class 1 valve for ASME Section III, Code Class 2 application.

Date: 06/29/01 Sheet: 1 Of 1 Unit: Not Applicable

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back         Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Ot         Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F         Remarks: See attached NPV-1 Code Data Report for the new valve RCIC-V-91, Serial No 941014-4.	k) her 🔀 No
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Ot Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F	
Test Pressure: PsigTest Temperature: ° FComponent Design Pressure: PsigTemperature: ° F	her 🔀 No
<b>Remarks:</b> See attached NPV-1 Code Data Report for the new valve RCIC-V-91, Serial No 941014-4.	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	.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 and employed by have inspected the co	
described in this Owner's Report during the periodto	_ and taken ts of the oressed or Report.
Injury or property damage or a loss of any kind arising from or connected with this inspector         Not Required - Replacement 1* NPS And Smaller         Inspector's Signature	tion.
Date	

# PLAN NO. 2-1732 941014

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

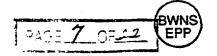
Pg. 1 of \_\_\_\_\_

1. Manufactured and ce	rtified by <u>VEL</u>	AD IDC.	2125	WARS	d NUE, M	<u>[h- (</u>	LANADA
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2. Manufactured for	BAW	NUCLEAR	- SEG	<u>5916 E</u>	• •		
	<u>л</u> .		(name and ad	idress of Pu	urchaser)		
3. Location of installation		·					
	'.			me and add		•	\
4. Model No., Series No	., or Type	TE Draw	ving <u>21-71</u>	1-00-1	BLRev. F		CRN_N
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5. ASME Code, Section	III, Division 1:	1989	<u> </u>	JUE			NIN
		(edition)	ladden	ida date)	te) (class)		(Code Čase no.)
6. Pump or valve	LVE	Nominal inlet size_	12-		Outlet size	12.	
			(in.)			(in.)	
7. Material: Body	A-105	BonnetSA	105	Disk _SP	A-351,cf81	Bolting	<u>52:193,87</u> 52:194,24
(a)	(b)		(c)		(d)		(e)
Cert.	Nat'l		Body		Bonnet		Disk
Holder's	Board		Serial		Serial		Serial
Serial No.	No.		No.		No.		No.
9/41014-1	NIA	<u>iu</u>	C: NV	<u> </u>	HIC: A.V	<u> </u>	HIC: INK
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\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ × 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88)

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



2.6 -URM NPV-1 (Back -- Pg. 2 of \_\_\_\_) 941014 Certificate Holder's Serial No. 800 °F or valve pressure class \_ 8. Design conditions (temperature psi at 100°F 9. Cold working pressure 10. Hydrostatic test 3000 3300 osi psi. Disk differential test pressure . SPI: GOITIGS 11. Remarks: MATERIALS **CERTIFICATION OF DESIGN** FARRELL P.E. State Reg. no. Design Specification certified by P.E. State Reg. no. Design Report certified by 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. MÞ Expires N Certificate of Authorization No. Date March 7/ac Name Signed (authorized/representative) Contificate Holder CERTIFICATE OF INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and and employed by 200. al de the State on Province of \_ have inspected the pump, or valve, described in this Data Report on رد of , and state that to the best of my knowledge and belief, the Certificate Holder has con-94 310 structed this pump, or valve, in accordance with the ASME Code, Section III, Division 1. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning 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. O17 Commissions . Signed [Nat'l. Bd. (incl. endorsements) and state or prov. and no.] (Authorized Inspector) (1) For manually operated valves only.

PAGE 13 OF 27



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

- 1. Owner: Energy Northwest
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station
- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: High Pressure Core Spray (HPCS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS(1)-4CL2	WPPSS *	HPCS(1)-4CL2-P1	N/A	N/A	1983		Yes, Code Class

7. Description Of Work Performed: Installed external bypass for valve HPCS-V-12, Serial No E5310-1-1. The replacement work was performed as follows:

- 1) Installed new piping material such as pipe, elbow, pilot boss.
- 2) Made required welds.
- 3) Performed visual examination on the final welds. Visual examination results acceptable.
- 4) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable.

#### NOTES -

\* Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
 The existing ASME Code Stamped piping system in which the external by pass for valve HPCS-V-12, Serial No E5310-1-1 was installed is High Pressure Core Spray (HPCS) piping system HPCS(1)-4CL2-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

Date: 06/29/01 Sheet: 1 Of 1 Unit: Not Applicable

	PLAN No 2-1733 <b>NERGY</b> ORTHWEST
FORM NIS-2 OWNER'S REPOR	RT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic Pneuma Test Pressure: Psig Component Design Pressur Pemarks: None	Test Temperature: ° F
CERTIFI	CATE OF COMPLIANCE
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By Kuldip Singh - Program Lead Engine	
	OF INSERVICE INSPECTION
Vessel Inspectors and the State of	
lescribed in this Owner's Report during the	e period and
state to the best of my knowledge and belie corrective measures described in this Own ASME Code, Section XI. By signing this certificate neither the Inspec	f, the Owner has performed examinations and taken er's Report in accordance with the requirements of the ctor nor his employer makes any warranty, expressed or corrective measures described in this Owner's Report.
Furthermore, neither the Inspector nor his e	employer shall be liable in any manner for any personal kind arising from or connected with this inspection.
Not Required - Replacement 1" NPS And Smaller	Commissions
Inspector's Signature	



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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: High Pressure Core Spray (HPCS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1971 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS-V-4	Anchor Darling	E5310-4-1	N/A	N/A	1974	Repair	Yes, Code Class 1

7. Description Of Work Performed: Drilled hole in the disc for valve HPCS-V-4. The work was performed as follows: 1) Drilled hole in the existing disc of the valve - See Note 1.

2) Performed VT-3 visual examination on the existing studs for the valve body to bonnet joint. VT-3 visual examination results acceptable.

Performed VT-3 visual examination on the existing nuts for the valve body to bonnet joint. VT-3 visual examination results acceptable.
 Reinstalled the existing disc in the valve - See Note 1.

5) Reinstalled VT-3 visually examined existing studs for the valve body to bonnet joint.

6) Reinstalled VT-3 visually examined existing nuts for the valve body to bonnet joint.

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

#### NOTES -

1) HPCS-V-4 is a double (duel) disc valve. The hole was drilled on the Reactor Pressure Vessel (RPV) side of the valve disc. The disc opposite to the Reactor Pressure Vessel (RPV) side of valve HPCS-V-4 was replaced in accordance with ASME Section XI Plan No 2-1762.

Date: 07/19/01 Sheet: 1 Of 1 Unit: Not Applicable

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
None X None	
sts Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       None         Test Pressure: 2790 Psig       Test Temperature: 500° F         Component Design Pressure: 405 Psig       Temperature: 86° F	
emarks: None	
	]
CERTIFICATE OF COMPLIANCE We certify that the statements made in this Owner's Report are correct and this repair conforms to th	
ules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Mail Singh - Program Lead Engineer (PLE)         Nate       123 01	
CERTIFICATE OF INSERVICE INSPECTION	 e
Vessel Inspectors and the State of Washington and employed by Factory Matter Media Media Media Media Media Media Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>4///////</u> to <u>7//////</u> and state to the best of my knowledge and belief, the period <u>4//////</u> to <u>7/////</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	he
in 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.	or
<u>Inspector's Signature</u> 2/24///	
Date	



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

- 1. Owner: Energy Northwest Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. Plant: Columbia Generating Station Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Standby Liquid Control (SLC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SLC(2)-4S	WPPSS *	SLC(2)-4S-P1	N/A	N/A	1983		Yes, Code Class 1
SLC-V-4B	Conax	3	90	N/A	1975		Yes, Code Class 1
Trigger Body	Conax	4295	N/A	N/A	1993	Replaced	Yes, Code Class 1
Trigger Body	Conax	5885	N/A	N/A	2000	Replacement	Yes, Code Class 1
Inlet Fitting	Conax	4328	N/A	N/A	1993	Replaced	Yes, Code Class 1
Inlet Fitting	Conax	5887	N/A	N/A	2000	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced parts for the existing valve SLC-V-4B, Serial No 3, National Board No 90. The replacement work was performed as follows:

- 1) Removed the existing Trigger Body Subassembly Serial No 4295 from the valve.
- 2) Installed new replacement Trigger Body Subassembly Serial No 5885 in the valve.
- 3) Removed the existing Inlet Fitting Serial No 4328 from the valve.
- 4) Installed new replacement Inlet Fitting Serial No 5887 in the valve.

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

- 6) Performed VT-3 visual examination on the existing nuts for the valve inlet joint. VT-3 visual examination results acceptable.
- 7) Performed VT-3 visual examination on the existing nuts for the valve outlet joint. VT-3 visual examination results acceptable.
- 8) Reinstalled refurbished valve SLC-V-4B, Serial No 3, National Board No 90.
- 9) Reinstalled VT-3 visually examined existing studs and nuts for the valve inlet and outlet joints.

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

#### NOTES -

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

2) The existing ASME Code Stamped piping system in which the existing valve SLC-V-4B, Serial No 3, National Board No 90 was reinstalled is Standby Liquid Control (SLC) piping system SLC(2)-4S-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

3) ASME Section III, Code Class 1, 1971 Edition with Winter 1972 Addenda for the existing valve SLC-V-4B, Serial No 3, National Board No 90.

4) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new replacement Trigger Body Subassembly Serial No 5885. The new replacement Trigger Body Subassembly certified to 1977 Edition with Summer 1977 Addenda is acceptable for use in the existing valve certified to 1971 Edition with Winter 1972 Addenda. This acceptability is documented in ASME Section XI Plan No 2-1618.

5) ASME Section III, Code Class 1, 1977 Edition with Summer 1977 Addenda for the new replacement Inlet Fitting Serial No 5887. The new replacement Inlet Fitting certified to 1977 Edition with Summer 1977 Addenda is acceptable for use in the existing valve certified to 1971 Edition with Winter 1972 Addenda. This acceptability is documented in ASME Section XI Plan No 2-1618.

Date: 06/14/01 Sheet: 1 Of 1 Unit: Not Applicable

	EMERGY NORTHWEST
F	ORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conduct	red: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       Other       Non         Test Pressure: 1240/1245 Psig       Test Temperature: 82.6° F       Component Design Pressure: 1400 Psig       Temperature: 150° F
<u>Vaive Part</u> Trigger Body St	E997
The design pressu stem SLC(2)-4S-P	re of 1400 Psig and design temperature of 150° F are for both valve SLC-V-4B and Standby Liquid Control (SLC) pipil
	CERTIFICATE OF COMPLIANCE
Certificate O	Signed By       Signed By
Vessel Inspe Johnston, Rh period /~/ Owner has p in accordan By signing t Implied, cor Furthermor	CERTIFICATE OF INSERVICE INSPECTION signed, holding a valid commission issued by the National Board of Boiler and Pressure ectors and the State of Washington and employed by Factory Mutual Insurance Company of bode Island have inspected the components described in this Owner's Report during the sector to and state to the best of my knowledge and belief, the boerformed examinations and taken corrective measures described in this Owner's Report ce with the requirements of the ASME Code, Section XI. this certificate neither the Inspector nor his employer makes any warranty, expressed or the examinations and corrective measures described in this Owner's Report. the inspector nor his employer shall be liable in any manner for any personal to perty damage or a loss of any kind arising from or connected with this inspection.
1.11	Inspector's Signature Commissions 745/40/7456 NIISIS National Board, State, and Endorsements
Date (	11

PLAN NO. 2-1735 Kudit

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

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

NOT TO	Exceed	One Da	v's i	Production
			7	roudotion

1. Manuf	factured and certified by	IST-Conax Nuclear, 402 Sonwil Drive, Checktowaga, NY 14225						
				nd address of NPT Cer				
2. Manuf	actured for		Energy Northwe	st, Richland, WA	99352			
	•			address of Purchaser)				
3. Location	on of installation			UNKNOWN				
				(name and address)	<u></u>			
4. Type:	N20000, Rev. G	SA479 304SST	75 KSI		N/A	2000		
	(drawing no.)	(mat'i spec. no.)	(tensile streng	າເມ	(CRN)	(year built)		
5. ASME	Code, Section III, Division	n 1:77		577	1	N/A		
		(edition)	(adda	nda date)	(class)	(Code Case no.)		
6. Fabrica	ated in accordance with Co	nst. Spec. (Div. 2 only)	N/A	Revision	Da	te		
			(no.)			••••••••••••••••••••••••••••••••••••••		
7. Remark	ks:Trigger Body Sub	assembly for explosive ac	tuated valve repl	acement kit for s	tandhy liquid control	eveteen.		

Para. NB-2121 (b) is applicable to ram. Press Fit/Seal on .328 & .4375 diameters. Overall subassembly length is 2.5". Pressure Test at 2800 psi for 10 minutes.

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

	Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	5885	5885	(26)	
(2)	5886	5886	(27)	
(3)			(28)	
(4)			(23)	
(5)			(30)	
(6)	SLC-V-48	TRIGGER	(31)	
(7)			(32)	
(8)	BODY SI	J 5885	(33)	
(9)			(34)	
(10) (11)			(35)	
(12)			(36)	
(12)			10//	
(14)			(38)	
(15)			(39)	
(16)			(40)	
(17)			1417	
18)			(42)	
19)			(43)	
20)			(44)	
			(45)	
			(40)	
· •			(47)	
			(48)(49)	·····
25)			(50)	
•			1007	

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

-1

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

	Certificate Holder's Seria	al Nos58	85	through	5886
	CERTIFICATION OF DESIG	5N			L
Design specifications certified by	George I. Skoda (when applicable)	P.E. State	CA	Reg. no	15847
Design report* certified by	Francis J. Domino (when applicable)	P.E. State	NY	Reg. no	36832
	CERTIFICATE OF COMPLIAN	NCE			
We certify that the statements made in th	is report are correct and that this (these)	Tric	ger Body	Sub Assembly	
conforms to the rules of construction of th	e ASME Code, Section III, Division 1.				
NPT Certificate of Authorization No.	N-1850	Expires	Septe	amber 2, 2001	,
Date 8 10 00 Name	IST Conax Nuclear	_Signed	ult	Couch	me
	(NPT Certificate Holder)	1	(authoria	ted representative)	
	CERTIFICATE OF INSPECTI	ON			
l, the undersigned, holding a valid commission	n issued by the National Board of Boiler and I	Pressure Vessel Insp	ectors and t	he State or Prov	vince of
	Hartford Steam Boi				
of <u>Hartford, CT</u> have inspect best of my knowledge and belief, the Certi Section III, Division 1. Each part listed has By signing this certificate, neither the insp described in this Data Report. Furthermore property damage or loss of any kind arising	been authorized for stamping on the date ector nor his employer makes any warrant e, neither the inspector nor his employer s	r appurtenances in a shown above. ty, expressed or imp	accordance blied, conce	with the ASM	E Code, oment
Date <u>8-10-00</u> Signed	(Authorized Inspector)			AN NY 505 ents) and state of p	and the state of the

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PLAN NO. 2-1735

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(when applicable)

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6/12/01 Pg. 1 of 2

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

As Required by the Provisions of the ASME Code, Section III Not to Exceed One Day's Production

1. Manufactured and certified by IST Conax Nuclear, 402 Sonwil Drive, Cheektowaga, NY 14225 (name and address of NPT Certificate Holder) 2. Manufactured for Energy Northwest Richland, WA 99352 (name and address of Purchaser) 3. Location of installation UNKNOWN (name and address) N38017, Rev. F 4. Type: SA479 304SST 75 KSI  $M/\Delta$ 2000 (drawing no.) (mat'l spec, no.) (tensile strength) (CRN) (year built) 5. ASME Code, Section III, Division 1:\_\_\_ 77 S77 1 N/A (edition) (addenda date) (class) (Code Case no.) 6. Fabricated in accordance with Const. Spec. (Div. 2 only) Revision N/A Date (no.) 7. Remarks: Inlet Fitting for explosive actuated valve replacement kit for standby liquid control system.

Pressure Test at 2800 psi for 10 minutes.

8. Nom. thickness (in.) .040 Min. design thickness (in.) .031 Dia. ID (ft & in.) .895" Length overall (ft & in.) .2.245" 9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. in Numerical Order		Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	5887	5887	(26)		
(2)	5888	5888	(27)	······	
(3)			(28)		
(4)			(29)		
(5)			(30)		
(6)	SLC-V-4	S. INLET	(31)		
(7)			(32)		
(8)	FITTING	SIN 5887	(33)		
(9)			(34)		
(10)			(35)		
(11)			(36)		
(12)			(37)		
(13)			(38)		
(14)				· · · ·	
(15)	······································		(40) -		
(16) (17)			(41)		
· · . · ·			(42) _		
(19)			(43)		
(20)			(44)		
(21)			(45)		
(22)			(40)		-
•	· · · · · · · · · · · · · · · · · · ·		(48) -		
			(48) -		
(25)	4				
			- 100/-		

\*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form. FORM N-2 (Back - Pg. 2 of \_2\_)

	Certificate Holder's	Serial Nos.	5887	through	5888
[	· · · · · · · · · · · · · · · · · · ·				
	CERTIFICATION OF DI	ESIGN			Ļ
Design specifications certified by	George I. Skoda	P.E. Sta	ate <u>CA</u>	Reg. no	15847
	(when applicable)				
Design report <sup>•</sup> certified by	Francis J. Domino (when applicable)	P.E. Sta	ate <u>NY</u>	Reg. no	36832
	CERTIFICATE OF COMP	LIANCE			
We certify that the statements made in th	is report are correct and that this (the	se)	Inle	t Fittings	
conforms to the rules of construction of t	he ASME Code, Section III, Division 1.				
NPT Certificate of Authorization No.	N-1850	Expires	Se	ptember 2, 200	1
Date 8 10 00 Name	IST Conax Nuclear	Signed	aul	Elouch	ma
		{	(auti	norized representative	)) 
	CERTIFICATE OF INSPE	CTION			
I, the undersigned, holding a valid commissio	n issued by the National Board of Boiler (	and Pressure Vess	el inspectors an	d the State or Pro	ovince of
	Hartford Steam		•		
	ted these items described in this Data ifficate Holder has fabricated these par s been authorized for stamping on the bector nor his employer makes any war re, neither the inspector nor his employ g from or connected with this inspecti	Report on Act ts or appurtenand date shown abov rranty, expressed ver shall be liable	C.10 ZC ces in accordan e. or implied, cor	, and s ice with the ASM	ME Code, ipment
Date <u>8-10-00</u> Signed	(Authorized Inspector)	nmissions		64AN NY 50 sements) and state or	



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

# 1. Owner: Energy Northwest

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

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

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CAC-HR-18 CAC-RV-638 CAC-RV-638	Air Products Lonergan Anderson Greenwood	76-130-3 507929-1-2 97-16628	5210 N/A N/A	N/A N/A N/A	1977 1976 1997	Replaced Replacement	Yes, Code Class 3 Yes, Code Class 3 Yes, Code Class 2

7. Description Of Work Performed: Removed parts from the existing relief valve CAC-RV-63B, Serial No 507929-1-2 and installed in the replacement relief valve CAC-RV-63B, Serial No 97-16628 to change the setpoint pressure from 488 psig to 300 psig. The parts replacement work and the replacement of the relief valve work was performed as follows:

1) Removed spring from the existing relief valve Serial No 507929-1-2 and installed in the replacement relief valve Serial No 97-16628.

2) Removed spring steps from the existing relief valve Serial No 507929-1-2 and installed in the replacement relief valve Serial No 97-16628.

3) Removed nozzle from the existing relief valve Serial No 507929-1-2 and installed in the replacement relief valve Serial No 97-16628. 4) Removed bonnet from the existing relief valve Serial No 507929-1-2 and installed in the replacement relief valve Serial No 97-16628.

5 Assembled relief valve Serial No 97-16628 using the above listed parts.

6) Removed the existing relief valve CAC-RV-63B, Serial No 507929-1-2.

7) Installed the replacement relief valve CAC-RV-63B, Serial No 97-16628.

#### NOTES -

1) Parts from existing relief valve Serial No 507929-1-2 are certified to comply with ASME Section III, Code Class 3, 1974 Edition with Summer 1974 Addenda requirements and replacement relief valve Serial No 97-16628 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements. The above ASME Section III, Code Class 3 parts were reviewed against ASME Section III, Code Class 2, Subsection NC requirements and were found to be acceptable for ASME Section III, Code Class 2 application.

2) Lonergan-relief valves were manufactured by Anderson Greenwood.

3) The existing ASME Code Stamped piping system in which the replacement valve CAC-RV-63B, Serial No 97-16628 was installed is Containment Atmosphere Control (CAC) piping system for CAC-HR-1B. The CAC-HR-1B skid piping is certified to comply with ASME Section III, Code Class 2, however the cooling water (SW) lines on which the relief valve was installed is certified to comply with ASME Section III, Code Class 3.

4) ASME Section III, Code Class 2 relief valve CAC-RV-63B, Serial No 97-16628 for ASME Section III, Code Class 3 application.

Date: 01/24/01 Sheet: 1 Of 1 Unit: Not Applicable

PLAN No 2-1736

Prepared By		PLAN No 2-1736
ests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure:       Other ★ None         Test Pressure: Psig       Test Temperature: ° F         Premarks: See attached NV-1 Code Data Reports for the following relief valves:       1         1) NV-1 Code Data Report for relief valve Serial No 507929-1-2 from which the parts were removed and installed in relief valve Serial No 507929-1-2.         87.16628.       2) NV-1 Code Data Report for relief valve Serial No 507929-1-2.         9.1 NV-1 Code Data Report for relief valve Serial No 507929-1-2.       Relief valve Serial No 57.16828 was installed in the plant as CAC-RV-63B         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp; Not Applicable       Signed By		NORTHWEST
Test Pressure: Paig       Test Temperature: ° F         Code Date Popot for relief valve Serial No 507929-1-2.         Temperature: ° F	F	ORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
1) NV-1 Code Data Report for relief valve Serial No 507929-1-2 from which the parts were removed and installed in relief valve Serial No 57-16628 which received the parts removed from relief valve Serial No 507929-1-2. Relief valve Serial No 97-16628 was installed in the plant as CAC-RV-63B  CERTIFICATE OF COMPLIANCE  We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No: Not Applicable Expiration Date: Not Applicable Muldip Singh - Program Lead Engineer (PLE) Date	ests Conduct	Test Pressure: Psig Test Temperature: ° F
2) NV-1 Code Data Report for relief valve Serial No 57:16628 which received the parts removed from relief valve Serial No 507329-1-2. Relief valve Serial No 57:16628 was installed in the plant as CAC-RV-63B           CERTIFICATE OF COMPLIANCE           We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.           Type Code Symbol Stamp: No tApplicable         Signed By         Support Stamp: No tApplicable           Expiration Date: Not Applicable         Signed By         Support Stamp: (PLE)           Date         12.4         01         Date         12.4         0.1           CERTIFICATE OF INSERVICE INSPECTION           Is a selection to the selection of the selection on the selection on the selection of th	1) NV-1 Code D	ittached NV-1 Code Data Reports for the following relief valves: ata Report for relief valve Serial No 507929-1-2 from which the parts were removed and installed in relief valve Serial 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 Expiration Date: Not Applicable Prepared By	2) NV-1 Code D	ata Report for relief valve Serial No 97-16628 which received the parts removed from relief valve Serial No 507929-1-2. al No 97-16628 was installed in the plant as CAC-RV-63B
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Expiration Date: Not Applicable Prepared By		
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Muldip Singh & Program Lead Engineer (PLE) Date		CERTIFICATE OF COMPLIANCE
Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Full         Kuldip Singh - Program Lead Engineer (PLE)         Date       12401	to the rules o	f the ASME Code, Section XI.
Kuldip Singh - Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)         Date       1)24(0)         Date       1)24(0)         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel inspectors and the State of Washington and employed by Factory Mutual Insurance Company of         Johnston, Rhode Island have inspected the components described in this Owner's Report during the         period       8/11/00       to 3/19/01         and state to the best of my knowledge and belief, the         Owner has performed examinations and taken corrective measures described in this Owner's Report         In accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or         Implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal         Injury or property damage or a loss of any kind arising from or connected with this inspection.         M.M. Tuttor       Commissions 7486m/24470 ML	Certificate Of	Authorization No.: Not Applicable
Date       12401       Date       12401         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of         Johnston, Rhode Island have Inspected the components described in this Owner's Report during the         period $S/11/00$ to $3/9/0^{\prime}$ and state to the best of my knowledge and beilef, the         Owner has performed examinations and taken corrective measures described in this Owner's Report       in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or       implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal       injury or property damage or a loss of any kind arising from or connected with this inspection.         M.M. Tatada       Commissions 7486 M/746M MI	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 Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $g/1/00$ to $g/9/00$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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	
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	Vessei Inspect Johnston, Rho period <u>8</u> Owner has period in accordance By signing the implied, conce Furthermore,	gned, holding a valid commission issued by the National Board of Boiler and Pressure ctors and the State of Washington and employed by Factory Mutual Insurance Company of de Island have inspected the components described in this Owner's Report during the $\frac{1}{0}$ to $\frac{3}{9}/\frac{9}{0}$ and state to the best of my knowledge and belief, the enformed examinations and taken corrective measures described in this Owner's Report e with the requirements of the ASME Code, Section XI. is certificate neither the Inspector nor his employer makes any warranty, expressed or erning the examinations and corrective measures described in this Owner's Report. neither the Inspector nor his employer shall be liable in any manner for any personal
		That a service THEINITIES ANT
Date	<u>A. M.</u>	A JOP / Commissions / 786 W/ 148 C NCC
	<u>M. M.</u>	

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AS 10	quired by the Provisiou	s of the ASME Code Rules Judap Sur
Manufacture J. E. LONE	RGAN CO., RED T	ICN RD., W. OF VERREE RD., FHILA.
, Mandractured By		Name and Address
Model No. D30-D Order No. 50	7929 Contract Date _	6/23/75 National Board No.
Manufactured For Air Produc	cts Chemicals.	Inc. 00-1-327-308
Manufactured For Air Produc	Name and Address	Inc. Allentown, Pa. Order No. 00-4-1371-108
Owner Unknow		
Uwiter		and Address
Location of Plant Unkn	lown	
Location of Flant	· · · · · · · · · · · · · · · · · · ·	
Valve Identification SV-63B	Serial No. <u>50792</u>	9-1-2 Drawing No. <u>A-2369</u>
		Opipe Size Inlet Outlet 2"
Safety; Safety Relief; Pilot; Power A	ctuated SQ . Inch	Inch Inch .
, Set Pressure (PSIG) <u>300# PS</u>	IG Coincident w	ith heo
	5# PSIG Back	Pressure Rated Temperature
Summed Carleton 30.8 G.P.1	• · · ·	•
Stamped Capacity 30.8 G.P.I	IPX/Ar @ % Over	pressure Blowdown (PSIG)&**
Hydrostatic Test (PSIG) Inlet	150	Outlet LOG" Dorg
Hydrostatic Test (PSIG) Inlet	4_/\	Roupling Valve <u>425# PSIG</u>
The material, design, construction as	nd workmanshin comply at	
The material, design, construction as Class3		MPPSS CONTRACT 2808 71
	, Edition 197!	Menda Date <u>6/30/74</u> WPPSS CONTRACT 2808 71 PROJECT NUMBER 2
Class3,	, Edition 197!	Summer 1974 , Addenda Date <u>6/30/74</u> , Case No. 1555 & WPPSS CONTRACT 2808 71 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D
Class 3 Pressure Containing or Pressure Rec	Edition <u>197!</u> aining Components Serial No. or	Summer 1974 , Addenda Date 6/30/74 Case No. 1555 & WPPSS CONTRACT 2808 71 1 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NOCAC HR 18 NB 5-10
Class 3 Pressure Containing or Pressure Ret	Edition <u>197!</u> aining Components Serial No. or Identification	Menda Date 6/30/74 WPPSS CONTRACT 2808 71 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NO. CAC HR 18 NB 5-10 HYDROGENERECOMBLINER SYSIEM
Class 3 Pressure Containing or Pressure Rec	Edition <u>197!</u> aining Components Serial No. or	Summer 1974 , Addenda Date 6/30/74 Case No. 1555 & WPPSS CONTRACT 2808 71 1 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NOCAC HR 18 NB 5-10
Class 3 Pressure Containing or Pressure Ret	Edition <u>197!</u> aining Components Serial No. or Identification	Addenda Date 6/30/74 WPPSS CONTRACT 2808 71 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NO. CAC HR 18 NB 5-10 HYDROGENERECOMBLINER SYSIEM ASME SA 216/WCB
Class 3 Pressure Containing or Pressure Rec a. Castings Body	Edition <u>197!</u> aining Components Serial No. or Identification <u>A-9035-2</u>	Menda Date 6/30/74 WPPSS CONTRACT 2808 71 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NO. CAC HR 18 NB 5_10 HYDROGENERECOMBLINER STS IEM ASME SA 216/WCB
Class 3 Pressure Containing or Pressure Ret a. Castings Body Bonnet CXXXX b. Bar Stock and Forgings	Edition <u>197!</u> aining Components Serial No. or Identification <u>A-9035-2</u>	Addenda Date 6/30/74 WPPSS CONTRACT 2808 71 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NO. CAC HR 18 NB 5-10 HYDROGENERECOMBLINER SYSIEM ASME SA 216/WCB
Class 3 Pressure Containing or Pressure Ret a. Castings Body Bonnet CXXXX	Edition <u>197!</u> aining Components Serial No. or Identification <u>A-9035-2</u> <u>A-9035-12</u>	Summer 1974 Addenda Date 6/30/74 Case No. 1555 & WPPSS CONTRACT 2808 71 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NO. CAC HR 18 NB 5_10 HYDROGENERECOMBLINER STS IEM ASME SA 216/WCB
Class 3 Pressure Containing or Pressure Ret a. Castings Body Bonnet CXXXX b. Bar Stock and Forgings	Edition <u>197!</u> aining Components Serial No. or Identification <u>A-9035-2</u>	Summer 1974 Addenda Date 6/30/74 Case No. 1555 & WPPSS CONTRACT 2808 71 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NO. CAC HR 18 NB 5_10 HYDROGENERECOMBLINER STS IEM ASME SA 216/WCB
Class 3 Pressure Containing or Pressure Ret •. Castings Body Bonnet CXXXX b. Bar Stock and Forgings Support Rods	Edition <u>197!</u> aining Components Serial No. or Identification <u>A-9035-2</u> <u>A-9035-12</u>	Summer 1974 Addenda Date 6/30/74 Case No. 1555 & WPPSS CONTRACT 2808 71 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NO. CAC HR 18 NB 5_10 HYDROGEN RECOMBLINER STS IEM ASME SA 216/WCB ASME SA 216/WCB
Class 3 Pressure Containing or Pressure Ret a. Castings Body Bonnet XXXX b. Bar Stock and Forgings Support Rods Nozzle	Edition <u>197!</u> aining Components Serial No. or Identification <u>A-9035-2</u> <u>A-9035-12</u>	Addenda Date 6/30/74 Case No. 1555 & WPPSS CONTRACT 2808 71 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NO. CAC HR 18 NB 5_10 HYDROGEN-RECOMBLINER SYSIEM ASME SA 216/WCB ASME SA 216/WCB
Class 3 Pressure Containing or Pressure Ret a. Castings Body Bonnet CXXXX b. Bar Stock and Forgings Support Rods Nozzle Disc	Edition <u>197!</u> aining Components Serial No. or Identification <u>A-9035-2</u> <u>A-9035-12</u> 55603 55703	Addenda Date 6/30/74 Case No. 1555 & WPPSS CONTRACT 2808 71 1 PROJECT NUMBER 2 DWG. NO. 4 1371 1820 U3D ITEM NO. CAC HR 18 NB 5_10 HYDROGEN & RECOMBLINER STS IEM ASME SA 216/WCB ASME SA 216/WCB ASME SA -1479 Type 304 ASME SA-479 Type 304

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

erial No. o I Specification ........... Heat No. Type or Grade Spring 31933 ASTH A-229 Studs Cert. Conformance of ASME SA-193 GR-B7 Nuts 11 . 11 d. Bolting ASME SA-194 GR-2H e. Other Parts such as Pilot Components Cap D-1055 ASME SA. -275/ 3 . . . . ٩ ¥ \ <u>70.</u> S. We certify that the statements made in this report are correct, SEP 2 8 1976 29-76 Date ONERGAN Signed Manufacturer aski Certificate of Authorization No. expires August 9, 1979 **CERTIFICATE OF SHOP INSPECTION** I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>P</u> of <u>Hartford</u>, Conn. and employed by Hartford Steam Boiler L.&I.Co. Penna. have inspected the equipment described in this Data Report on \_\_\_\_\_ SEP 2 8 1976 \_\_\_and state that to the best of my knowledge and belief, the Manufacturer has con-19. structed this equipment in accordance with the applicable Subsections of ASME Section III. By signing this certificate, neither the Inspector not 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. 2 8 1976 ommission (Inspect (National Board, State, Province and No.) Printed in U.S.A. 1/73 from the ASVE. 345 E. 47th St., New 10017

Manufactured and	certified by And	lerson, Gr	eenwood	E Co 3050	Croophal	,Stafford,TX
•	Washingto	n Public	Power "	ame and address of MV Car	Ufficing Holder) OCO	Richland, WA
Manufactured for _			•		DI	
			•	and address of Purchaser		And NO. 2-1-
Location of installat	tion <u>Washing</u>	ton Nuclea	ar Power	Plant, N.	Power Plan	t Loop, Richla
ND30DS	046 5121ADG498	AP 15-14-97	•	(name and address)		WA 99
Valve	eries no.)	size <u>0.394</u> (in.)	Nom	. inlet size1	Gin.] Outlet	
ASME Code, Sectio	n III. Division to	1974	£7	74		
		(edition)	<u> </u>	idenda date)	2	(Code Case no.)
TypeSpring		488	Fixed	70°F	450	
(spring, pilot or po	wer operated) (set	pressure, psig)	(blowdown, psi)	(rated temp.)	ihydro. test, peig, inle	at_Ambient•
Identification	7-16628	NA	N1	1.1315 R/A	NA	1997
(Cer	t. Holder's serial no.)	(CRN)		(drawing no.)	(Nat'l. Bd. no.)	(year built)
Control ring settings	NA					
				•		····
Pressure retaining it	ems:				· · · · · · · · · · · · · · · · · · ·	
	• •	·		•		
	-	erial No. or		Mat'i.	Spec.,	Tensile
•	ic	Ientification	<u>_</u>	Including Ty	/pe or Grade	Strength
Body		<u>B635-2</u>		SA216		70
Bonnet or Yoke		<u>B623-2</u>		SA216		70
Support Rods. Ca	<u>p</u>	<u>J3288-5</u>		SA216		70
Nozzle ·		<u>B613-1</u>		SA351-	-CF8M	70
Disk Spring WeshersD	ico Helde	<u>B607</u>		<u>SA479</u>		75
	Nut ·	B617		SA351		70
windle Screw		B529	·	<u>SA479</u> .		75
pring_SCrew		B612		<u>SA479</u> -		75
loking Stud		8866612	<u> </u>	<u>SA479</u>		75
ther Items Pipe	the second s	621YNF,6	21 VNE 2	SA1931	5/	105
Nut		N4C		<u>SA105</u> SA194-	217	70
lelieving capacity	75.1 GPM	N-10	<u> </u>			NA
		fluid, Ib/hr)	(pei)	Overpressure a	s certified by the Nat	ional Board4-16-
	· .					
emarks:	·					
• • .						
Specification certi	fied by Davi	<u>d Michael</u>	IFICATION O		<b>M</b>	200.41
Report certified by			BUSI			eg. no. <u>20941</u>
				P.E. State _	<u> </u>	eg. no/A
rtify that the statem	ente modo in obio -	CERTIF	ICATE OF CO	MPLIANCE		
ision 1.	ente mage in this f	eport are correct an	o that this valu	e conforms to the r	lies for construction o	of the ASME Code, Section
	. <b>.</b>	•				
rtificate of Authoriz	ation No. N	-2825		· _	9/10/99	<b>,</b>
· · · · · · · · · · · · · · · · · · ·				Expires		

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

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, the undersigned, holding a ofTX	valid commission is and employed by	CERTIFICATE ( ssued by the National B 		essure Vessel Inspecto	rs and the State or Provin
	of <u></u> of		have	inspected the valve dea	cribed in this Data Report
<u></u> , and	state that to the be	st of my knowledge and			ted this valve in accordan
with the ASME Code, Section By signing this certificate nei In this Data Report. Furtherm I loss of any kind arising from	ther the inspector no ore, neither the insp n or connected with	ector nor his Employer s	ny warranty, express hall be liable in any n	sed or implied, concerni nanner for any personal	ng the component describ injury or property damage
Date	(Author	rized (nspector)	_ Commissions	INAT'I. Bd. (incl. endorsemen	ts) and state or prov. and no.]
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•••	Халар (с. 1916)			SATISFACTORY	UNSATISFACTORY <i>INSATISFACTORY</i>
	•		•	RECEIPT INSPECTOR ASMETL/	/ LEVEL / DATE



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

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

CC 45 Date: 09/06/99 Sheet: 1 of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Reactor Recirculation Cooling (RRC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
- (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC-P-1A Mechanical Seal Mechanical Seal	Bingham Bingham Bingham	B-2-1034 11N92-3 11N92-2	134 1080 1079	NA NA NA	1974 1983 1983	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

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

1) Removed existing upper mechanical seal, Serial No 11N92-3.

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

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

#### NOTES -

1) The existing pump RRC-P-1A is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements. 2) Both the existing mechanical seal, Serial No 11N92-3 and the spare replacement mechanical seal, Serial No 11N92-2 are certified to comply with ASME Section III, Code Class 1, 1971 Edition with 1971 Addenda requirements.

	NORTHWEST
FOR	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
	: Hydrostatic Pneumatic Nominal Operating Pressure X Other Nom Test Pressure: 935 Psig Test Temperature: 525° F Component Design Pressure: 1650 Psig Temperature: 575° F
l <b>emarks:</b> See atta	iched N-2 Code Data Report for the spare replacement mechanical seal, Serial No 11N92-2.
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	CERTIFICATE OF COMPLIANCE
Certificate Of A Expiration Date Prepared By	abol Stamp: Not Applicable         uthorization No.: Not Applicable         Not Applicable         Signed By         Utdup         Signed By         Kukdip Singh - Program Lead Engineer (PLE)         G11400    Date 91400
Vessel Inspecto Johnston, Rhode period Owner has peri in accordance v By signing this implied, concer	CERTIFICATE OF INSERVICE INSPECTION ned, holding a valid commission issued by the National Board of Boiler and Pressure fors and the State of Washington and employed by Factory Mutual Insurance Company of Island have inspected the components described in this Owner's Report during the 100 to $1/26/00$ and state to the best of my knowledge and belief, the formed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI. certificate neither the inspector nor his employer makes any warranty, expressed or rning the examinations and corrective measures described in this Owner's Report. either the Inspector nor his employer shall be liable in any manner for any personal rty damage or a loss of any kind arising from or connected with this inspection.
Furthermore, h injury or prope	

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	FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*	<u>م</u> ن
)		Sup Iclia
	L. (a) Manufactured by Bingham-Willamette Company, Portland, OR (Neme and address of Menufacturer of peri)	[e] v
• •	(b) Maaulactured for Kashington Public Power Supply System, Richland, WA (Manu and address of Manufacturer of completed aucleur component)	
	2. Identification-Manufacturer's Serial Na. of Part 11N92 - 2 Nat'l Bd. No. 1079	
	(a) Constructed According to Drawing No. J1756 Drawing Prepared by Bingham-Hillamette Company	
	(b) Description of Part Inspected Mechanical Seal Type RV875B-2	
	(c) Applicable ASME Coder Section III, Edicion 1971 , Addenda date 1971 , Case No. NONE Class 1	·
	3. Remarket To prevent liquids from escaping from pump. PB Parts consist of: (Brief description of service for which component was designed)	
	a.) Seal Holder SN 149285-2b.) Gland-Upper Seal SN 1495283-2	•
·	Seal Hydrotested at 2575 PSI.	
•	Note: Items 4-18 not applicable.	
2	We certify that the statements made in this report are correct and this vessel part or apputtenance as defined in the Code con- forms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufactures is responsible for furnishing a separate Design Specification and Stress Report if the apputtenance is not included	•
1	in the component Design Specification and Stress Report.) NOV 2 1 1983	·
•	(Manufeeturer)	
i i	CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)	1
	Design information on file atN/A	•
	Stress saniysis report on file st	· ·
.1	Design specifications certified by WA	÷. • :
Ϊ.	Stress analysis report certified by N/A Prof. Eng. State Reg. No	
	CERTIFICATE OF SILOP 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 <u>Oregon</u> and employed by <u>Department</u> of Commerce	•
•	of <u>Commerce</u> have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on <u>NUV 2 1 1983</u> 19, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III. By signing this cartificate, neither the Inspector nor his employer makes any warrancy, expressed or implied, concern- ing the part described in this Manufacturer's Partial Data Report. Furthermore, and the Inspector sor his employer shall be liable in any manner for any personal injury or property damage of a loss of any kind arising from or connected with this inspection.	i
•	Date NOV 2 1 1983	:
•	Al mint Compission MB 8036 Deser	•
4	Inspector's Signature     National Beard, State, Prevince and Ne,     Supplemental shaots in form of lists, sketches or drawings may be used provided (1) eize is SW' x 11", (2) information in items 1-3 on this	
	dain report is included an anth cheat, and (3) goah sheat is humbered and number of sheets (a recorded in itsm 2, "Remarks".	
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·	S.O. <u>IIN92-2</u>	· ··
	ITEM 1 Nº2 Cale Data Report	£
	PAGE 2	

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		· · ·						
ms 4-8 jaci, se be co	mpieted for single	wall vessels, j	ackets of jac	keted vessels	, or shells of he	at exchange	18	
Shell: Material	T.S. Spec. Ma.) (Min. of B	Nominal Thickness_ Lange Specified)	Corm ia. Allow	sion	Dla <i>le</i> ,	in. Length	ft i	i <b>n.</b>
Seams: Long	H.T. <sup>1</sup>		R.T	· · ·	Efficiency	•	. *	•
•		••		•	•			
Girth Hendst (s) Material,	H.T. <sup>1</sup>		R.T		No. of Courses			
Location	Cr	wa Kausida	Elliptical	Conisai	Homiophorizal	Flat	Side to Press	•
(1)	Thickness Re		Ratio	, Apex Angle	Redius ·	Dismotor	' (Conv. er Cen	<b>6.)</b>
(b)	·						•	
If removable, boirs u	sed	Ipaa, No., T.S., Si	se, Number)	Other face	ning	aribe or attac	h aketek)	-
	•			•		•		
Jacket Closure:	naa 26 og se ood weid,	, nar, etc. If bargiv	ve dimensions, l	L' Daltad, doscril		eight		•
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as 9 and 10 to be com		•	•		<u> </u>			<u>.</u>
Tubo Sheeras Station Flaatis Tuboss Haterial	ary. Material	h fars. No.1	a.	Thick	iaessia. A	tachment	Velded. Bolted	<u> </u>
Flaaria	n Maradal	n		This				
Tubes: Material	0.0			inches	Number	Туре		
Shells Material	<b>T.S</b>	Nominal Thickness		La; or channel				
Shells Material	T.S.	Nominal Thickness	cketed vesse	ls; or channel sion vance		in, Length_	• • • •	
Shell: Material (Kiad & I Seams: Long	ipee. He.) (Min. of R. H.T. 6	Nominal Thickness. ange Speaklied)	cketed vesse Corre 	ls, og channel vica vance	Die (t	in, Length_	• • • •	
Seams: Long	T.S. Ipose Heal Ottime of R H.T.L H.T.L	Nominal Thickness. ange Speaklied)	cketed vesse Corre 	is; or channel sion rance	Dia fr Efficiency Nd. of Courses	in, Length_	• • • •	
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S.O. <u>IIN92-2</u> ITEM <u>1M2 Code Data Rep</u> PAGE <u>3</u>

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC-P-1B Mechanical Seal Mechanical Seal*	Bingham Bingham Bingham	210100 (B-2-1035) 11N92-1 N01-1*	135 1078 473*	N/A N/A N/A	1974 1983 1981*	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 No, Code Class 1*

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

1) Removed existing upper mechanical seal, Serial No 11N92-1.

2) Installed spare replacement upper mechanical seal, Serial No N01-1.

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

#### NOTES -

1) \* The origin and the acceptability of the spare mechanical seal, Serial No N01-1 is as follows:

The used spare replacement mechanical seal, Serial No N01-1 is from a pump, Serial No 00N04, National Board No 473. This pump was furnished by Bingham Willamette to Black Fox plant. This plant was later cancelled. There is no ASME Code stamping nor ASME Code Data Report for this seal since it was part of an ASME Section III, Code Class 1 stamped pump, Serial No 00N04, National Board No 473. This mechanical seal was originally installed in pump RRC-P-1B, ASME Section XI Plan No 2-0357 and was previously removed from pump RRC-P-1B, ASME Section XI Plan No 2-0750. The acceptability of this seal is documented in ASME Section XI Plan No 2-0357.

Date: 06/23/01 Sheet: 1 of 1 Unit: Not Applicable

	PLAN No 2-17-
	<b>ENERGY</b> NORTHWEST
ŀ	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
sts Conduc	cted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       Other       Non         Test Pressure: 1022 Psig       Test Temperature: 215° F       Component Design Pressure: 1650 Psig       Temperature: 575° F
e <b>marks:</b> See anical seal, Se	e attached NPV-1 Code Data Report for pump, Serial No 00N04, National Board No 473. The used spare replacement erial No N01-1 is from a pump, Serial No 00N04, National Board No 473.
	CERTIFICATE OF COMPLIANCE
o the rules Type Code Certificate (	that the statements made in this Owner's Report are correct and this replacement conforms of the ASME Code, Section XI. Symbol Stamp: Not Applicable Of Authorization No.: Not Applicable Date: Not Applicable My
Vessel Ins, Johnston, R period Owner has in accorda By signing	CERTIFICATE OF INSERVICE INSPECTION rsigned, holding a valid commission issued by the National Board of Boiler and Pressure pectors and the State of Washington and employed by Factory Mutual Insurance Company of thode Island have inspected the components described in this Owner's Report during the $\frac{1}{2}/\frac{0}{2}$ to $\frac{1}{2}/\frac{0}{2}/\frac{0}{2}$ and state to the best of my knowledge and belief, the performed examinations and taken corrective measures described in this Owner's Report ince with the requirements of the ASME Code, Section XI. This certificate neither the Inspector nor his employer makes any warranty, expressed or concerning the examinations and corrective measures described in this Owner's Report.
Example owned	re, neither the inspector nor his employer shall be liable in any manner for any personal roperty damage or a loss of any kind arising from or connected with this inspection.
<u>M- //</u>	Inspector's Signature Commissions 74/60/7466 with a
Date 7/	10/01

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PLAN NO. 2-1738 SEAL SIN NOI-I FROM BLACK FOX PUMP SIN DONO4.

# 70N00 .05

As Requir

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ed by the Pro

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# Kudip Sup 1, FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES 6/12/01 of the ASME Code, Section III, Div. 1 Bingham-Williamette Co., 2800 NW Front Ave., Portland, Oregon 97210 (Name and Address of N Cartificate Meteor) General Electric for resale to Oklahoma Public Services Black Fox Plant Site near Engla, Oklahom

er Type No. Ma (a) Clas id. No. 1 . . . . Built H-5083 Rev. 0 NB-473 1981 001104 NA RY (11) 88 (4) (3) 73 188 (10 Recirculation Pum .

NA 1650 575 1650

Mark He.	Material Spec. Ha."	Menulesturer ··	Remote
i Castinga	•		
771.127	SA-351 Gr CF8A	Kubota Ltd.	Nolute Case (103-1)
P4717	SA-JSI Gr CEBN	Wisconsin Cent.	Stuffing Box (113-1)
26758	SA-351 Gr CFB	Wisconsin Cent.	Seal Holder (402-1)
A7238	5A-351 Gr CF8	Wisconsin Cent.	Gland, Upper (405-1)
G9932	SA-182 To 304	Rocky Mtn Nuclear	Clamp Set (603-1).
67607-1A1	SA-240 F316	G.O. Carlson	Naive-Body (510-1)
67725-281	SA-240 F316	G.O. Carison	Nalve Bonnet (610-2)
H0253	SA-213 T304	Plymouth Tube	Cot1 (613-4)
48719	SA-182 F304	Viking	Thermowel 1 ( 605-5.507-
48719	SA-182 F304	Viking	Flange(613-1,-3) 509 Nozzle (113-3 thru
48/19	<u>SA-182_F304</u>	Viking -	Thrust Ring (119)
17229 B1-18417	SA-182 F316 SA-350 Gr LF2	Earl M. Jorgensen	Puno Flange (501-2)
			Plug (503)
523036	SA-350 Gr LFZ	Coulter Steel	R-Con Flance(606-3,60
<u>G9932</u>	SA-182 F304	Rocky Mtn Nuclear	
55729 (VKB)	SA-182 F304	Standard	
8654259	SA-182 E104	Western Forge	Flange (607-5)
625389 (VMO)	SA-182 F304	Standard	Tee (607-7)
A16852 (VHH)	SA-182 F304	Standard	Plug (608)

(10/77)

Name 1, 2 at d 5 on this



SO 00N04 CODE DATA REPORT GE PO AG 909 13-FAGE

Mark No.	Material Spec-No.	<ul> <li>Manufacturer ***</li> </ul>	- Remerks
lotting	· · ·		
15814 & 125913	SA-540 Gr 823 C1 5	Jorgensen	Stud, Case (108)
062630 -	-   SA-194 Gr 7	Metrix Mfg.	Nut, Case (109)
X, RXX & CF	SA-194 Gr 8	Rocky Mtn Nuclear	Nut, Clamp (603-3)
J	1 SA-193 Gr 88	Rocky Mtn Nuclear	Stud, Clamp (603-2
5382 (A&B)	N2 Data Report	Western Piping	Heat Exchanger(519)
6502	SA-35	Lukens	Strut Lugs (501-10,
654156	SA-182 F304	Western Forge	Flange (113-6
68105	SA-516 Gr 70	U.S. Steel	Stiffener (501-5)
6502	SA-36	Lukens	Motor Flange (501-1)
d) Other Parts D495	7 SA-36	Lukens	Hanger Lug (501-4)
148-1	SA-240 Tp 304	G.O. Carlson	Lugs (113-7)
1994	SA-479 Tp 304	Metrix Mfg.	E1bow (402-2)
-47587	SA-240 Tp 304	Eagle Metals	Bracket (402-4
68105	SA-516 Gr 70	U.S. Steel	Barrel (501-3)
6502	SA-36	Lukens Steel	Brace (501-8
ZD128	SA-312 Tp 304 SA-312 Tp 304	Combustion Engrig	Pipe (606-1.607-1 thr
2972		Capitol Pipe	Pipe (609-1 thru -5)
137615 (VIO)	SA-182 F304	Standard	Tee (609-6)
23346, 614320	SA-182 F304	Western Forge	Flange (609-8)
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### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

#### 1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/08/01 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Reactor Recirculation Cooling (RRC) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with 1971 Addenda, Code Case: None
- (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None -N-416-1 VS

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

Name Of Component	Name Of Manufacturer	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 Pumps Mechanical Seal Mechanical Seal	Bingham Bingham Bingham	11N92-3 11N92-4	1080 1081	N/A N/A	1983 1983	Replacement Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Assembled spare mechanical seal for RRC pumps. The spare mechanical seal for RRC pumps was assembled using parts as follows:

1) Used seal holder from mechanical seal Serial No 11N92-4.

2) Used upper seal gland from previously removed seal Serial No 11N92-3.

3) Used thrust ring from previously removed seal Serial No 11N92-3.

#### NOTES -

1) Mechanical seal Serial No 11N92-3 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with 1971 Addenda requirements. See attached N-2 Manufacturer Code Data Report mechanical seal Serial No 11N92-3.

2) Mechanical seal Serial No 11N92-4 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with 1971 Addenda

requirements. See attached N-2 Manufacturer Code Data Report mechanical seal Serial No 11N92-4.

3) The entire mechanical seal assembly is identified by the seal holder Serial No 11N92-4.

PLAN NO 2-1 EMERGY NORTHWEST	741
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
	one
emarks: See attached N-2 Manufacturer Code Data Reports for the following: echanical seal Serial No 11N92-3. echanical seal Serial No 11N92-4.	
CERTIFICATE OF COMPLIANCE	
Ne certify that the statements made in this Owner's Report are correct and this replacement conforms	
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable	
Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable	
Prepared By Audup Sup Signed By Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)	
Date 5 9 01 Date 5 9 01	
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>Sectors</u> to <u>Sectors</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.	
Inspector's Signature Commissions / 13 d - 1	-

PORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTSANCES A required by the Provides of the ASEE Cole Relations in the second seco		(		PRAN 1	10.2-174
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Design specifications certified by <u>N/A</u> Prof. Eng. State <u>Reg. No.</u> Stress analysis report certified by <u>N/A</u> <u>Prof. Eng. State <u>Reg. No.</u> CERTIFICATE OF SIOP INSPECTION I, the andersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of <u>Oregon</u> and employed by <u>DEDartment</u> of <u>Oregon</u> and <u>Commerce</u> the base of any knowledge in this Manufacturer has constructed this part in accordance with the ASME Code Section III. The deard described in this Manufacturer has present to a pressure vessel described in this in the fare described in this Manufacturer being of an Disc employer makes any warrany, expressed or implied, concern- tical be first the in section are his employed by <u>DeDart the Inspector</u> are this employed with this inspection. Date <u>DEC 8 1983</u> 19 <u>Manufacturer</u> <u>Decommissions MA COSC (DSCU)</u> Nettenail Beard, State, Province and He. -Supportended in this state of a class of any kind arising from or consected with this inspection. Date <u>DEC 8 1983</u> 19 <u>Manufacturer</u> <u>Astress of decompany to need previded (1) size is SWF 205CU. Nettenail Beard, State, Province and He. -Supportended in item 1, "Remarks", and (2) each sheet is Aumbered and number of sheets is recorded in time 1 Network is the form of lists, sheets or drawings may to need previded (1) size is SWF 2 11", (2) Information in time 1 Astronometry is desceribed an each sheet, and (2) each sheet is Aumbered and number of sheets is recorded in time 1, "Remarks".</u></u>		Design information on file at N/A	SIGN FOR APPURTENAN		··· .
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I, the undersigned, holding a valid commission issued by the Nacional Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of <u>Oregon</u> and employed by <u>DEDArtment</u> of <u>Commerce</u> bare inspected the part of a pressure vessel described in this Manufacturer has constructed this part in accentation with the ASME Code Section III. By signing this certificate, neither the Inspector nor his comployer makes any warranty, expressed or implied, concern- ing the part described in this Manufacture's Partin a accentation of the action of a pressure vessel described in this manufacture's part described in this Manufacture's Partin a accentation of the action of the impletion or his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from a connected with this inspection. Date <u>DEC 8 1983</u> 19 					Reg. No
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S.O. <u>11N92-3</u> ITEM <u>FN2-Code Data Report</u> PAGE <u>3</u>

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	PLAN NO. 2-1	141
•	FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES	
	As required by the Provisions of the ASME Code Rules	Serie 6
	L. (a) Manufactured by Bingham-Willamette Company, Portland, OR (Name and address of Manufacturer of part)	5/9(01
· · ·	(b) Magufactured for Washington Public Power Supply System, Richland, WA (Name and eddress of Menufacturer of completed machees component)	
	2. Identification-Manufacturer's Serial No. of Part 11H92 - 4 Nat'l Bd. No. 1081	
	(a) Constructed According to Drawing No. J1756 Drawing Prepared by Bingham-Willamette Company	
	(b) Description of Part Inspected Mechanical Seal Type RV875B-2	
	(c) Applicable ASME Code: Section III, Edition 1971, Addende date 1971, Case No. NONE	
	3. Remarks: To prevent liquids from escaping from pump. PB Parts consist of:	
	(Brief description of service for which component was designed) a.) Seal Holder SN 149285 b.) Gland-Upper Seal SN 1495283	
	Seal Hydrotested at 2575 PSI.	
	Note: Items 4 - 18 not applicable	
	We certify that the statements made in this report are correct and this vessel part or apputtenance as defined in the Code con- forms to the miles of construction of the ASME Code Section III.	
	(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. As appartenance 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.)  Singhum Willumette Company Date_DEC_2_19SignedByByByByBy	_
	(Manulasturer)	
	Certificate of Authorization Expires February 28, 1986 Certificate of Authorization No. N-1655	
	CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)	
	Design information on file at N/A	
$\smile$	Stress saalysis report on file atN/A	
	Design specifications certified by N/A . Prof. Eng. State Reg. No	
	Stress analysis report certified by N/A Prof. Eng. State Reg. No.	
	CERTIFICATE OF SHOP INSPECTION	N.,
	1, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Oregon and employed by Department	
	of Commerce have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on DEC_8 198319, and state that to the best of my knowledge	
	and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concern- ing the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer	
	shall be liable in any manaer for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	
	Date DEC 8 1983 19	
	Commissions LIB 5036 OR 507	
	*Supplemental sharts in form of lists, sketches or drawings may be used provided (1) size in SW" x 11", (2) information in items 1-2 on this	
	dala report to included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in liem 3, "Remarks".	
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S.O. <u>IIN92-4</u> ITEM <u>1:W2-C. Le Pata Report</u> PAGE <u>3</u>

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC-P-1A Mechanical Seal Mechanical Seal	Bingham Bingham Bingham	210009 (B-2-1034) 11N92-2 11N92-4	134 1079 1081	N/A N/A N/A	1974 1983 1983	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

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

1) Removed existing upper mechanical seal, Serial No 11N92-2, National Board No 1079.

2) Installed spare replacement upper mechanical seal, Serial No 11N92-4, National Board No 1081.

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

#### NOTES -

1) The existing pump RRC-P-1A is certified to comply with ASME Section III, Code Class 1, 1971 Edition with no Addenda requirements. 2) Both the existing mechanical seal, Serial No 11N92-2, National Board No 1079 and the spare replacement mechanical seal, Serial No 11N92-4, National Board No 1081 are certified to comply with ASME Section III, Code Class 1, 1971 Edition with 1971 Addenda requirements.

3) The replacement mechanical seal, Serial No 11N92-4, National Board No 1081 was assembled in accordance with ASME Section XI Plan No 2-1741 using seal holder from Serial No 11N92-4, National Board No 1081 and upper seal gland and thrust ring from Serial No 11N92-3, National Board No 1080.

4) The entire mechanical seal assembly is identified by the seal holder Serial No 11N92-4, National Board No 1081.

Date: 06/23/01 Sheet: 1 of 1 Unit: Not Applicable

PLAN No 2-174 ENERGY NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X Other Nor Test Pressure: 1022 Psig Test Temperature: 215° F Component Design Pressure: 1650 Psig Temperature: 575° F
<b>Remarks:</b> See attached N-2 Code Data Reports for Serial No 11N92-3, National Board No 1080 and Serial No 11N92-4, National Boa 081.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>S</u> / <u>U</u> / <u>I</u> to <u>T</u> / <u>I</u> / <u>I</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
Furthermore, neither the inspection hor his chipte of this chipte
Inspector's Signature

(	( PLAN NO. 2-1742
	<u>renn no. 2-1142</u>
•	FOR NUCLEAR PART AND APPURTENANCES*
• As required by the Provision	ns of the ASHE Code Rules Kuldup . Sur
1. (a) Manufactured by Bingham-Willamette Company, (Name an	Portland, OR 6/12/0
(b) Maaufactured for <u>Washington Public Power Supp</u> (Name and address of	ly System, Richland, WA
2. Identification-Manufacturer's Serial No. of Part 11/192 -	3Nat'l Bd. No1080
(a) Constructed According to Drawing NoJ1756	Drawing Prepared by Bingham-Willamette Company
(b) Description of Part Inspected Mechanical Seal Ty	
(c) Applicable ASME Coder Section III, Edition 1971, Add	denda date <u>1971</u> , Case No. <u>NONE</u> <u>Class</u> 1
3. Remarks: To prevent liquids from escaping from (Brief description of servi	om pump. PB parts consist of:
a.) Seal Holder SN 149285. b.) Gland-Upper S	Seal SN 1495283c.) Thrust Ring SN 1513982-1
•	al Hydrotested at 2575 PSI.
Note: Items 4 - 18 not applicable.	
forms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not Manufacturer is responsible for furnishing a separate Design Specification in the component Design Specification and Stress Report.) Date	citication and Stress Report if the appurtenance is not included
	ever) Cercificate of Authorization No. <u>N-1655</u>
	•
CERTIFICATION OF DESIGN FOR A	PPURTENANCE (when applicable)
Design information on file as <u>N/A</u>	
Stress analysis report on file asN/A	
Design specifications certified by <u>N/A</u>	Prof. Eng. State Reg. No
Stress analysis report certified by N/A	Prof. Eng. State
	te National Board of Boiler and Pressure Vessel Inspectors aployed by <u>Department</u> aspected the part of a pressure vessel described in this
By signing this certificate, seither the Inspector nor his certificate, seither the Inspector nor his certificate in this Manufacturer's Parcial Data R shall be liable in any manner for any personal injury or prop- with this inspection.	aployer makes any warranty, expressed or implied, concern-
Date <u>DEC 8 1983</u> 19	
A fund	ssions NB SC36 ARSVU
Inspector's Signature	Notional Beard, State, Province and No.
•Supplemental shoets in form of lists, sketches or drawings may be used p data report is included on each shoet, and (3) each shoet is dumbered and	revided (1) size is $\delta W^{\prime\prime} \propto 11^{\prime\prime}$ , (2) information in items 1-2 on this ) number of sheets in recorded in item 3, "Remarks".
SED UPPER SEAL GLAND	
AND THRUST RING FROM	so 11N92-3
S/N 11N92-3	0.0.
	ITEM 1N2 Cade Data Report
	DAOT 2

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	hell: ieans: ieans: b) Chi f remo Design belov Safery Nozzle Purpe Outlet	Materiai (Clas & i Long Girth (s) Material (s) Material Lessuice p, bottom, end masel invable, bolts pressure <sup>2</sup> v to be comple Valve Outlet est as (laist, press)	Thickness Thickness assed (a)	r inner chan N In. of Range fr H. T. <sup>1</sup> H. T. <sup>1</sup> Crown Billin or Sin Dia. or Sin	bers of jac ominal hickness_ pecified) 	Existed vesses	els, or chanae peioe wancein, (b) Materia Contest Apez Angle O	is of heat excha Dia, fr Effliciency No., of Courses Nonispherical Radius ther fascening Charp fr st tem  Ref	Agers. in. Length. T.S. Plat Diameter (Doseribe er Veight y Impact p. of afereement	(Str. er U)
	a) Top leads b) Chi b) Chi f remo Design below Safety Nozzle Purper Outlet	Materiai (Cline & ) Long Girth (a) Material (a) Material (a) Material (a) Material (b) Material (c) Material	Thiskness Thiskness Is	r inner chan N In. of Range & H. T. <sup>1</sup> H. T. <sup>4</sup> Crown B. Redus ( vessals whe Dia. or Sis	bers of jac ominal hickness_ pecified) T.S Encethe Radius 	Existed vesses	els, or chanae peioe wancein, (b) Materia Contest Apez Angle O .ocationO	is of heat excha Dia, fr Effliciency No., of Courses Nonispherical Radius ther fascening Charp fr st tem  Ref	Agers. in. Length. T.S. Plat Diameter (Doseribe er Veight y Impact p. of afereement	(Str. er U)

18. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_ Lugs \_\_\_ Legs \_\_\_ Unmber) Uner \_\_\_ (Beseribe) (Where & How)

U Passweld Heat-Treated.

"List other internal or external pressure with seinsident temperature when applicable.

S.O. \_\_\_\_\_\_\_\_ ITEM 1-N2-Code Data Report PAGE \_

FORM N-2 MANUFACTU	IRERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As r	equired by the Provisions of the ASME Code Rules
(a) Manufactured by Bingham-W	illamette Company, Portland, OR (Neme and address of Manufecturer of part)
	n Public Power Supply System, Richland, WA (Name and address of Manufacturer of completed nuclear component)
Identification-Manufacturer's Serial	11002 4 1001
	ing No. J1756 Drawing Prepared by Bingham-Willamette Company
	Mechanical Seal Type RV875B-2
	III, Edition 1971, Addende date 1971, Case No. NONEClass1
	s from escaping from pump. PB Parts consist of:
	(Brief description of service for which component was designed) 5 b.) Gland-Upper Seal SN 1495283
	Seal Hydrotested at 2575 PSI.
Note: Items 4 - 18 not a	in this report are correct and this vessel part or appurtenance as defined in the Code con-
	BINGHAM-WILLAMETTE COMPANY Signed <u>PORTUND, ORFCCIU</u> By <u>Stearge</u> Ollina (Manufacturer)
Certificate of Authorization Expires	Signed <u>PORTUAND, ORFCCU</u> By <u>Starge</u> <u>Uterson</u> (Manufacturer) February 28, 1986 <u>Certificate</u> of Authorization No. <u>N-1655</u>
Certificate of Authorization Expires	Signed <u>PORTUAND, ORFCCIU</u> (Manual acturer) February 28, 1986 Certificate of Authorization No. <u>N-1655</u> FION OF DESIGN FOR APPURTENANCE (when applicable)
Certificate of Authorization Expires CERTIFICAT Design information on file at	Signed <u>PORTUND. ORECCU</u> (Manufacturer) February 28, 1986 Certificate of Authorization No. <u>N-1655</u> FION OF DESIGN FOR APPURTENANCE (when applicable) N/A
Certificate of Authorization Expires	Signed <u>PORTUND. ORFCCU</u> (Manufacturer) February 28, 1986 Certificate of Authorization No. <u>N-1655</u> FION OF DESIGN FOR APPURTENANCE (when applicable) N/A N/A
Certificate of Authorization Expires CERTIFICAT Design information on file at	Signed <u>POPTUAND_ORFECTU</u> (Manufacturer) February 28, 1986 Certificate of Authorization No. <u>N-1655</u> FION OF DESIGN FOR APPURTENANCE (when applicable) N/A N/A N/A Prof. Eng. State Reg. No
Certificate of Authorization Expires CERTIFICAT Design information on file at Stress analysis report on file at	Signed <u>POPTUAND. ORFCC11</u> (Manufacturer) February 28, 1986 Certificate of Authorization No. <u>N-1655</u> FION OF DESIGN FOR APPURTENANCE (when applicable) N/A N/A N/A N/A N/A Prof. Eng. State Reg. No
Certificate of Authorization Expires CERTIFICAT Design information on file at Stress analysis report on file at Design specifications certified by	Signed <u>POPTUAND_ORFECTU</u> (Manufacturer) February 28, 1986 Certificate of Authorization No. <u>N-1655</u> FION OF DESIGN FOR APPURTENANCE (when applicable) N/A N/A N/A Prof. Eng. State Reg. No
Certificate of Authorization Expires CERTIFICAT Design information on file at Stress analysis report on file at Design specifications certified by Stress analysis report certified by L, the understand, holding a va	Signed       POPTUAND. ORFECCI       By Sleeps Withthema         (Manufacturer)       February 28, 1986       Certificate of Authorization No. N-1655         FEDRUARY 28, 1986       Certificate of Authorization No. N-1655         FION OF DESIGN FOR APPURTENANCE (when applicable)         N/A         N/A         N/A         Prof. Eng. State         N/A         Prof. Eng. State         Reg. No.         N/A         Prof. Eng. State         Reg. No.         CERTIFICATE OF SHOP INSPECTION         slid commission issued by the National Board of Boiler and Pressure Vessel Inspectors
Certificate of Authorization Expires CERTIFICAT Design information on file at Stress analysis report on file at Design specifications certified by Stress analysis report certified by I, the undersigned, holding a va and/or the State or Province of of	Signed       POPTUAND_ORFECTU       By Starge Withthemain         (Manufacturer)       February 28, 1986       Certificate of Authorization No. N-1655         FEDRUARY 28, 1986       Certificate of Authorization No. N-1655         FION OF DESIGN FOR APPURTENANCE (when applicable)         N/A         N/A         N/A         Prof. Eng. State         N/A         Prof. Eng. State         Reg. No.         CERTIFICATE OF SHOP INSPECTION         stid commission issued by the National Board of Boiler and Pressure Vessel Inspectors         Dregon       and employed by         Department         bave inspected the part of a pressure vessel described in this
Certificate of Authorization Expires CERTIFICAT Design information on file at Stress analysis report on file at Design specifications certified by Stress analysis report certified by I, the undersigned, holding a va and/or the State or Province of of Hanufacturer's Partial Data Report and belief, the Manufacturer has co 	Signed       POPTUAND_ORFECTI       By Starge Withthemain         (Manufacturer)       February 28, 1986       Certificate of Authorization No. N-1655         February 28, 1986       Certificate of Authorization No. N-1655         FION OF DESIGN FOR APPURTENANCE (when applicable)         N/A         N/A         N/A         Prof. Eng. State         Reg. No.         CERTIFICATE OF SHOP INSPECTION         stid commission issued by the National Board of Boiler and Pressure Vessel Inspectors         Dregon       and employed by         Department         have inspected the part of a pressure vessel described in this         ton       DEC         8       1983         19       and state that to the best of my knowledge         constructed this part in accordance with the ASME Code Section III.         there the Inspector on this employer makes any warenery. expressed or implied, concern-
Certificate of Authorization Expires	Signed       POPTUAND_ORFECTI       By Starge With the second state of the second state state of the second state state state of the second state sta
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Certificate of Authorization Expires	Signed       POPTUAND_ORFECTU       By Starting With the subscription of this employed by Starting With the subscription of this employed by Start the inspector of this employed markes any warranty, expressed or implied, concernanged or the inspector more the inspector on this employed markes any warranty, expressed or implied, concernanged or the inspector on this employed markes any warranty, expressed or implied, concernanged or the inspector on this employed markes any warranty, expressed or implied, concernanged or the inspector on this employed markes any warranty, expressed or implied, concernanged or the inspector on this employed markes any warranty, expressed or implied, concernanged or the inspector on this employed markes any warranty, expressed or implied, concernanged and the inspector on this employed markes any warranty, expressed or implied, concernanged and the inspector on this employed markes any warranty, expressed or implied, concernanged for the inspector on this employed markes any warranty, expressed or implied, concernanged for the inspector on this employed markes any warranty, expressed or implied, concernanged for the inspector on this employed markes any warranty and the inspector on this employed markes any warranty and the inspector on the inspecto

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SIN 11N92-4

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ITEM	1-N2-Coda	Data	Report			
PAGE		2				

tei	ns 4—8 I	aci. to be co	mpleted for sin	gie wall v	ressels, ja	ckets of jac	keted vessels	, or shells of he	u exchanger	8, .
4.	Shells	Material	T.S.	No Th . of Range S	bickness_	Corro in, Allow	sion vanceis,	Dis ft i	a. Leagth_	ft., i
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6,	Headau							l		
		Location		Crews	Kanette	Elliptical	Conical	Hemispherical	Flat	Side to Press (Conv. er Con
	(=)		- <sup>·</sup>			<del></del>				<u> </u>
	(b)	vable, bolts :		<del></del>		<del></del>	Other free			
	•	-		rist, Spee. H	ia., T.S., Siz	e, Number)	Other trace	ming	sribe or stas	h sketch)
7.	Jacket	Closure:	ribe as eges and	weld, har	te. Lí ber siv	e dimensions.	if belted, deseri		. <u></u> .	
•		(231						. Drop W	eight	
8.	Design	·pressure <sup>1</sup>	1650	-	<b>psi</b> s	<u> </u>			Impact	fr
					• • • •					
ter	ns 9 and	10 to be com	placed for cube	sections	•	•		· · · · · · · · · · · · · · · · · · ·	·	
~	Tut - 4							kanaa la t		
у.	Troe 2	neetsi Statio	aary. Material_	(Lind & Spe	i Di	(Subject to	presswo)	kness In. A	(1.cn	Velded, Belted)
0.	Tubes	Material		0.D.	in. Th	ickness	inches	knessia. A . Number		
										(Su. or U)
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11.	Sheili	Material	T.S	. N T	omisal bickaess pecificat)	Corre in, Allor	osion wanceln.	Die ft	in. Length_	
11.	Sheili	Material	T.S \$pee. No.) (MinH		omisal bickaess_ peelfier\$	Corre in, Allor R.T	osion wencela.	Dia ft	in, Length_	-*
11.	Sbeil: Seems	Material	T.S. Spee. Ne.J (Min. H	N 	ominal bickaess_ pecified)	in. Allor R.T	osion wanceln.	Dis ft Efficiency .No. of Courses	in. Length_	_%
11.	Sbeil: Seems	Material	T.S \$pool No.j (Min H	N . of Ronge 8 . T. <sup>1</sup>	omisal bickaess_ pecified)	in. Allor R.T R.T	osion wanceln. (b) Materia	Die, ft, Efficiency No. of Courses	ia. Leagth_	_%
11.	Sbeil: Seems	Material	T.S \$pool No.j (Min H	N . of Ronge 8 . T. <sup>1</sup>	omisal bickaess_ pecified)	in. Allor R.T	osion wanceln. (b) Materia	Dis ft Efficiency .No. of Courses	in. Length_	_%
11.	Shelli Seems Heads	Material	T.S 8900. No.j (Min. H H H H H	 of Roage 5/ .T. <sup>1</sup> .T. <sup>1</sup> Crown Radius	ominal bickaess pecified) 	Corre in, Allor 	Daion wancein. (b) Materia Contest Apez Angle	Die, ft Efficiency .No. of Courses I Hemispherical	in. Length T.S 71es	_ 75 
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13.	Shelli Seems Heads (a) To (b) Ch If rem	Material (Kind b 1 Long Girth (a) Material Lossnice .p, bottom, en annel ovable, bolts	T.S Spee. No.) (Min. H H H H H	N . of Range 5 . T. <sup>1</sup>	omisal bickaess pecified)  Kaustie Redus b)	Corre- in, Allor R.T R.T Eliliptical Ratio	Desion wancein. (b) Materia Contest Apes Angle	Dis ft Efficiency .No. of Courses i Hemispherical Radius ther fastening Drop U	in, Length_ T.S Plan Dismotor (Describe or of reight	_% Side to Pros (Cenv. or Con 
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11. 12. 13.	Shelli Seems Heads (s) To (b) Ch If rem Desig :ms belo . Safet) . Nozzi Purpe	Material	T.S Spee. No.J (Min. H H Thicknoos ds used (s) letted for sil ve ts: Number	N of Rango 5 T. <sup>1</sup> Crown Radius 	omisal hickoss - pesified) T.S	Corre- in, Allor R.T Eilipticat Ratio (c) at blc.	(b) Materia (b) Materia Contest Aper Angle 01 02 03 04 04 05 04 05 05 05 05 05 05 05 05 05 05	Diaft Efficiency .No. of Courses i Hemisphorical Redius  ther fastening Charpy      	ia, Leagth_ T.S Plat Dismotor  (Describe or of feight / Impact p. of	_ %
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13.	Shelli Seems Heads (s) To (b) Ch If rem Desig :ms belo . Safet) . Nozzi Purpe	Material	T.S Spee. No.J (Min. H H Thicknoos ds used (s) letted for sil ve ts: Number	N of Rango 5 T. <sup>1</sup> Crown Radius 	omisal hickoss - pesified) T.S	Corre- in, Allor R.T Eilipticat Ratio (c) at blc.	(b) Materia (b) Materia Contest Aper Angle 01 02 03 04 04 05 04 05 05 05 05 05 05 05 05 05 05	Diaft Efficiency .No. of Courses i Hemisphorical Redius  ther fastening Charpy      	ia, Leagth_ T.S Plat Dismotor  (Describe or of feight / Impact p. of	_ %
13. 14 15 16	Sheili Seems Heads (a) To (b) Ch If rem Desig ms belo Nozzi Purps Outin	Material (Kind b 1 Long (a) Material Lessuise annel ovable, bolts n pressure <sup>2</sup> w to be comp y Valve Outle est ne (Inlet, net, Drain)	Thiskness ds used (a) icced for sil ve Number	N of Rango S T. <sup>1</sup> Crown Radius 	omisal hickoss - pesified) T.S	Correction Allor R.T R.T Zillipileat Ratio  (c) at ble ypo Ma	(b) Materia (b) Materia Contest Aper Angle 01 02 03 04 04 05 04 05 05 05 05 05 05 05 05 05 05	Diaft Efficiency .No. of Courses i Hemisphorical Redius  ther fastening Charpy      	ia, Leagth_ T.S Plat Disaster  (Describe or of reight / Impact p. of nioreement (storial	_ %
11. 13. 14 14 15 16	Shelli Seems Heads (s) To (b) Ch If rem Desig ms belo Safety Nozzi Purps Outlo	Material	Thiskness ds used (a) icced for sil ve Number	N of Rango S T. <sup>1</sup> Crown Radius 	omiaal hickaess pesified) 	Correction Allor R.T R.T Elilipticat Ratio  (c) at bic ypo Ma	Location	Diaft Efficiency .No. of Courses i Hemisphorical Redius  ther fastening Charpy      	ia, Leagth_ T.S Plat Disaster  (Describe or of reight / Impact p. of nioreement (storial	_ %

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. If Passweld Heat-Trouted, <sup>3</sup> List other internul or external prossure applicable. estagident temperature who with

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ITEM 1	N2-Code Data Report
PAGE _	3

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

## 1. Owner: Energy Northwest

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

2. Plant: Columbia Generating Station

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

3. (a) Work Performed By: Energy Northwest

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manuf <u>a</u> cturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Spare Relief Valve (LPCS-RV-18)	Lonergan	138433-1-1 (LPCS-RV-18)	N/A	NA	1994	Replacement	Yes, Code Class 2

7. Description Of Work Performed: installed test port for spare relief valve Serial No 138433-1-1. The work was performed as follows:

1) Machined groove in the spare relief valve discharge flange in accordance with ASME Section XI Plan No 2-1676.

2) Surface finished the grooved surfaces in the spare relief valve discharge flange in accordance with ASME Section XI Plan No 2-1676.

3) Drilled holes in the spare relief valve discharge flange in accordance with ASME Section XI Plan No 2-1676.

4) Installed new male connector on the spare relief valve discharge flange - See Note 2.

5) Made required weld - See Note 2.

6) Performed visual examination on the final weld. Visual examination results acceptable - See Note 2.

7) Performed liquid penetrant (PT) examination on the final weld. Liquid penetrant (PT) examination results acceptable - See Note 2.

8) Installed new cap on the male connector - See Note 2.

### NOTES -

1) The modified spare relief valve Serial No 138433-1-1 will be installed in the plant as LPCS-RV-18 in accordance with ASME Section XI Plan No 2-1677.

2) During the close-out review for ASME Section XI Plan 2-1676, it was determined that the male connector installed for the test port on spare valve Serial No 138433-1-1 (LPCS-RV-18) was welded using the wrong weld metal - See PER No 201-0342 for details. This ASME Section XI Plan No 2-1746 removed the installed male connector and existing weld metal and welded new male connector using the correct weld metal. In addition, new cap was installed on the male connector.

		ENERGY	PLAN No 2-1746
FOR			OR REPLACEMENTS (Back) Operating Pressure Description Other X None
	Test Pressure: Psig Component Design Pressu	ure: Psig To	est Temperature: ° F emperature: ° F
<b>}emarks:</b> See attac	ched NV-1 Code Data Report for t	he sp <b>are roliof valve Serial</b>	No 138433-1-1.
<u> </u>			
We certify that t		FICATE OF COMPLI	ANCE
to the rules of th	he ASME Code, Section XI bol Stamp: Not Applicable		
Certificate Of A	uthorization No.: Not Applicat	ble	
Expiration Date:	Not Applicable	1	M. PA OG
Prepared By	White Singh - Program Load Engin	Signed By	Kuldip Singh - Program Lead Engineer (PLE)
Date	51)4(01	Date	5114/01
<u></u>	CERTIFICA	TE OF INSERVICE II	NSPECTION
Vessel Inspecto Johnston, Rhode	brs and the State of Washin Island have inspected the $f_{-} = 0$ to $f_{-} = (9 - 0)$	ngton and employed b components describ and state to th	National Board of Boller and Pressure by Factory Mutual Insurance Company of bed in this Owner's Report during the best of my knowledge and belief, the
<b>Owner has perf</b>	formed examinations`and t	taken corrective mea	sures described in this Owner's Report
By signing this implied, concer Furthermore, D	ning the examinations and either the inspector nor hi	pector nor his emplo d corrective measure is employer shall be i	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.
injury or proper	Forth		s 747 JW/7486 NIJS National Board, State, and Endorsements
<u></u>	pector's Signature		Tranolia Doard, Claid, and Endorschilding
<u>9.</u> Ins Date <u>5-19</u>	pector's Signature		

			PL	AN NO. 2	-1146
FORM NV-1 CERTI	FICATE HO' "SRS' DA	TA REPORT F	OR PRESSURE		RELIEF VALVES*
A	s Required by the Provis	nions of the AS	AE Code, Section	on al, <b>Division</b> 1	Pg. 1 of _2_
_	Kunkle Industries	Inc.			
1. Manufactured and certifie	d by Lonergan Valve Di	vision, 8222 Bl	uffton Rd., Fo	rt Wayne, IN 46	809
· · · · · · · · · · · · · · · · · · ·					
Manufactured forWast	Pub Pwr Supply, Accts	reme an	Box 968, Kich	Land, VA 99302-	
				· · ·	Loop Bighland Lit 0025
3. Location of installation	esti rub rwi Suppiy, w	-2 des mese de	(nome and address)	NOLUI POWEL FIL	Loop, Richland, WA 9935
ND30FS021-DG		<b>.</b> .	11/2	u Outlat a	<b>2</b>
4. Valve <u>ND30FS021-DG</u> (model no., series no.	Untice size		let size(i	in.)	(ia.)
5. ASME Code, Section III, D	livision 1: 1974	WINIT	<u>r 1974</u>	2	R/A
J. ADML COLE, DECIDINI, L	(edition)	Ladde	nda date)	(class)	(Cada-Case no.)
6. TypeSPRING (spring, pilot or power opt	427	FIXED	450 <sup>0</sup> F (rated temp.)	641	at *F ,
(spring, pilot or power ap	arated) (set pressure, psig)	(blowdown, psi)	(rated temp.)	(hydro. test, psig, inlet	)
7. Identification	<u>-1 N/A</u>		4 Rev	N/A	1994
•		(d	awing no.}	(Nat'l. 8d. no.)	(year built)
8. Control ring settings	2 notches down				
	<141 )	38433-1	-1 (LPC	S-RV-18)	
9. Pressure retaining items:	SIN 1	-		1. Ché	26
				Fundip Su	$\tau$
	Serial No. or		Matt	Spec., -1	
	Identification		Including Ty	pe or Grade	Strength
Body	<u>T4710-1</u>		SA-216 WCB		<u>70 ksi</u>
жылаясностяя: Сар	J1592-5		SA-216 WCB		<u>70 ksi</u>
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	<u>12633-9</u>		SA-216 WCB		70 ksi
Nozzle	23016		SA-479 TY 31	<u>75 ksi</u>	
Disk	35492		SA-479 TY 31	<u>75 ksi</u>	
spoopanaaas Stea	94918		SA-479 TY 31	<u>75 ksi</u>	
Manager and a sub-			SA-479 TY 31		<u>75 ksi</u>
same Spring Step_	38003		<u>SA-479 TY 31</u>		<u>75 ksi</u>
Spring	AJ7182		A-313 TY 316		<del></del>
zwoog Nut	8079541/N4C		SA-194 GR 2		
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	8866612		SA-193 GR B7	/	<u>125 ksi</u>
(CONTINUED IN BLOC	K 11)	107			4 16 95
10. Relieving capacity9	(steem or fluid By/br)	<u> </u>	overpressure a	as certified by the Na	itional Board <u>4-16-85</u>
		10001			
11. Remarks: Gag Plug S	Screw 30091		SA-479 TY 31	16	75 ksi
Ring Pin S	Screw 30091		SA-479 TY 31	16	75 ksi
Plug	18450		SA-479 TY 31	16	<u>75 ksi</u>
* Spring exempt fro	om material requirement	ts of NC-2000 b	ut meets design	requirements of	<u>NC-3595.</u>
		CERTIFICATION OF	DESIGN		
Design Specification certified			P.E. State	WA	Reg. no. <u>12542</u>
Design Report certified by	N/A		P.E. State		Reg. noN/A
Design neport certified by					
	C1	ERTIFICATE OF CO	MPLIANCE		
We certify that the statements				rules for construction	of the ASME Code, Section
III. Division 1.			·		
NV Certificate of Authorizatio	n No <u>№–2853</u>		Expir	es <u>November 18</u>	, 1994
	Kunkle Industrie	es Inc.		1.000	•
Date 7-27-94	ame Lonergan Valve 1		Signed D.U.	- I Ballin	ja-
	INV Certificate			(authorized repr	esentativel

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

Ke. 100035 Blil94

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

		6		138433-1-1
Certificate	Holder's	Serial	NO.	

for 8/1/94

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CERTIFICATE OF INS	SPECTION
I, the undersigned, holding a valid commission issued by the National Board of	of Boiler and Pressure Vessel Inspectors and the State or Province
of Michigan and employed by HSBI & I Co.	
Hartford, CT	have inspected the valve described in this Data Report on V
JUIV 27, 1994, and state that to the best of my knowledge and belie	of, the Certificate Holder has constructed this valve in accordance
with the ASME Code, Section III, Division 1.	the described
By signing this certificate neither the inspector nor his employer makes any wa	arranty, expressed or implied, concerning the component described
in this Data Report. Furthermore, neither the inspector nor his employer shall b	e liable in any manner for any personal injury or property carriage of
a loss of any kind arising from or connected with this inspection.	
Date 7-27-94 Signed Fic Karch Lauge	mmissions NB 7444 (NBIA), INS PYD
(Authorized inspector)	(NET I. DO. (ITC. CHECKERINETIC) and state of prove and rear

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

1. Owner: Energy Northwest

Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352 2. Plant: Columbia Generating Station Date: 05/05/01 Sheet: 1 Of 1 Unit: Not Applicable

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Core Isolation Cooling (RCIC) System

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Cr No) Code Class
RCIC-P-1	Bingham	B-2-1061	161	<b>N/A</b>	1973 •	Repaired	Yes, Code Class 2

7. Description Of Work Performed: Repaired pump RCIC-P-1 outboard end cover (item 22-1). The repair work was performed as follows:

1) Performed weld build up of the worn areas on the outboard end cover.

2) Machined the weld built up areas on the outboard end cover.

3) Performed liquid penetrant (PT) examination on the final machined areas. Liquid penetrant (PT) examination results acceptable.

4) Performed VT-3 visual examination on the existing studs for the outboard end cover joint. VT-3 visual examination results acceptable.

5) Performed VT-3 visual examination on the existing nuts for the outboard end cover joint. VT-3 visual examination results acceptable. 6) Reinstalled outboard end cover.

7) Reinstalled VT-3 visually examined existing studs and nuts for the outboard end cover.

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

PLAN No 2-1	1747
NORTHWEST	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
8 Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure [1]	one
CERTIFICATE OF COMPLIANCE	٦
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       Uldub       Signed By       Uldub       Sught         Kuldip Singh - Program Lead Engineer (PLE)       Signed By       Kuldip Singh - Program Lead Engineer (PLE)         Date       S[S]01       Date       S[S]01	
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the period $3-3-01$ to $3-12-01$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	
Date 5-12-01 Commissions 7486W/7486 INTS, National Board, State, and Endorsements	



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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

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

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

Name Of Component	Name Of Manufacturer	Manufacturer' <b>s</b> Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-2C	WPPSS *	RHR(1)-2C-P1	N/A	N/A	1883		Yes, Code Class 2
RHR(4)-1C	WPPSS *	RHR(4)-1C-P1	N/A	N/A	1983		Yes, Code Class 2
RHR-RV-25C	Lonergan	509258-75-1	N/A	N/A	1982		Yes, Code Class 2

7. Description Of Work Performed: The existing relief valve RHR-RV-25C was removed and reinstalled. The removal and reinstallation work was performed as follows:

1) Removed existing relief valve RHR-RV-25C, Serial No 509258-75-1 to refurbish (recondition). Provisions were provided to replace the nozzle during refurbishing (reconditioning) activities, how ever relief valve nozzle was not replaced.

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

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

4) Reinstalled relief valve RHR-RV-25C, Serial No 509258-75-1.

5) Reinstalled VT-3 visually examined existing studs and nuts for the relief valve outlet joint.

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

#### NOTES -

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

2) The existing ASME Code Stamped piping system applicable to relief valve RHR-RV-25C, Serial No 509258-75-1 inlet side is Residual Heat Removal (RHR) piping system RHR(1)-2C-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) The existing ASME Code Stamped piping system applicable to relief valve RHR-RV-25C, Serial No 509258-75-1 outlet side is Residual Heat Removal (RHR) piping system RHR(4)-1C-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

4) The existing relief valve RHR-RV-25C, Serial No 509258-75-1 is certified to comply with ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda requirements.

PLAN	No 2-1749
EMERGY	
NORTHWEST	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: Psig Component Design Pressure: Psig Remarks: None	None
iemarks: None	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement confe	orms
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable	
Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable	
$\Lambda$ , $\beta$ , $\rho$ , $\Lambda$ , $\rho$	
Prepared By         July         Signed By         July         Signed By         July         Signed By         July         Signed By         Signed By	(PLE)
Date 6/13/01 Date 6/13/01	
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pres	
Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company Johnston, Rhode Island have inspected the components described in this Owner's Report during	the
period $5/26/01$ to $6/22/01$ and state to the best of my knowledge and belie Owner has performed examinations and taken corrective measures described in this Owner's F	f, the
in accordance with the requirements of the ASME Code, Section XI.	
By signing this certificate neither the Inspector nor his employer makes any warranty, expresse implied, concerning the examinations and corrective measures described in this Owner's Repo	ed or ort.
Furthermore, neither the inspector nor his employer shall be liable in any manner for any perso	onal
injury or property damage or a loss of any kind arising from or connected with this inspection.	
A. M. Fasto Commissions 7486W/7486 WI	. ZI
Inspector's Signature Commissions (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	ents
Date (199101	
	1



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

1. Owner: Energy Northwest

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Diesel Cooling Water (DCW) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1974 Edition with Winter 1974 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
DCW-HX-1B2	American Standard	8-20004-01-2	N/A	N/A	1976	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced studs and nuts for heat exchanger DCW-HX-1B2. The replacement work on the channel/tube sheet bolted joint and back channel/tube sheet bolted joint was performed as follows:

## Channel/Tube Sheet Bolted Joint

1) Removed existing studs and nuts.

2) Installed twenty eight (28) replacement studs.

3) Installed fifty six (56) replacement nuts.

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

## Back Channel/Tube Sheet Bolted Joint

1) Removed existing studs and nuts.

2) Installed twenty eight (28) replacement studs.

3) Installed fifty six (56) replacement nuts.

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

Test Pressure: 56 Psig       Test Temperature: 165° F         Component Design Pressure: 150 Psig       Temperature: 300° F         emarks: None       CERTIFICATE OF COMPLIANCE         Ve certify that the statements made in this Owner's Report are correct and this replacement conforms o the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable       Certificate Of Authorization No.: Not Applicable         Certificate Of Authorization No.: Not Applicable       Signed By         Muldip Singh - Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)		NORTHWEST
Test Pressure: 56 Paig       Test Temperature: 165° F         Component Design Pressure: 150 Paig       Temperature: 300° F         emarks: None       Emarks: None         CERTIFICATE OF COMPLIANCE         Vecentity that the statements made in this Owner's Report are correct and this replacement conforms of the ASME Code, Section XI.         Ype Code Symbol Stamp: Not Applicable       Expiration Date: Not Applicable         Perpared By		FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
We certify that the statements made in this Owner's Report are correct and this replacement conforms of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Ertificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Guad         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Attended the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Rhode Island have inspected the components described in this Owner's Report during the period         Constraint Asperformed examinations and taken corrective measures described in this Owner's Report necessary segure and the Island base of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal		Test Pressure: 56 PsigTest Temperature: 165° FComponent Design Pressure: 150 PsigTemperature: 300° F
We certify that the statements made in this Owner's Report are correct and this replacement conforms of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Ertificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Guad         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Attended the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Rhode Island have inspected the components described in this Owner's Report during the period         Constraint Asperformed examinations and taken corrective measures described in this Owner's Report necessary segure and the Island base of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal		
o the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By		CERTIFICATE OF COMPLIANCE
CERTIFICATE OF INSERVICE INSPECTION the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure (essel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Rhode Island have inspected the components described in this Owner's Report during the period $\int -2(-C)/$ to $(-1) \int -(-1)/$ and state to the best of my knowledge and belief, the Dwner has performed examinations and taken corrective measures described in this Owner's Report n accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal	to the rules Type Code ( Certificate (	of the ASME Code, Section XI. Symbol Stamp: Not Applicable Of Authorization No.: Not Applicable
the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of ohnston, Rhode Island have inspected the components described in this Owner's Report during the period $5-2(2-c)/$ to $(2-1)(5-c)/$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal	Prepared B	Kuldip Singh - Program Lead Engineer (PLE)       Signed By       Kuldip Singh - Program Lead Engineer (PLE)         G/(3/01       Date       6/13/01
Inspector's Signature Commissions 7486 w/7486 ruf IS 3 National Board, State, and Endorsements	Vessel Insp Johnston, Rh period <u>/-</u> Owner has p in accordan By signing t implied, cor Furthermore	Signed, holding a valid commission issued by the National Board of Boiler and Pressure ectors and the State of Washington and employed by Factory Mutual Insurance Company of ode Island have inspected the components described in this Owner's Report during the $2(-c)'$ to $(-7)^{-c})'$ and state to the best of my knowledge and belief, the performed examinations and taken corrective measures described in this Owner's Report ce with the requirements of the ASME Code, Section XI. his certificate neither the Inspector nor his employer makes any warranty, expressed or cerning the examinations and corrective measures described in this Owner's Report. a, neither the Inspector nor his employer shall be liable in any manner for any personal operty damage or a loss of any kind arising from or connected with this inspection. $\mathcal{M}$



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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Repaired by welding pits on the inside (ID) surfaces of elbow and flange to elbow circumferential butt weld 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.

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

3) Performed visual examination on the final ground/blended inside (ID) surfaces. Visual examination results acceptable.

4) Performed magnetic particle (MT) examination on the final ground/blended inside (ID) surfaces. Magnetic particle (MT) examination results acceptable.

5) Performed radiographic (RT) examination on the final ground/blended inside (ID) surfaces. Radiographic (RT) examination results were acceptable.

6) Performed VT-3 visual examination on the existing bolts for the valve bolted joints. VT-3 visual examination results acceptable.
7) Reinstalled spacers and valve SW-V-2B.

8) Reinstalled VT-3 visually examined existing bolts for the valve bolted joints.

9) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve bolted joints, elbow and flange to elbow circumferential butt weld. No evidence of leakage during the pressure test.

#### NOTES -

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

2) The magnetic particle (MT) examination on the final ground/blended inside (ID) surfaces was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

3) The radiographic (RT) examination on the final ground/blended inside (ID) surfaces was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1

3) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve bolted joints, elbow and flange to elbow circumferential butt weld was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

	PLAN No 2-1751 ENERGY NORTHWEST
F	ORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
sts Conduct	ed: Hydrostatic Pneumatic Nominal Operating Pressure X Other None Test Pressure: 210 Psig Test Temperature: 58° F Component Design Pressure: 309 Psig Temperature: 150° F
e <b>marks:</b> None	
	CERTIFICATE OF COMPLIANCE
ule <mark>s</mark> of the A Type Code S	at the statements made in this Owner's Report are correct and this repair conforms to the ASME Code, Section XI. ymbol Stamp: Not Applicable f Authorization No.: Not Applicable
Expiration D. Prepared By	Ate: Not Applicable     Signed By     Support       Kuldip Singh - Program Lead Engineer (PLE)     Signed By     Kuldip Singh - Program Lead Engineer (PLE)
Date	6 29 01 Date 6 29 01
	CERTIFICATE OF INSERVICE INSPECTION
Vessel Inspection	igned, holding a valid commission issued by the National Board of Boiler and Pressure ectors and the State of Washington and employed by Factory Mutual Insurance Company of ode Island have inspected the components described in this Owner's Report during the <u>27/0</u> to <u>7/10/01</u> and state to the best of my knowledge and belief, the performed examinations and taken corrective measures described in this Owner's Report
in accordand By signing t implied, con	ce with the requirements of the ASME Code, Section XI. his certificate neither the Inspector nor his employer makes any warranty, expressed or cerning the examinations and corrective measures described in this Owner's Report. o, neither the Inspector nor his employer shall be liable in any manner for any personal operty damage or a loss of any kind arising from or connected with this inspection.
<u></u>	Inspector's Signature Commissions 74/66/74/66 wIII National Board, State, and Endorsements
Date	10/01



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

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

2. Plant: Columbia Generating Station

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with no Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RRC-P-1A	Bingham	210099	134	N/A	1974	Repaired	Yes, Code Class 1

7. Description Of Work Performed: Removed unacceptable PT indication from shock suppressor lug weld for pump RRC-P-1A. The repair work was performed as follows:

1) Removed (locally) unacceptable PT indication by mechanical means.

2) Uniformly blended the excavation into the surrounding surfaces.

3) Performed liquid penetrant (PT) examination on the excavated surfaces. Liquid penetrant (PT) examination results acceptable.

4) Performed visual examination on the weld excavated surfaces to determine if the fillet leg size and profile complies with the design requirements. The fillet leg size and profile complied with the design requirements.

	PLAN No 2-1752 EMERGY NORTHWEST
F	DRM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conduct	ed: Hydrostatic Pneumatic Nominal Operating Pressure Other X None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
<b>Remarks:</b> Non <del>e</del>	
	CERTIFICATE OF COMPLIANCE
rules of the A Type Code Sy Certificate Of	t the statements made in this Owner's Report are correct and this repair conforms to the SME Code, Section XI. Imbol Stamp: Not Applicable Authorization No.: Not Applicable te: Not Applicable Signed By Culor Such Kuldip Singh - Program Lead Engineer (PLE) 6/13/01 Date 6/(3/01
I the undersi	CERTIFICATE OF INSERVICE INSPECTION gned, holding a valid commission issued by the National Board of Boiler and Pressure
Vessel Inspect Johnston, Rhoo period <u>5</u> Owner has period in accordance By signing the implied, conce Furthermore,	The state of Washington and employed by Factory Mutual Insurance Company of the Island have inspected the components described in this Owner's Report during the $V_{-}O_{-}$ to $L_{-}O_{-}O_{-}O_{-}O_{-}O_{-}O_{-}O_{-}O$
<u></u>	Spector's Signature Commissions 7456 NI National Board, State, and Endorsements
1	



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

1. Owner: Energy Northwest

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Diesel Cooling Water (DCW) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 3, 1974 Edition with Winter 1974 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer' <b>s</b> Serial No	National Board No	Other I.D.	Year Built	Repaired, Repiaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
DCW-HX-1A1	American Standard	8-20004-02-1	N/A	N/A	1976	Replacement	Yes, Code Class 3

7. Description Of Work Performed: Replaced studs and nuts for heat exchanger DCW-HX-1A1. The replacement work on the channel/tube sheet bolted joint and back channel/tube sheet bolted joint was performed as follows:

Channel Cover Plate (Stationary End) Bolted Joint

1) Removed existing studs and nuts.

2) Installed twenty eight (28) replacement studs.

3) Installed fifty six (56) replacement nuts.

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

### Channel/Tube Sheet (Stationary End) Bolted Joint

1) Removed existing studs and nuts.

2) installed twenty eight (28) replacement studs.

3) Installed fifty six (56) replacement nuts.

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

## Back Channel Cover Plate (Packed End) Bolted Joint

1) Removed existing studs and nuts.

2) Installed twenty eight (28) replacement studs.

3) Installed fifty six (56) replacement nuts.

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

### Back Channel/Tube Sheet (Packed End) Bolted Joint

1) Removed existing studs and nuts.

2) Installed twenty eight (28) replacement studs.

3) Installed fifty six (56) replacement nuts.

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

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)         3 Tests Conducted: Hydrostatic Pressure: 6P sig         Test Temperature: 164° F         Test Temperature: 164° F         Component Design Pressure: 150/300 Psig         Temperature: 300/300° F         Other E         Component Design Pressure: 150/300 Psig         Temperature: 300/300° F         Component design pressure of 150 Psig and design temperature of 300° F is for heat exchanger DCW-HX-1A1         Other E         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement confort to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Prepared By         Muddle Sign Lead Engineer (PLE)         Date       6/13/01
Test Pressure: 65 Psig       Test Temperature: 164° F         Component Design Pressure: 150/300 Psig       Temperature: 300/300° F         Remarks: 1) Component design pressure of 150 Psig and design temperature of 300° F is for heat exchanger DCW-HX-1A1         Component design pressure of 300 Psig and design temperature of 300° F is for heat exchanger DCW-HX-1A1         Component design pressure of 300 Psig and design temperature of 300° F is for heat exchanger DCW-HX-1A1 channel side.         Certify that the statements made in this Owner's Report are correct and this replacement confort to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Muldip Singh - Program Lead Engineer (PLE)         Signed By       Muldip Singh - Program Lead Engineer (PLE)
CERTIFICATE OF COMPLIANCE We certify that the statements made in this Owner's Report are correct and this replacement confort to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By Much Signed By Much Ruch Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
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
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By Lulan Support Signed By Lulan Support Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
<b>CERTIFICATE OF INSERVICE INSPECTION</b> <i>I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressed</i> <i>Vessel Inspectors and the State of</i> Washington <i>and employed by</i> Factory Mutual Insurance Company of Johnston, Rhode Island <i>have inspected the components described in this Owner's Report during th</i> <i>period</i> $\int -3!-c!$ to $[2,-15-c!]$ and state to the best of my knowledge and belief, <i>Owner 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 <i>implied, concerning the examinations and corrective measures described in this Owner's Report</i> <i>Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal</i> <i>injury or property damage or a loss of any kind arising from or connected with this inspection.</i>
M. Totol     Commissions     71186 w/ 74156 w/       Inspector's Signature     National Board, State, and Endorsement       Date     6 - 15 - 01



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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced existing 2" NPS Service Water (SW) section of pipe with the through wall hole. The replacement work was performed as follows:

1) Cut/ground existing socket weld and existing circumferential butt weld.

2) Removed existing section of pipe with the through wall hole.

3) Installed replacement section of pipe.

4) Made required socket weld.

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

6) Made required root pass weld for circumferential butt weld.

7) Performed visual examination on the root pass for circumferential butt. Visual examination results acceptable.

8) Performed magnetic particle (MT) examination on the root pass for circumferential butt weld. Magnetic particle (MT) examination results acceptable.

9) Made required cover pass (final) for circumferential butt weld.

10) Performed visual examination on the cover pass (final) for circumferential butt. Visual examination results acceptable.

11) Performed magnetic particle (MT) examination on the cover pass (final) for circumferential butt weld. Magnetic particle (MT) examination results acceptable.

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

NOTES

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

2) The magnetic particle (MT) examination on the final socket weld was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

3) The magnetic particle (MT) examination on the root pass and cover pass (final) for circumferential butt weld was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

4) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joints was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

	PLAN No 2-1755 ENERGY
	NORTHWEST
I	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
sts Conduc	Cted: Hydrostatic       Pneumatic       Nominal Operating Pressure       X       Other       None         Test Pressure: 209 Psig       Test Temperature: 63° F       Component Design Pressure: 309 Psig       Temperature: 150° F
e <b>marks:</b> Not	NG
	CERTIFICATE OF COMPLIANCE
o the rules Type Code - Certificate (	hat the statements made in this Owner's Report are correct and this replacement conforms of the ASME Code, Section XI. Symbol Stamp: Not Applicable Of Authorization No.: Not Applicable Date: Not Applicable
Prepared B	Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y       Y
	CERTIFICATE OF INSERVICE INSPECTION
Vessei Insp Johnston, Ri Deriod Owner has	signed, holding a valid commission issued by the National Board of Boller and Pressure bectors and the State of Washington and employed by Factory Mutual Insurance Company of hode Island have inspected the components described in this Owner's Report during the <u>2400</u> to <u>72400</u> and state to the best of my knowledge and belief, the performed examinations and taken corrective measures described in this Owner's Report ince with the requirements of the ASME Code, Section XI.
By <mark>s</mark> igning Implied, co Furthermol	this certificate neither the Inspector nor his employer makes any warranty, expressed or ncerning the examinations and corrective measures described in this Owner's Report. re, neither the Inspector nor his employer shall be liable in any manner for any personal roperty damage or a loss of any kind arising from or connected with this inspection.
<u>A- 14</u>	Inspector's Signature Commissions 711667486 NES ES National Board, State, and Endorsements
Date	<u>F7/01</u>



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

1. Owner: Energy Northwest

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

2. Plant: Columbia Generating Station

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

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

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

Name Of Manufacturer	Manufacturer' <b>s</b> Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
WPPSS*	MS(1)-4D-P1	N/A	N/A	1983	****************	Yes, Code Class 2
NPS	NA-2295-027-18	N/A	N/A	1988	Replaced	Yes, Code Class NF(1)
Lisega	1234-3-17	N/A	N/A	1992	Replacement	No, Code Class NF(1)
	Manufacturer WPPSS* NPS	ManufacturerSerial NoWPPSS *MS(1)-4D-P1NPSNA-2295-027-18	ManufacturerSerial NoBoard NoWPPSS *MS(1)-4D-P1N/ANPSNA-2295-027-18N/A	ManufacturerSerial NoBoard NoI.D.WPPSS *MS(1)-4D-P1N/AN/ANPSNA-2295-027-18N/AN/A	ManufacturerSerial NoBoard NoI.D.BuiltWPPSS *MS(1)-4D-P1N/AN/A1983NPSNA-2295-027-18N/AN/A1988	ManufacturerSerial NoBoard NoI.D.BuiltReplaced Or ReplacementWPPSS * NPSMS(1)-4D-P1 NA-2295-027-18N/AN/A1983 N/A 1988 Replaced

7. Description Of Work Performed: Replaced existing rigid strut for support MS-1010N(E). The replacement work was performed as follows:

1) Removed existing rigid strut, Serial No NA-2295-027-18.

2) Installed replacement rigid strut, Serial No 1234-3-17.

3) Installed new bolts.

4) Performed VT-3 visual examination on support MS-1010N(E) to satisfy Inservice Inspections (ISI)/Preservice Inspections (PSI) requirements. VT-3 visual examination results acceptable.

### NOTES -

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

2) The existing ASME Code Stamped piping system in which the replacement rigid strut, Serial No 1234-3-17 installed is Main Steam (MS) piping system MS(1)-4D-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

3) ASME Section III, Code Class NF(1) rigid strut for ASME Section III, Code Class NF(2) application.

PLAN No 2-1756 EMERGY NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       X       None         Test Pressure: Psig       Test Temperature: ° F       Component Design Pressure: Psig       Temperature: ° F
Remarks: None
ς
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $\frac{5/3}{0}$ to $\frac{6}{2}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Inspector's Signature Commissions 7486-W/7486 WJJ/ Inspector's Signature National Board, State, and Endorsements
Date

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

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

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

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

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

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

7. Description Of Work Performed: Replaced one (1) stud for Reactor Pressure Vessel (RPV) head vent nozzle N-8 bolted joint. The replacement work was performed as follows:

- 1) Removed existing studs.
- 2) Performed VT-3 visual examination on the existing studs. VT-3 visual examination results acceptable.
- 3) Removed existing nuts.
- 4) Performed VT-3 visual examination on the existing nuts. VT-3 visual examination results acceptable.
- 5) Performed VT-1 visual examination on one (1) replacement stud. VT-1 visual examination results acceptable.
- 6) Reinstalled VT-3 visually examined existing studs.
- 7) Reinstalled VT-3 visually examined existing nuts.
- 8) Installed one (1) VT-1 visually examined stud.

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

#### NOTES -

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

	PLAN NO 2-175
	NORTHWEST
FOR	M NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted	: Hydrostatic Pneumatic Nominal Operating Pressure X Other Non Test Pressure: 1022 Psig Test Temperature: 215° F Component Design Pressure: 1250 Psig Temperature: 575° F
<b>Remarks:</b> None	
	CERTIFICATE OF COMPLIANCE
to the rules of t Type Code Syn Certificate Of A Expiration Date Prepared By	the statements made in this Owner's Report are correct and this replacement conforms the ASME Code, Section XI. The ASME Code, Section XI. The Asymptotic Stamp: Not Applicable withorization No.: Not Applicable : Not Applicable Signed By Huldup Guid Kuldip Singh - Program Lead Engineer (PLE) 6)23 01 Date 6)22 01
Vessel Inspecto Johnston, Rhode period <u>(4/4/</u> Owner has period	CERTIFICATE OF INSERVICE INSPECTION med, holding a valid commission issued by the National Board of Boiler and Pressure fors and the State of Washington and employed by Factory Mutual Insurance Company of Island have inspected the components described in this Owner's Report during the med by the state to the best of my knowledge and belief, the formed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI.
By signing this implied, concer Furthermore, n injury or proper	certificate neither the Inspector nor his employer makes any warranty, expressed or rning the examinations and corrective measures described in this Owner's Report. either the Inspector nor his employer shall be liable in any manner for any personal rty damage or a loss of any kind arising from or connected with this inspection.
Ins Date <u>7/11/</u>	Dector's Signature National Board, State, and Endorsements

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

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

- 3. (a) Work Performed By: Energy Northwest
- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (c) Type Code Symbol Stamp: Not Applicable
- (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1972 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer' <b>s</b> Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS-V-20 Disc Disc	Anchor Darling Anchor Darling BW/IP	R-Z337-1-1 9 1	N/A N/A N/A	N/A N/A N/A	1995 1994 1997	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 2 Yes, Code Class 2

- 7. Description Of Work Performed: Replaced existing disc for valve MS-V-20. The replacement work was performed as follows: 1) Removed existing valve disc, Serial No 9.
  - 2) Assembled replacement valve disc, Serial No 1 and disc nut.
  - 3) Made required valve disc to disc nut welds.
  - 4) Performed visual examination on the final welds. Visual examination results acceptable.
  - 5) Performed liquid penetrant (PT) examination on the final welds. Liquid penetrant (PT) examination results acceptable.
  - 6) Installed replacement valve disc, Serial No 1 in the valve.
  - 7) Performed VT-2 visual examination during pressure test to confirm pressure boundary integrity of the joint. No evidence of leakage during the pressure test.

#### NOTES -

1) Valve parts for Anchor Darling valves are manufactured by BW/IP International, inc.

		PLAN No 2-1758
	E NO	NERGY PRTHWEST
FOR	A NIS-2 OWNER'S REPOR	T FOR REPAIRS OR REPLACEMENTS (Back)
	est Pressure: 935 Psig Component Design Pressure	
e <b>marks:</b> See attac	hed N-2 Code Data Report for the re	placement valve disc, Serial No 1.
	CERTIFIC	CATE OF COMPLIANCE
o the rules of th Type Code Sym Certificate Of Au Expiration Date:	e ASME Code, Section XI. bol Stamp: Not Applicable tthorization No.: Not Applicable	N. PA QOI
Vessel Inspecto Johnston, Rhode	ed, holding a valid commiss ors and the State of Washingto Island have inspected the co to 7/24	FOF INSERVICE INSPECTION sion issued by the National Board of Boller and Pressure on and employed by Factory Mutual Insurance Company of components described in this Owner's Report during the and state to the best of my knowledge and bellef, the ken corrective measures described in this Owner's Report
in accordance v By signing this Implied, concer Systhermore, n	with the requirements of the certificate neither the inspe- ning the examinations and c either the inspector nor his (	ASME Code, Section XI. ctor 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.
A. 11	Control Signature	Commissions 7486 w/7486 wfs JS National Board, State, and Endorsements
Ins		

(a) Maanfactured by BW/IP International, Inc. Valve Division, 701 First St., Williamsport (Kan aar address of Vertragettate Nader (B) Maanfactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 993 (Been address of Vertragettate Nader's Commented Entropy Commentation Entrop				PL	AN NO. 2-1758	
As required by the Provision of the ASME Code Rules. Section III. Div. 1  (a) Maxafactured by BW/IP International, Inc. Valve Division, 701 First St., Williamsport  (b) Massifactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 993  (c) Massifactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 993  (c) Massifactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 993  (c) Massifactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 993  (c) Massifactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 993  (c) Massifactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 993  (c) Massifactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 993  (c) Massifactured for Washington Public Power Supply System, P.O. Box 968, Richland, WA 993  (c) Massifactured Accessing Strategies and Massifactured Strategies and Strate Researce  (c) Massifactured Strategies and Strate Researce and Strate Researce  (c) Massifactured Massific and Tarvita for Suph Strategies and Strate Researce  (c) Massific duratigation of aversa for Suph Strategies and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Researce as defined in the Code cost  (c) Massific duratigation and Strate Resear	• 50	NOM N-2 NOT CERTIFICATE HOLDE	RS' DATA REPORT FOR	NUCLEAR PART AND A	PFURTENANCES*	
(b) Masselactured for Washington Public Pover Supply System, P.O. Box 968, Richland, WA 993 Masselactured for Washington Public Pover Supply System, P.O. Box 968, Richland, WA 993 Masselated Certificate Holder's Serial No. of Part SN - 1 Nor'l B4. No. N/A (c) Constructed According to Draving Ne. D12090 Draving Prepared by EW/IP International, Inc. Division (c) Applicable ASME Code: Section III, Edition 1971, Addenda date Mint '72, Case No Class 2 Remarks: Spare Part for 3"-900#-Globe Stop Valve Remarks: Spare Part for 3"-900#-Globe Stop Valve BW/IP S.O. No.: P-343D-1 No Disc Hydro Performed MS-V-20, DISC S/A 1 We control the for the section III, Edition III, Balance Design Specification and Stress Report for Stop Valve Remarks: Spare Part for 3"-900#-Globe Stop Valve Remarks: Spare Part for 3"-900#-Globe Stop Valve BW/IP S.O. No.: P-343D-1 No Disc Hydro Performed MS-V-20, DISC S/A 1 We control the ASME Code Section III. BW/IP International, Inc. BW/IP S.O. No.: P-343D-1 No Disc Hydro Performed Design Specification and Stress Report if the appuratements in the Code cost as to the nine of Construction of the ASME Code Section III. BW/IP International, Inc. BW/IP Stopperson in reporting a transmission and Stress Report if the appuratements in the Code cost as to the nine of Construction and Stress Specification and Stress Report if the appuratements in the Code cost as to the nine of Construction and Stress Report in By Massed Part of Report Stress Report if the appuratements in the component for the appuratement in the component for the appuratement in the component of the ASME Code Section and Stress Report in the appuratement in the component for the appuratement in the component of the appuratement in the appuratement in the component of the ASME Code Section and Stress Report in the appurate of the appuratement in the appuratement in the appurate of the ASME Code Section and Stress Report in the appurate of the appu	-	As required by the Pro-	vision of the ASME Code	Rules, Section III, Div. 1	Chedip Sup	
(b) Masselectured for Washington Public Power Supply System, P.O. Box 966, Richland, WA 993         (c) Constructed According to Drawing No	(a) Manufs	ectured by BW/IP Internationa	al, Inc. Valve Di	vision, 701 First	St., Williamsport,	
Identification - Certificate Holder's Serial No. of Part       Diff.       Number of the No.       Diff.         (a) Constructed According to Drawing No.       Diff. One       Diff. Diff.       Diff. Diff.         (b) Description of Part Impertend       Diff. International, Inc.       Diff. Diff. Diff.         (b) Description of Part Impertend       Diff. Diff	(b) Manufa	actured for Washington Public	Power Supply Sys	tem, P.O. Box 968	, Richland, WA 99352	
(b) Description of Par Inspected						
(b) Description of Par Lappered	(s) Const	spected According to Drawing No	12090 Drewie	Prepared byBW/IP_I	nternational, Inc. V Division	
Remarkes:       Spare Part for 3"-900#-Globe Stop Valve         (Buid descuption of cervice for which component use designed)         BW/IP S.O. No.:       P-343D-1         No Disc Hydro Performed       MS-V-20, DiSc S/A 1         Pe certify that the essenance and is in this report are correct and this vessel part or appurcenance as defined in the Code com- is to the null Defin Specification and Strem Report are not the reponsibility of the NPT Certificate Holder for parts. An NPT Certificate in Holder for parts. An NPT Certificates in Holder for parts. An NPT Certificates in Holder for parts. An NPT Certificates in the appurchance is not BW/IP International, Inc.         P-23       19.77       Signed       Yalve Division       By       Difference in the appurchance is not be reponsibility of the NPT Certificate Holder for parts. An NPT Certificate in the appurchance is not BW/IP International, Inc.         P-33       19.77       Signed       Yalve Division       By       Difference in the appurchance is not be reported being procession No.       N1713         CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)         Design information on file at         Prof. Eng. State         Reg. No.         CERTIFICATE OF SHOP INSPECTION         I, the underrespande for a pressure vessal inspectors and yois report on file at         Prof. Eng. State         Prof. Eng. State <td c<="" td=""><td>(b) Descr</td><td>ription of Part Inspected</td><td>, neal No. 24-225</td><td>/</td><td></td></td>	<td>(b) Descr</td> <td>ription of Part Inspected</td> <td>, neal No. 24-225</td> <td>/</td> <td></td>	(b) Descr	ription of Part Inspected	, neal No. 24-225	/	
BW/IP S.O. No.: P-343D-1         No Disc Hydro Performed       MS-V-20, Disc S/M 1         Precentify that the extrements made in this report are correct and this vessel part or appurcenance as defined in the Code correction III.       Precentify that the extrements made in this report are correct and this vessel part or appurcenance as defined in the Code correction III.         Precentify that the extrements made in this report are not the reponsibility of the NT Certificate Moder for parts. An NT Certificate in the exponents of the Appurcenance is not being Specification and Stress Report 1 the exponsibility of the exput second and Stress Report 1 the exput second and second second and the exput second and t					Class2	
BW/IP S.O. No.: P-343D-1         No Disc Hydro Performed       MS-V-20, Disc S/M J         Precently that the attarements made in this report are correct and this vessel part or appurtenance as defined in the Code con- is to the rules of construction of the ASME Code Section III.         applicable Design Specification and Strem Report are not the rule of appurtenance as defined in the Code con- is to the rules of construction of the ASME Code Section III.         applicable Design Specification and Strem Report, are not the rule of appurtenance and Strem Report.         BM/IP International, Inc.         P-23       19         BW/IP International, Inc.         BW/IP Contenses Holder         OUT Contenses Holder         CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)         Design information on file at         CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)         Design information on file at         CERTIFICATE OF SHOP INSPECTION         I, the undersigned, holding a valid commination issued by the National Board of Boiler and Pressure Vessel Inspectors         I, the undersigned, holding a valid commination issued by the National Board of Boiler and Pressure Vessel Inspectors         I, the undersigned, holding a valid commination issued by the National Board of Boiler and Pressure Vessel Inspectors         I, the undersigned, holding a valid commination issued by the National Board of Boiler and Pressure Vessel Inspectors         I, the undersigneed, h	Remarks:	Spare Part for 3"-900	-Globe Stop Valv	e compensat was designed)		
We certify that the statements made is this report are correct and this vessel part or appurtenance as defined in the Code construction of the ASME Code Section III.         Projective Design Specification and Stress Report are correct and this vessel part or appurtenance as defined in the Code construction of the ASME Code Section III.         Projective Component Design Specification and Stress Report if the appurtenance is not inder for parts. An NPT Certification and Stress Report if the appurtenance is not inder for parts.         Image: A stress of the ASME Code Section and Stress Report if the appurtenance is not inder for parts.         Image: A stress of the ASME Code Section and Stress Report.         BW/IP International, Inc.         Image: A stress of the Asther Stress Report Stress Report if the appurtenance is not international in the component Design Specification and Stress Report if the appurtenance is not international.         Image: A stress of Authorization Expires         A/15/98       Certificate of Authorization No.         N1713         CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)         Design information on file at         Stress analysis report on file at         CERTIFICATE OF SHOP INSPECTION         1, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Laspectors in and belief, the NTC Certificate Holder has constructed by commercial Union Insurance Company of Boston.         Matther Hit Certificate, easter Holder has constructed by the preperty damage or a loast of any kind azising from de exp		•	·			
se to the reles of conservation of the ASME Code Section III. spontable Design Specification and Stress Report at most the responsibility of the NPT Certificate Holder for parts. An NPT Certification and Stress Report of the appurchance is not bled in the component Design Specification and Stress Report of the appurchance is not bled in the component Design Specification and Stress Report. BW/IP International, Inc. BW/IP International, Inc. WHY Certificate Moder WHY Certificate Moder BW/IP International, Inc. WHY Certificate Moder By Certification of the ASME Code Section No. N1713 CERTIFICATION OF DESIGN FOR APPURTENANCE (when explicable) Design information on file at CERTIFICATION OF DESIGN FOR APPURTENANCE (when explicable) CERTIFICATION OF DESIGN FOR SHOP INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Builer and Pressure Vessel Lappectors I, the undersigned, holding a valid commission issued by the National Board of Builer and Pressure Vessel Lappectors I, the undersigned, holding a valid commission issued by the National Board of Builer and Pressure Vessel Lappectors I, the undersigned, holding a valid commission issued by the National Board of Builer and Pressure Vessel Lappectors Ind/or the State Report on 5-20-97 HMA DADD DADD DADD DADD DADD DADD DADD		No Disc Hydro Perform	ed MS-	V-20, Disc s	NI	
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 State or ARMININGEX of Pennsyl vania and employed by Commercial Union Insurance Company and/or the State or ARMININGEX of Pennsyl vania and employed by Commercial Union Insurance Company and/or the State or ARMININGEX of Pennsyl vania and state that to the best of my knowledge. Boston. Mass have inspected the part of a pressure vessel described in this Partial Data Report on AM 19 and state that to the best of my knowledge. By signing this certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate to the Inspector nor his employer makes any warranty, expressed or implied, concern- ing the part described in this Partial Data Report. Furthermore. neither the Inspector and his employer hall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or consected with this inspection. Date	Design inf	formation on file at		<u></u>		
Stress analysis report certified by		• • • •		Prof. Eng. State	Reg. No	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or NRTHVINOTXOF <u>Pennsylvania</u> and employed by <u>Commercial Union Insurance Company</u> of <u>Boston</u> , <u>Mass</u> , <u>have inspected the part of a pressure vessel described in this</u> partial Data Report on <u>5-20-90 the</u> <u>7-28-90</u> 19 and state that to the best of my knowledge and bellef, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the laspector nor his employer makes any warranty, expressed or implied, concern- ing the part described in this Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Date <u>7-20</u> 19 <u>97</u> <u>Manual Manual</u> Commissions <u>Pennsylvania 2392</u> National Beerd, State, Prevince and No.					Reg. No	
and/or the State OF PERMININGLOUND PERMISSIVATIA and employed by <u>Commissions</u> <u>Of Bostons</u> <u>Mass</u> . <u>have inspected the part of a pressure vessel described in this</u> partial Data Report on <u>5-20-97</u> <u>428-97</u> 19 and state that to the best of my knowledge. and bellef, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the laspector nor his employer makes any warranty, expressed or implied, concern- ing the part described in this Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Date <u>7-20</u> 19 <u>97</u> <u>Mathematicate</u> <u>19</u> <u>Pennsylvania</u> 2392 National Beerd, State, Prevince and Ne.		CERTI	FICATE OF SHOP INS	PECTION		
Partial Data Report on <u>5-20-97</u> <u>728-7</u> and bellef, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the laspector nor his employer makes any warranty, expressed or implied, concern- ing the part described in this Partial Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Date <u>7-20</u> 19 <u>97</u> <u>Pennsylvania 2392</u> National Beerd, State, Prevince and No.	ad/or the	e State of XXXXXXXXXX Pennsy I Va	nia and employed by	Commercial onton	Thourance company	
Date <u><u><u></u></u> <u><u><u></u></u> <u><u></u> <u><u></u></u> <u><u></u> <u></u> <u></u> <u></u> <u></u> <u></u> </u></u></u></u>	Partial Dat and bellef. By sign ing the i shall be l	ta Report on $5-20-97$ the , the NPT Certificate Holder has construct ming this certificate, neither the lasp part described in this Partial D liable in any manner for any personal	2-28-92 ted this part in accordance ector nor his employer mi		the best of my knowledge ill. ued or implied, concern- lor nor his employer	
And Commissions Pennsylvania 2392 Darles Yound Beard, State, Prevince and No.		<u>1 2-28 19 9'</u>	2	•		
arles Young State State A.	()	1. Mentrus		Pennsylvania 239	92	
	<u>unian</u>	Voitaspector's Sylandiure				
applemental shoets in term of lists, skylchos or drawings may be used provides (1) size is 6%" z 11", (2) information in items 1-2 on this		and the short of the second second second	be used provided (1) size is BW	" z 11", (2) information in itoms	1-2 on this	
This form (E000.40) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017			n and an an har abanda and former all	a Owier Debt., ASME, 345 E. 4	TTT ST., NEW TOFK, N.T. LUUI/	

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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

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

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
SW(1)-2UG	WPPSS *	SW(1)-2UG-P1	N/A	N/A	1983	Repaired	Yes, Code Class 3

7. Description Of Work Performed: A) Repaired by welding pits (Pit No 2 and 3 base metal repairs) on the inside (ID) surfaces of elbow and flange to elbow circumferential butt weld 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.

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

3) Performed visual examination on the final ground/blended inside (ID) surfaces. Visual examination results acceptable.

4) Performed magnetic particle (MT) examination on the final ground/blended inside (ID) surfaces. Magnetic particle (MT) examination results acceptable.

5) Performed radiographic (RT) examination on the final ground/blended inside (ID) surfaces. Radiographic (RT) examination results were acceptable.

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

B) Repaired by welding pit (Pit No 1 stainless steel weld overlay) on the inside (ID) surfaces of elbow down stream side of valve SW-V-2A. The repair work was performed as follows:

1) Weld repaired (weld built up) stainless steel weld overlay.

2) Ground/blended the weld repaired areas on the inside (ID) surfaces flush with the adjacent metal to match the contour of the inside surfaces,

3) Performed visual examination on the final ground/blended inside (ID) surfaces. Visual examination results acceptable.

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

NOTES -

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

2) The magnetic particle (MT) examination on the final ground/blended inside (ID) surfaces was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-

3) The radiographic (RT) examination on the final ground/blended inside (ID) surfaces was performed in accordance with the requirements of ASME Section III, Code Class 3, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-

3) The VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve bolted joints, elbow and flange to elbow circumferential butt weld was performed in accordance with the requirements of ASME Section XI, 1992 Edition with no Addenda to satisfy the requirements outlined in Code Case N-416-1.

	PLAN No 2-1759
	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
<b>Tests</b> Co	Inducted: Hydrostatic Pneumatic Nominal Operating Pressure _X Other None Test Pressure: 215 Psig Test Temperature: 63° F Component Design Pressure: 309 Psig Temperature: 150° F
Remark	s; None
	CERTIFICATE OF COMPLIANCE
rules o	tify that the statements made in this Owner's Report are correct and this repair conforms to the f the ASME Code, Section XI.
Certific	ode Symbol Stamp: Not Applicable ate Of Authorization No.: Not Applicable ion Date: Not Applicable
Prepar	ALPH ONL ALPHON
Frepar	Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date	DateDate
Vessel Johnsto period Owner In acco By sign Implied Furthe	CERTIFICATE OF INSERVICE INSPECTION ndersigned, holding a valid commission issued by the National Board of Boiler and Pressure Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of n, Rhode Island have Inspected the components described in this Owner's Report during the <u>bas</u> <u>bas</u>
1.	Inspector's Signature Commissions 7466W/7486 N.F.S. E. National Board, State, and Endorsements
Date	7/24/01

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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Containment Instrument Air (CIA) System

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

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

7. Description Of Work Performed: Replaced studs and nuts for the bolted piping flanged joint for flex hose CIA-FLX-1J. The replacement work was performed as follows:

1) Installed eight (8) new studs for the bolted piping flanged joint.

2) Installed sixteen (16) new nuts for the bolted piping flanged joint.

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

### NOTES -

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

	PLAN No 2-1 EMERGY NORTHWEST				
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)					
	ed: Hydrostatic Pneumatic Nominal Operating Pressure X Other Test Pressure: 185 Psig Test Temperature: 79° F Component Design Pressure: 200 Psig Temperature: 340° F				
	CERTIFICATE OF COMPLIANCE				
to the rules of Type Code Sy Certificate Of	t the statements made in this Owner's Report are correct and this replacement conforms the ASME Code, Section XI. mbol Stamp: Not Applicable Authorization No.: Not Applicable te: Not Applicable Kuldip Singh - Program Lead Engineer (PLE) 6 29 01 Date 6 29 01				
Vessel Inspect Johnston, Rhoo period <u>///</u> Owner has pe in accordance By signing th implied, conc	CERTIFICATE OF INSERVICE INSPECTION gned, holding a valid commission issued by the National Board of Boiler and Pressure stors and the State of Washington and employed by Factory Mutual Insurance Company of the Island have inspected the components described in this Owner's Report during the to				
injury or prop	neither the Inspector nor his employer shall be liable in any manner for any personal erty damage or a loss of any kind arising from or connected with this inspection.				



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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Building Closed Cooling (RCC) System

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCC(36)-1	WPPSS *	RCC(36)-1-P1	N/A	N/A	1983		Yes, Code Class 3

7. Description Of Work Performed: Repaired (modified) snubber transition kit (tube kit) for support RCC-161. The repair work was performed as follows:

1) Cut/ground existing snubber transition kit (tube kit) weld.

2) Reassemble snubber transition kit (tube kit).

3) Made required weld.

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

#### NOTES -

Company name changed from Washington Public Power Supply System (WPPSS) to Energy Northwest in 1999.
 ASME Section III, Code Class NF(3) for support RCC-161.

	PLAN No 2-17
	ENERGY NORTHWEST
FOR	I NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
-	Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F       Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F
emarks: None	
<del>, , , , , , , , , , , , , , , , , , , </del>	CERTIFICATE OF COMPLIANCE
rules of the ASM Type Code Syml Certificate Of Au	ne statements made in this Owner's Report are correct and this repair conforms to the E Code, Section XI. Sool Stamp: Not Applicable Thorization No.: Not Applicable
Expiration Date: Prepared By Kı Date	Not Applicable       Signed By       Rules       Rules         Idip Singh - Program Lead Engineer (PLE)       Signed By       Kuldip Singh - Program Lead Engineer (PLE)         6/29/01       Date       6/29/01
Vessel Inspecto Johnston, Rhode I period Owner has period	CERTIFICATE OF INSERVICE INSPECTION ed, holding a valid commission issued by the National Board of Boiler and Pressure rs and the State of Washington and employed by Factory Mutual Insurance Company of sland have inspected the components described in this Owner's Report during the bound to and state to the best of my knowledge and belief, the bound examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI.
By signing this ( Implied, concert Furthermore, ne	certificate neither the Inspector nor his employer makes any warranty, expressed or ning the examinations and corrective measures described in this Owner's Report. ither the Inspector nor his employer shall be liable in any manner for any personal ty damage or a loss of any kind arising from or connected with this inspection.
<u>IEn</u>	Commissions 74/6W/74/6 N/I ( ). National Board, State, and Endorsements
msp	
Date 7/24	



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

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

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: High Pressure Core Spray (HPCS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Summer 1971 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
HPCS-V-4 Disc Disc	Anchor Darling Anchor Darling Anchor Darling	E5310-4-1 5 or 6 1 (H/N 220872)	N/A N/A N/A	N/A N/A N/A	1974 N/A N/A	Replaced Replacement	Yes, Code Class 1 No, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced disc for valve HPCS-V-4. The replacement work was performed as follows: 1) Removed the existing disc from the valve - See Note 1.

2) Installed the replacement disc in the valve - See Note 1.

NOTES -

1) HPCS-V-4 is a double (duel) disc valve. The hole was drilled on the Reactor Pressure Vessel (RPV) side of the valve disc in accordance with ASME Section XI Plan No 2-1734.

2) VT-3 visual examination on the existing studs and nuts for the valve body to bonnet joint was performed in accordance with ASME Section XI Plan No 2-1734.

3) VT-2 visual examination during pressure test to confirm pressure boundary integrity of the valve body to bonnet joint was performed in accordance with ASME Section XI Plan No 2-1734.

PROPERTY OF CONTRACT OF CONTR		
esis Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Component Design Pressure: Paig Test Temperature: ° F Component Design Pressure: Paig Temperature: ° F Remarks: See attached N-2 Code Data Report for the replacement valve disc. Serial No 1, Heat No 220672. Remarks: See attached N-2 Code Data Report for the replacement valve disc. Serial No 1, Heat No 220672. Remarks: See attached N-2 Code Data Report for the replacement valve disc. Serial No 1, Heat No 220672.		i no 2-176
ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Care Test Pressure: Paig Test Temperature: ° F Component Design Pressure: Paig Test Temperature: ° F Temerks: See attached N-2 Code Data Report for the replacement valve disc, Serial No 1, Heat No 220872.	ŇORTHWĒST	
Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F         Temperature: ° F       Temperature: ° F         Remarks: See attached N-2 Code Data Report for the replacement valve disc, Serial No 1, Heat No 220672.         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 INSERVICE inspection         Kudip Singh - Pkgram Lead Engineer (PLE)         Not Applicable         CERTIFICATE OF INSERVICE INSPECTION         It is a part of the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period of Michae and Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period of Michae and Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period of Michae and Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period of Michae and Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period of Michae and Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period of Michae and Insurance Company of Johnston, Rho	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this owner's Report are correct and this 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         Expiration Date: Not Applicable         Kuldip Singh - Pubgram Lead Engineer (PLE)         Date         122 0.         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the prood J and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report In accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the inspector nor his employer makes any warranty, expressed or Implied, concerning the examinations and corrective measures described in this Owner's Report In accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the inspector nor his employer makes any warranty, expressed or Implied, concerning the examinations and corrective measures described in this Owner's Report.	Test Pressure: Psig Test Temperature: ° F	X
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         Explication Date: Not Applicable         Prepared By       Juttice         Kuldip Singh - Pagram Lead Engineer (PLE)         Date       122 01         Signed By       Juttice         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the period (JEA)         main corrective measures described in this Owner's Report during the period (JEA)         main corrective measures described in this Owner's Report for and taken corrective measures described in this Owner's Report for a speriormed examinations and taken corrective measures described in this Owner's Report.         By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the inspector nor his employer makes 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 impl	<b>Remarks:</b> See attached N-2 Code Data Report for the replacement valve disc, Serial No 1, Heat No 220872.	
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         Explication Date: Not Applicable         Prepared By       Signed By         Kuldip Singh - Pagram Lead Engineer (PLE)         Date       122 01         Signed By       223 01         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have Inspected the components described in this Owner's Report during the period (JC)         Moment as performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or Impleid, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or Impleid, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer makes any warranty, expressed or Impleid, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his emplo		
rules of the ASME Code, Section XI.  Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	CERTIFICATE OF COMPLIANCE	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>6/8/0/</u> to <u>7/24/0/</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.	rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	
Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $\frac{6/8}{2}$ to $\frac{7/24}{2}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.         MMM       Commissions		
	Vessel inspectors and the State of Washington and employed by Factory Mutual Insurance Compan Johnston, Rhode Island have inspected the components described in this Owner's Report during period $\frac{C}{S}$ to $\frac{7}{2}$ $\frac{24}{2}$ and state to the best of my knowledge and belief Owner has performed examinations and taken corrective measures described in this Owner's is in accordance with the requirements of the 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 person	ny of the ef, the Report ed or ort. onal
Date <u>7/24/0/</u>		<u>ZJZ</u> ients

FORM N-2 NPT CEPTIFICAT		PLAN NO 2-1762
As required	by the Provision of the ASME Cod	R NUCLEAR PART AND APPURTENANCES*
		Audaip Sup
1. (a) Manufactured by Anchor/Dar1	ing Valve Co., 701 First	t St., Williamsport, PA 17701
(b) Manufactured for Washington	Public Power Supply Sys	stem, P.O. Box 968, Richland, WA 993
2. Identification-Certificate Holder's Seria	I No. of Part $ S/N - 1$	
(a) Constructed According to Drawin	8 No C10887 Drawin	ng Prepared by Anchor/Darling Valve Comp
(b) Description of Part Inspected		
(c) Applicable ASME Code: Section III	, Edition <u>1980</u> , Addends date	Sum '82, Case No. N/A Class 1
3. Remarks: 12"-900# Double [	Disc	
A/DV S.O. P-2478-	(Brief description of service for whic .8	th component was designed)
Note: No Disc Hy	dro Performed	
Certificate of Authorization Expires CERTIFICATIO	4/15/86 Cerr	•
Design information on file at		•••
Stress 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 INS	PECTION
I, the undersigned, holding a valid and/or the State XXXXXXX ofPeni ofBoston, Mass.	and employed by	Board of Boiler and Pressure Vessel Inspectors Commercial Union Insurance Company
Partial Data Report on <u>8-10</u> the and belief, the NPT Certificate Holder has By signing this certificate, neither ing the part described in this Pa	constructed this part in accordance to the inspector nor his employer mail	the part of a pressure vessel described in this 19and state that to the best of my knowledge with the ASME Code Section III. kes any warranty, expressed or implied, concern- re. neither the inspector nor his employer is or a loss of any kind arising from or connected
Dary 10.6	19 83	
Russell E. Morridonium	Man Commissions	Pennsylvania WC972 Nettonel Beerd, State, Province and No.
*Supplemental abasis in fam of lines available	<u> </u>	

\*Supplemental sheets in form of lists, sketches or drawings may be used provides (1) size is 20," x 11", (2) information in items 1-2 on this Cost Arout is included us each sheet, and (3) on these 1-2 on this country included in terms 2." Remarks".

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

1. Owner: Energy Northwest

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

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

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Traversing Incore Probe (TIP) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Summer 1972 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
PDM	12764	790	N/A	1976		Yes, Code Class 2
Crosby	N96297-00-0003	N/A	N/A	1988	Replaced	Yes, Code Class 2
Crosby	N96297-01-0006	N/A	N/A	1998	Replacement	Yes, Code Class 2
	PDM Crosby	PDM 12764 Crosby N96297-00-0003	PDM         12764         790           Crosby         N96297-00-0003         N/A	No         No           PDM         12764         790         N/A           Crosby         N96297-00-0003         N/A         N/A	No         No           PDM         12764         790         N/A         1976           Crosby         N96297-00-0003         N/A         N/A         1988	ManufacturerSerial NoBoard NoI.D.BuiltReplaced Or ReplacementPDM12764790N/A1976CrosbyN96297-00-0003N/AN/A1988Replaced

7. Description Of Work Performed: Replaced existing valve TIP-V-3. The replacement work was performed as follows:

- 1) Removed existing valve TIP-V-3, Serial No N96297-00-0003.
- 2) installed replacement pipe plug for valve TIP-V-3, Serial No N96297-00-0003.
- 3) Installed replacement valve TIP-V-3, Serial No N96297-01-0006.

### NOTES -

1) The existing valve TIP-V-3, Serial No N96297-00-0003 was installed in accordance with ASME Section XI Plan No 2-0405. This plan referenced N-1 Code Data Report issued by PDM for Containment Vessel, Penetration No X-27C. This ASME Section XI plan also referenced N-1 Code Data Report issued by PDM for Containment Vessel, Penetration No X-27C to document replacement of TIP-V-3, Serial No N96297-01-0006. The N-1 Code Data Report certifies the Containment Vessel, Penetration No X-27C to comply with ASME Section III, Code Class MC, 1971 Edition with Summer 1972 Addenda requirements.

2) The replacement valve TIP-V-3, Serial No N96297-01-0006 is certified to comply with ASME Section III, Code Class 2, 1986 Edition with 1986 Addenda requirements.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F	] None
<b>Remarks:</b> See attached NPV-1 Code Data Report for the replacement valve TIP-V-3, Serial No N96297-01-0006.	
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       Julicity         Kuldip Singh - Program Lead Engineer (PLE)         Date       6 [14 [0]	15 .E)
CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressu Vessel inspectors and the State of and employed by	re
have inspected the component in the state of and employed by have inspected the component	its
described in this Owner's Report during the period to and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	or
Not Required - Replacement 1" NPS And Smaller Commissions	
Inspector's Signature National Board, State, and Endorsements Date	

PLAN NO. 2-1763

Q.C.-398, Rev. A Form NPV-1

		FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*											
:			nred by the				Pg. 1 of 2						
	1.	1. Manufactured and certified by Crosby Valve Inc., 43 Kendrick St., Wrentham, MA 02093											
	(name and address of N Certificate Holder) 2. Manufactured for WASHINGTON PUBLIC POWER SUPPLY SYSTEM RICHLAND, WA 99352												
	2.	Manufactured for	WASHING	and the second se			A 99352						
5	3	Location of installation			and address of Pu	ANT RICHLAND, WA							
2	2.			HANFORD 2 NOT	(name and addr								
02/5121044	4.	Model No., Series No., or Typ	pe N9629	97-1 Drawing	•	RevOCRN	<u>N/A</u>						
	5.	ASME Code, Section III, Divis	sion 1:	1986	1986	2	N/A						
				(edition)	(addenda date)	(class)	(Code Case no.)						
	6.	Pump or valve BALL V.	ALVE	Nominal inlet size	3/8	Outlet size	3/8						
					(in.)		(in.)						
	7.	Material: Pressure Reta	aining Comp	onents listed below:	<u></u>								
	8.	Ceruificate Holder's Serial Number:		N96297-01-0006 Natic		tional Board No.: N/A							
				Serial No. Identification		Material Specification Including Type or Grade							
		Body	N95058-	5058-34-0009		ASME SA479 TYPE 316							
		Bonnet	N95059-	32-0006		ASME SA479 TYPE 31	6						
		Other:											
		BALL	N95060-	34-0010		ASME SA479 TYPE 316 ASME SA479 TYPE 316							
		END CAP	N95061-	33-0014									
				33-0013		ASME SA479 TYPE 316							
			<u></u>	<u></u>									
			1-0006	<u> </u>									
					1 50025_ 6/12/01	<u> </u>							
					<b>_</b>								
		·	<del></del>	<u></u>	<u> </u>	<u> </u>	-						

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

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

	Form NPV-1 Q.C. Side	-398, Rev.						
	FORM NPV-1 (Back Pg. 2 of 2 )	-						
		97-01-0006						
	9 Design conditions	PECIAL						
1045	(pressure) (temperature) 10. Cold working pressure 275 psi at 100°F							
02/5121045	11. Hydrostatic test 425 psi. Disk differential test pressure 325	ps						
0	12. Remarks:	p						
	CERTIFICATE OF DESIGN							
	Design Specification certified by J.R.COLE P.B. State WA Reg. No.	20653						
	Design Report certified by N/A P.E. State N/A Reg. No	N/A						
	CERTIFICATE OF COMPLIANCE							
	We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construct	lion						
	of the ASME Code, Section III, Division 1. N Certificate of Authorization No. N-1876 Expires SEPTEMBE							
	5	<u>3R 30,2001</u>						
	Date <u>25 Nov 98</u> Name <u>CR2584 VALVE</u> <u>INC.</u> Signed <u>GK m. Gm</u> (N Certificate Holder) (authorized represent	tative)						
	CERTIFICATE OF INSPECTION							
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Insp the State or Province of <u>Massachusetts</u> and employed by <u>Protection Mutual</u>	ectors and						
	of Norwood, MA have inspected the pump, or valve, described in this Dat							
	Maxem Asc. 35, 1998, and state that to the best of my knowledge and belief, the Certificate Holder structed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.	r has con-						
	By signing this certificate, neither the inspector nor mis employer makes any warranty, expressed or implied, c	oncerning						
	component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.							
	Value	• .						
	Date 1/-25-98 Signed (Authorized Inspector) Commissions (NA-14/18 (Authorized Inspector) (Nat'l. Bd. (incl. Endorsements) and state or							

1.5

1.00

PLAN No 2-1764



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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Low Pressure Core Spray (LPCS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1974 Edition with Winter 1974 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
LPCS-RV-31	Lonergan	509258-71-1	N/A	N/A	1979		Yes, Code Class 2

7. Description Of Work Performed: Replaced base for existing relief valve LPCS-RV-31. The replacement work was performed as follows:

1) Cut/ground existing pipe nipple to base weld and removed the base from the relief valve.

2) Assemble replacement base and the existing pipe nipple.

3) Made required weld.

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

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

Date: 06/16/01 Sheet: 1 Of 1 Unit: Not Applicable

	PLAN NO 2-176 EMERGY NORTHWEST
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	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducte	d: Hydrostatic Pneumatic Nominal Operating Pressure Other Nome Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
<b>Remarks:</b> None	
	CERTIFICATE OF COMPLIANCE
to the rules of Type Code Sy	Dig Our Dig Do
	CERTIFICATE OF INSERVICE INSPECTION
Vessel Inspec Johnston, Rhod period Owner has pe in accordance By signing thi implied, conce Furthermore,	aned, holding a valid commission issued by the National Board of Boiler and Pressure tors and the State of Washington and employed by Factory Mutual Insurance Company of e Island have inspected the components described in this Owner's Report during the V/U/ to $7/U/U/$ and state to the best of my knowledge and belief, the rformed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI. s certificate neither the Inspector nor his employer makes any warranty, expressed or erning the examinations and corrective measures described in this Owner's Report. meither the Inspector nor his employer shall be liable in any manner for any personal erty damage or a loss of any kind arising from or connected with this inspection.
<u></u>	spector's Signature Commissions 74866/7486 n Z Z National Board, State, and Endorsements
<i>a i</i>	

PLAN No 2-1765



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

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: High Pressure Core Spray (HPCS) System

5. (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: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	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-12	Anchor Darling	E5310-1-1	N/A	N/A	1974	Repaired	Yes, Code Class 2

7. Description Of Work Performed: Removed unacceptable liquid penetrant (PT) examination indication from the body flange for valve HPCS-V-12. The repair work was performed as follows:

1) Removed (locally) unacceptable liquid penetrant (PT) indication by mechanical means.

2) Performed in process liquid penetrant (PT) examination to minimize the valve flange material removed. In process liquid penetrant (PT) examination results acceptable.

3) Uniformly blended the sharp edges of the excavation into the surrounding surfaces.

4) Performed visual examination on the final blended excavated surfaces. Visual examination results acceptable.

5) Performed liquid penetrant (PT) examination on the final blended excavated surfaces.

Date: 06/29/01 Sheet: 1 Of 1 Unit: Not Applicable

Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F         emarks: None       Emarks: 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
sts Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None C Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F emarks: 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
Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F emarks: None CERTIFICATE OF COMPLIANCE We certify that the statements made in this Owner's Report are correct and this repair conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable
CERTIFICATE OF 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
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
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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
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 Underford Europ Signed By Underford Europ Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE) Kuldip Singh - Program Lead Engineer (PLE)
Date 6 29 01 Date 6 29 01
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company or
Johnston, Rhode Island have inspected the components described in this Owner's Report during the
period <u>6 / / / / / / / / / / / / / / / / / / </u>
in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or
implied concerning the examinations and corrective measures described in this Owner's Report.
Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal
injury or property damage or a loss of any kind arising from or connected with this inspection.
A 120 TH TH SILA NITC II
Commissions 74/6/74/6 NIS IS
Thspector's Signature National Board, State, and Endorsements
Date 7/24/01

PLAN No 2-1766



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

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

Date: 06/21/01 Sheet: 1 Of 1 Unit: Not Applicable

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Process Instrumentation (PI) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
Pl(1)-4S-X-78b	JCI	PI(1)-4S-X-78b	N/A	N/A	1982		Yes, Code Class 1

7. Description Of Work Performed: Replaced U bolts associated with valve LPCS-V-84. The replacement work was performed as follows:

- 1) Removed existing U bolts from Support No 8 associated with valve LPCS-V-84.
- 2) Installed replacement U bolts from Support No 8 associated with valve LPCS-V-84.

	<b>EMERGY</b> NORTHWEST	
FORM NIS-2 OWN	ER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
ests Conducted: Hydrostatic Test Pressure: Component De		× None
emarks: None		
	CERTIFICATE OF COMPLIANCE	
We certify that the statements i to the rules of the ASME Code, Type Code Symbol Stamp: Not A Certificate Of Authorization No	Applicabl <del>e</del>	orms
Expiration Date: Not Applicable		
Prepared By Kuldip Singh - Pregra	am Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer (	(PLE)
Date6)ンし	Date 6/2/01	
l, the undersigned, holding a va	ERTIFICATE OF INSERVICE INSPECTION alid commission issued by the National Board of Boiler and Press e of and employed by	
	have inspected the compon	
state to the best of my knowled corrective measures described ASME Code, Section XI.	ort during the periodtoto and dge and belief, the Owner has performed examinations and taken I in this Owner's Report in accordance with the requirements of the	he
implied, concerning the examir Furthermore, neither the Inspe	ner the Inspector nor his employer makes any warranty, expresse nations and corrective measures described in this Owner's Repo ctor nor his employer shall be liable in any manner for any perso loss of any kind arising from or connected with this inspection.	rt.
<u>Not Required - Replacement 1" NPS Ar</u> Inspector's Signature	nd Smaller Commissions National Board, State, and Endorseme	ents



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

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

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

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

Name Of Component	Name Of Manufacturer	Manufacturer' <b>s</b> Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4B MS-162(B) MS-162(B)	WPPSS * Pacific Scientific Pacific Scientific	MS(1)-48-P1 315 9825	N/A N/A N/A	N/A PSA-10 PSA-10	1983 1976 1981	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for support MS-162 (Bottom). The replacement work was performed as follows:

1) Removed existing PSA-10 snubber, Serial No 315.

2) Installed replacement PSA-10 snubber, Serial No 9825.

3) Torqued the fasteners to the required torque value.

4) Performed operability test on the replacement snubber. Operability test acceptable.

5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

#### NOTES -

1) B=Bottom snubber

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

3) The replacement PSA-10 snubber, Serial No 9825 is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements. ASME Section III, Code Class NF(1) snubber for ASME Section III, Code Class NF(2) application. 4) The existing ASME Code Stamped piping system in which the replacement snubber, Serial No 9825 was installed is Main Steam (MS) piping system MS(1)-4B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

Date: 07/06/01 Sheet: 1 Of 1 Unit: Not Applicable

		WOT No 01007828 0			
<b>EMERGY</b> NORTHWEST					
FORM	NIS-2 OWNER'S REPORT FOR REPA	IRS OR REPLACEMENTS (Back)			
	rdrostatic Pneumatic Nomi t Pressure: Psig nponent Design Pressure: Psig	nal Operating Pressure None X Test Temperature: ° F Temperature: ° F			
<b>lemarks:</b> See attached	NF-1 Code Data Report for the replacement snub	ber, Serial No 9825.			
	CERTIFICATE OF CO	MPLIANCE			
to the rules of the A Type Code Symbol Certificate Of Auth Expiration Date: No Prepared By	ASME Code, Section XI. Stamp: Not Applicable prization No.: Not Applicable t Applicable	rt are correct and this replacement conforms of By <u>fuldip</u> Sups Kuldip Singh - Program Lead Engineer (PLE) 7/9/01			
Vessel Inspectors Johnston, Rhode Isla period Owner has perform in accordance with By signing this cel	and the State of Washington and employ nd have inspected the components de- to and state ned examinations and taken corrective the requirements of the ASME Code, s tificate neither the inspector nor his en	the National Board of Boiler and Pressure red by Factory Mutual Insurance Company of scribed in this Owner's Report during the to the best of my knowledge and belief, the measures described in this Owner's Report			
Furthermore, neith injury or property	er the Inspector nor his employer shal damage or a loss of any kind arising fro	l be liable in any manner for any personal			
Date 7/1/	01				

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9855-9868	#						
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		(NPT Certificat	e Holder)	<b>.</b>	0		•
ASME Certificate of	Authorization No	1198	to use th	*Canoo	nent SI		
Aug	4, 1981		· •		the fi		
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-ist name only, signa		ig. No35	<del></del> .				
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"Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½ in., (2) information in items 1.2. <, ing on this Data Report is included on each sneet, and (3) each sneet is numbered and number of sheets is recorded at top of mis torm. . .

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FORM NF-1 (Back) CERTIFICATE OF SHOP INSPECTION I the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by ESETST Co. Rart \_ant have inspecied the component supports described in this Data Report on 1<u>8/</u> and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. •\$ nmission Bd., State, Prov., and No.) CERTIFICATION OF FIELD INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or \_ and employed by\_ of have compared the statements in this Data Report with the described component supports and str that the parts referred to as data items \_ -, not included in the certificate of shop inspection, have be icted by me and that to the best of my knowledge and belief the NªT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components. By signing this cartificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal or property damage or a loss of any kind arising from or connected with this inspection. Commissions (Nat'l Bd., State, Prov., and No.) 2 EVIEWED YOA REP 



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

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

(c) Type Code Symbol Stamp: Not Applicable

- (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable

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

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

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4B MS-148 MS-148	WPPSS * Pacific Scientific Pacific Scientific	MS(1)-4B-P1 9954 9417	N/A N/A N/A	N/A PSA-10 PSA-10	1983 1981 1981	Replaced Replacement	Yes, Code Class 2 No, Code Class ** Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for support MS-148. The replacement work was performed as follows:

1) Removed existing PSA-10 snubber, Serial No 9954.

2) Installed replacement PSA-10 snubber, Serial No 9417.

3) Torqued the fasteners to the required torque value.

4) Performed operability test on the replacement snubber. Operability test acceptable.

5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

#### NOTES -

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

2) \*\* ASME Section III, Code Class NF snubber.

3) The replacement PSA-10 snubber, Serial No 9417 is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements. ASME Section III, Code Class NF(1) snubber for ASME Section III, Code Class NF(2) application. 4) The existing ASME Code Stamped piping system in which the replacement snubber, Serial No 9417 was installed is Main Steam (MS) piping system MS(1)-4B-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

Date: 07/06/01 Sheet: 1 Of 1 Unit: Not Applicable

			WOT No 01007828 0
	E	MERGY	
	NO	ORTHWEST	
FOR	M NIS-2 OWNER'S REPOR	RT FOR REPAIRS	OR REPLACEMENTS (Back)
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<b>?emarks:</b> See atta	ched NF-1 Code Data Report for the	e replacement snubber, S	serial No 9417.
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	CERTIFI	CATE OF COMPLI	IANCE
to the rules of t Type Code Syn	he ASME Code, Section XI. bol Stamp: Not Applicable		e correct and this replacement conforms
Certificate Of A Expiration Date	uthorization No.: Not Applicable : Not Applicable	8	
· Prepared By	Childing Sing	Signed By	
ł	Kuldip Singh - Program Lead Engine		Kuldip Singh - Program Lead Engineer (PLE)
Date	14101	Date	
	CERTIFICATI	E OF INSERVICE II	NSPECTION
l, the undersigi	ned. holding a valid commis	sion issued by the	National Board of Boiler and Pressure
Vessel Inspector Johnston, Rhode period	Island have inspected the c	omponents describ	by Factory Mutual Insurance Company of and in this Owner's Report during the are best of my knowledge and belief, the
Owner has peri in accordance	formed examinations and ta with the requirements of the	ken corrective mea ASME Code, Secti	sures described in this Owner's Report ion XI.
By signing this implied, conce Furthermore, n	certificate neither the Inspe rning the examinations and either the Inspector nor his	ector nor his employ corrective measure employer shall be l	yer makes any warranty, expressed or es described in this Owner's Report. liable in any manner for any personal
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<u>M.T.</u>	pector's Signature	Commission	s 7486 W/ 7416 NT FS National Board, State, and Endorsements
Date 7/11	101		

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# FORM NE-1 (Back)

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, the undersigned, holding a valid com		Boiler and Pressure Vessel Inspectors and the S	State
	inspected the component supports described	2/3	
01		r has constructed these component supports in acco	ordano
ith the ASME Code for Nuclear Power			
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	r a loss of any kind arising from or co	r his employer shall be liable in any manner f	tor ai
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gned	Commissions	(Nar'l Ad. State Broy and No.)	
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	CERTIFICATION OF FIELD INSI	PECTION	
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

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

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

- (c) Type Code Symbol Stamp: Not Applicable
- (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable

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

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None
 (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(9)-4	WPPSS *	MS(9)-4-P1	N/A	N/A	1983		Yes, Code Class 1
MS-1369-12	Pacific Scientific	2154	N/A	PSA-1/2	1977	Replaced	Yes, Code Class 1
MS-1369-12	Pacific Scientific	429	N/A	PSA-1/2	1976	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for support MS-1369-12. The replacement work was performed as follows:

- 1) Removed existing PSA-1/2 snubber, Serial No 2154.
- 2) Installed replacement PSA-1/2 snubber, Serial No 429.
- 3) installed replacement forward adapter assembly.
- 4) Performed operability test on the replacement snubber. Operability test acceptable.
- 5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

#### NOTES -

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

2) The replacement PSA-1/2 snubber, Serial No 429 is certified to comply with ASME Section III, Code Class NF(1), 1974 Edition with Winter 1975 Addenda requirements.

3) The existing ASME Code Stamped piping system in which the replacement snubber, Serial No 429 was installed is Main Steam (MS) piping system MS(9)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

Date: 07/07/01 Sheet: 1 Of 1 Unit: Not Applicable

WOT No 01007828 01 ENERGY NORTHWEST						
FORM N	IS-2 OWNER'S REPO	RT FOR REPAIRS	OR REPLACEMEN	ITS (Back)		
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emarks: None						
	CERTIF	ICATE OF COMPL	IANCE			
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Prepared By Kuldip Date	Singh - Program Lead Engine	) Signed By ser (PLE) Date		am Lead Engineer (PLE)		
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

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

Date: 07/09/01 Sheet: 1 Of 1 Unit: Not Applicable

- (c) Type Code Symbol Stamp: Not Applicable (d) Certificate Of Authorization No.: Not Applicable
- (a) Certificate Of Authorization No...
- (e) Expiration Date: Not Applicable
- 4. Identification Of System: Main Steam (MS) System
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda, Code Case: None
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None
- 6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer' <b>s</b> Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
MS(1)-4D MD-1285-14C MD-1285-14C	WPPSS * Pacific Scientific Pacific Scientific	MS(1)-4D-P1 28429 28432	N/A N/A N/A	N/A PSA-1/4 PSA-1/4	1983 1982 1982	Replaced Replacement	Yes, Code Class 2 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for support MD-1285-14C. The replacement work was performed as follows:

- 1) Removed existing PSA-1/4 snubber, Serial No 28429.
- 2) Installed replacement PSA-1/4 snubber, Serial No 28432.
- 3) Installed replacement adapter assembly.
- 4) Performed operability test on the replacement snubber. Operability test acceptable.
- 5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

#### NOTES -

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

 2) The replacement PSA-1/4 snubber, Serial No 28432 is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1979 Addenda requirements. ASME Section III, Code Class NF(1) snubber for ASME Section III, Code Class NF(2) application.
 3) The existing ASME Code Stamped piping system in which the replacement snubber, Serial No 28432 was installed is Main Steam (MS) piping system MS(1)-4D-P1. This piping system is certified to comply with ASME Section III, Code Class 2, 1971 Edition with Winter 1973 Addenda requirements.

WOT NO 01007828 ENERGY NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
s Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None X Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
narks: See attached NF-1 Code Data Report for the replacement snubber, Serial No 28432.
CERTIFICATE OF COMPLIANCE
e certify that the statements made in this Owner's Report are correct and this replacement conforms the rules of the ASME Code, Section XI. spe Code Symbol Stamp: Not Applicable ertificate Of Authorization No.: Not Applicable expiration Date: Not Applicable repared By
CERTIFICATE OF INSERVICE INSPECTION the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure
essel inspectors and the State of Washington and employed by Factory Mutual Insurance Company of hinston, Rhode Island have inspected the components described in this Owner's Report during the eriod <u>S</u> (1) (1) to <u>1</u> (1) and state to the best of my knowledge and belief, the wher has performed examinations and taken corrective measures described in this Owner's Report accordance with the requirements of the ASME Code, Section XI. y signing this certificate neither the Inspector nor his employer makes any warranty, expressed or highlied, concerning the examinations and corrective measures described in this Owner's Report. withermore, neither the Inspector nor his employer shall be liable in any manner for any personal
jury or property damage or a loss of any kind arising from or connected with this inspection.

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				(Name and address of p	purchaser or a	mer)		_
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19 and state the with the ASME Code		sected the component supports described in s ledge and belief the NPT Certificate Holder bu int Components.		
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Signed	teusure to te	ale commissions CA-	15/3/ PA-WC-2781 (Navi Bd., State, Prov., and No.)	
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

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

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Low Pressure Core Spray (LPCS) System

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda, Code Case: None (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
LPCS(1)-4 LPCS-28 LPCS-28	WPPSS * Pacific Scientific Pacific Scientific	LPCS(1)-4-P1 3891 10615	N/A N/A N/A	N/A PSA-3 PSA-3	1983 1977 1980	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for support LPCS-28. The replacement work was performed as follows:

1) Removed existing PSA-3 snubber, Serial No 3891.

2) Installed replacement PSA-3 snubber, Serial No 10615.

3) Torqued the fasteners to the required torque value.

4) Performed operability test on the replacement snubber. Operability test acceptable.

5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

#### NOTES -

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

2) The replacement PSA-3 snubber, Serial No 10615 is certified to comply with ASME Section III, Code Class NF(1), 1974 Edition with Winter 1976 Addenda requirements.

3) The existing ASME Code Stamped piping system in which the replacement snubber, Serial No 10615 was installed is Low Pressure Core Spray (LPCS) piping system LPCS(1)-4-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

Date: 07/09/01 Sheet: 1 Of 1 Unit: Not Applicable

WOT No 01007828 C ENERGY NORTHWEST	71
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
iests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F       Component Design Pressure: Psig       Temperature: ° F         Remarks: See attached NF-1 Code Data Report for the replacement snubber, Serial No 10615.	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       July         Kuldip Singh - Program Lead Engineer (PLE)         Date       7)9[0]	
<i>CERTIFICATE OF INSERVICE INSPECTION</i> <i>I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure</i> <i>Vessel Inspectors and the State of</i> Washington <i>and employed by</i> Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>J/18/0/</u> to <u>T/1/0/</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.	
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\*Supplemental sheets in form of lists, sketches or drawings may be used provided:(1) size is 8½ in:, (2) information in items 1, 2, 4c, 4g on this Data:Report is included on each sheet; and (3) each sheet is numbered and number of sheets is recorded at top of this form.

# FORM: NF-T (Back)

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have inspected	the component supports described in this Data Re	125	
and state that to the best of my knowledge a	and belief the NPT Cartificate Holder has construc	sted these component supports	in accordance
the ASME Code for Nuclear Power Plant Col	omponents.		
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# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

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

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

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

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

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RHR(1)-4A1 RHR-SA-32(E) RHR-SA-32(E)	WPPSS * Pacific Scientific Pacific Scientific	RHR(1)-4A1-P1 13031 7102	N/A N/A N/A	N/A PSA-10 PSA-10	1983 1982 1980	Replaced Replacement	Yes, Code Class 1 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for support RHR-SA-32 (East). The replacement work was performed as follows:

1) Removed existing PSA-10 snubber, Serial No 13031.

2) Installed replacement PSA-10 snubber, Serial No 7102.

3) Torqued the fasteners to the required torque value.

4) Performed operability test on the replacement snubber. Operability test acceptable.

5) Performed VT-3 visual examination on the installed replacement snubber. VT-3 visual examination results acceptable.

#### NOTES -

1) E=East snubber

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

3) The replacement PSA-10 snubber, Serial No 7102 is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1977 Addenda requirements.

4) The existing ASME Code Stamped piping system in which the replacement snubber, Serial No 7102 was installed is Residual Heat Removal piping system RHR(1)-4A1-P1. This piping system is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Winter 1973 Addenda requirements.

Date: 07/09/01 Sheet: 1 Of 1 Unit: Not Applicable

<b>EMERGY</b> NorthWest	07828 01
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Component Design Pressure: Psig Temperature: ° F	×
<b>Remarks:</b> See attached NF-1 Code Data Report for the replacement snubber, Serial No 7102.	
	]
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement confort to the rules 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 Factory Mutual Insurance Company Johnston, Rhode Island have inspected the components described in this Owner's Report during to period <u>()</u> to <u>7</u> () and state to the best of my knowledge and belief Owner has performed examinations and taken corrective measures described in this Owner's Re in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expresse implied, concerning the examinations 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.	of the f, the eport d or rt.
<u>Inspector's Signature</u> <u>Inspector's Signature</u> <u>Commissions</u> <u>T496</u> National Board, State, and Endorseme	nts

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

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	CERTIFICATE OF SHOP INSPEC	CTION		
1. the undersigned, holding a Province of California	valid commission issued by the National Board of Bo	iler and Pressure Vessel	Inspectors and the St	tat.
	and employed by RSBISI CO.	of Hay	tiford (T	
19 and state that to the b	have inspected the component supports described in t	his Data Report on	4/25/80	_
with the ASME Code for Nuc	est of my knowledge and belief the NPT Certificate Holder ha lear Power Plant Components.	as constructed these comp	ionent supports in accord	dan
By signing this certificate ne	ither the Immeries are his amount of the		·	
supports described in this D	ither the Inspector nor his employer makes any warrant ata Report. Furthermore, neither the Inspector nor hi	ty, expressed or implied	, concerning the comp	one
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## FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required By The Provisions Of The ASME Code Section XI

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

3. (a) Work Performed By: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Building Closed Cooling (RCC) System

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

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCC(36)-1 RCC-150 RCC-150	WPPSS * Pacific Scientific Pacific Scientific	RCC(36)-1-P1 104 17480	N/A N/A N/A	N/A PSA-1/2 PSA-1/2	1983 1976 1983	Replaced Replacement	Yes, Code Class 3 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for support RCC-150. The replacement work was performed as follows:
 1) Removed existing PSA-1/2 snubber, Serial No 104.

Installed replacement PSA-1/2 snubber, Serial No 17480.

3) Torqued the fasteners to the required torque value.

4) Performed operability test on the replacement snubber. Operability test acceptable.

#### NOTES -

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

3) The replacement PSA-1/2 snubber, Serial No 17480 is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1978 Addenda requirements. ASME Section III, Code Class NF(1) snubber for ASME Section III, Code Class NF(3) application. 3) The existing ASME Code Stamped piping system in which the replacement snubber, Serial No 17480 was installed is Reactor Building Closed Cooling (RCC) piping system RCC(36)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

Date: 07/09/01 Sheet: 1 Of 1 Unit: Not Applicable

	WOT No 01007828 0
	ENERGY
	NORTHWEST
FOI	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
ests Conducted	l: Hydrostatic Pneumatic Nominal Operating Pressure None X Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F
<b>lemarks:</b> See att	ached NF-1 Code Data Report for the replacement snubber, Serial No 17480.
	CERTIFICATE OF COMPLIANCE
to the rules of Type Code Syr Certificate Of A Expiration Data Prepared By	the statements made in this Owner's Report are correct and this replacement conforms the ASME Code, Section XI. Inbol Stamp: Not Applicable Authorization No.: Not Applicable Signed By Authon Surght Kuldip Singh - Program Lead Engineer (PLE) Not Applicable Kuldip Singh - Program Lead Engineer (PLE) Not Applicable Kuldip Singh - Program Lead Engineer (PLE)
	CERTIFICATE OF INSERVICE INSPECTION
Vessel Inspect Johnston, Rhod period Owner has per in accordance By signing this implied, conce Furthermore, I	ned, holding a valid commission issued by the National Board of Boiler and Pressure ors and the State of Washington and employed by Factory Mutual Insurance Company of a Island have inspected the components described in this Owner's Report during the to and state to the best of my knowledge and belief, the formed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI. a certificate neither the Inspector nor his employer makes any warranty, expressed or rning the examinations and corrective measures described in this Owner's Report. heither the Inspector nor his employer shall be liable in any manner for any personal erty damage or a loss of any kind arising from or connected with this inspection.
- /.	Commissions <u>7476677466</u> with
Date _///	

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FORM NF-1 (Back)

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 OFLO and employed by HSBIST CO. of Hartford, CT FEB. 0 4 1983 have inspected the component supports described in this Data Report on \_ and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. FEB 0 4 1983 Cate. Commission CERTIFICATION OF FIELD INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of \_ and employed by\_ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items \_\_\_\_\_\_, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accord-الجوارية المراجع والمراجع والماجون والموجود والمعاد والمراجع ance with the ASME Code for Nuclear Power Plant Components. الجرامليجر الملأح By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal insury or property damage or a loss of any kind arising from or connected with this inspection. Date. (Nat'l Bd., State, Prov., and No.) *LEVIEWED* EBASCO ENGINEERING EBASCO YQA LEP.



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

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

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Building Closed Cooling (RCC) System

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

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

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCC(36)-1 RCC-161 RCC-161	WPPSS * Pacific Scientific Pacific Scientific	RCC(36)-1-P1 2581 16455	N/A N/A N/A	N/A PSA-1/2 PSA-1/2	1983 1978 1982	Replaced Replacement	Yes, Code Class 3 Yes, Code Class 1 Yes, Code Class 1

7. Description Of Work Performed: Replaced existing snubber for support RCC-161. The replacement work was performed as follows: 1) Removed existing PSA-1/2 snubber, Serial No 2581.

2) Installed replacement PSA-1/2 snubber, Serial No 16455.

3) Torqued the fasteners to the required torque value.

4) Performed operability test on the replacement snubber. Operability test acceptable.

#### NOTES -

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

 The replacement PSA-1/2 snubber, Serial No 17480 is certified to comply with ASME Section III, Code Class NF(1), 1977 Edition with Winter 1978 Addenda requirements. ASME Section III, Code Class NF(1) snubber for ASME Section III, Code Class NF(3) application.
 The existing ASME Code Stamped piping system in which the replacement snubber, Serial No 17480 was installed is Reactor Building Closed Cooling (RCC) piping system RCC(36)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

Date: 07/09/01 Sheet: 1 Of 1 Unit: Not Applicable

	wot № 01007828 0 <b>ENERGY</b>
	NORTHWEST
FOR	M NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
	Hydrostatic       Pneumatic       Nominal Operating Pressure       None       X         Test Pressure: Psig       Test Temperature: ° F         Component Design Pressure: Psig       Temperature: ° F
emarks: See atta	ched NF-1 Code Data Report for the replacement snubber, Serial No 16455.
	CERTIFICATE OF COMPLIANCE
to the rules of ti Type Code Sym Certificate Of A Expiration Date Prepared By	the statements made in this Owner's Report are correct and this replacement conforms         the ASME Code, Section XI.         bol Stamp: Not Applicable         uthorization No.: Not Applicable         Not Applicable         Wildip Singh - Program Lead Engineer (PLE)         VG(01    Signed By          Value
Vessel Inspecto Johnston, Rhode period Owner has period in accordance of By signing this implied concert	CERTIFICATE OF INSERVICE INSPECTION red, holding a valid commission issued by the National Board of Boiler and Pressure fors and the State of Washington and employed by Factory Mutual Insurance Company of Island have inspected the components described in this Owner's Report during the provided to <u>7/11/01</u> and state to the best of my knowledge and belief, the formed examinations and taken corrective measures described in this Owner's Report with the requirements of the ASME Code, Section XI. certificate neither the Inspector nor his employer makes any warranty, expressed or rining the examinations and corrective measures described in this Owner's Report. either the Inspector nor his employer shall be liable in any manner for any personal rty damage or a loss of any kind arising from or connected with this inspection.
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\*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½ in., (2) information in items 1.2, 4c, 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

# FORM NF-1 (Back)

· · ·	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
Province ofOHIO	and employed by HSBI&I Co. of Fartford, CT
	have inspected the component supports described in this Data Report on
19 and state that to the best of it	y knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance
with the ASME Code for Nuclear Po	wer Plant Components.
By signing this cartificate, neither t	ae inspector nor his employer makes any warranty, expressed or implied, concerning the component
supports described in this Data Re	port. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an
personal injury or property dama	ge or a loss of any kind arising from or connected with this inspection.
AUG 25 1982	
Date	
- Annuk	Commissions GA-15/3/ CHAO COMMISSIC
Signed	Commissions (Matiling State State State
	(Wery out, state, Froe., and red.)
	CERTIFICATION OF FIELD INSPECTION
, the undersigned, holding a valid c	
, the undersigned, holding a valid c	mmission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of
rovince of have con	emmission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of
have con hat the parts referred to as data	permission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of
have con have con have con have the parts referred to as data inspected by me and that is the best of	and employed by the National Board of Boiler and Pressure Vessel Inspectors and the State of of
have con hat the parts referred to as data respected by me and that to the best of	emmission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of
have com- hat the parts referred to as data respected by me and that is the best of nea with the ASME Code for Nuclea	and employed by the National Board of Boiler and Pressure Vessel Inspectors and the State of of
Province of have com hat the parts referred to as data respected by me and that to the best of nex with the ASME Code for Nuclea y signing this cartificate neither the	and employed by of of
Province of have compared to as data hat the parts referred to as data inspected by me and that to the best of nex with the ASME Code for Nuclea y signing this cartificate neither the upports described in this Data Aeport	ammission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of 
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Province of have compared to as data hat the parts referred to as data inspected by me and that to the best of nex with the ASME Code for Nuclea y signing this cartificate neither the upports described in this Data Aeport	ammission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of 

WOT No 01007828 01



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

1. Own	<i>ier:</i> Energy Northwest
Add	ress: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
2. Plan	t: Columbia Generating Station
Add	ress: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
3. (a) V	Vork Performed BV: Energy Northwest

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Reactor Building Closed Cooling (RCC) System

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

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
RCC(36)-1 RCC-964(N) RCC-964(N)	WPPSS * Pacific Scientific Pacific Scientific	RCC(36)-1-P1 20012 19884	N/A N/A N/A	N/A PSA-1/4 PSA-1/4	1983 1981 1982	Replaced Replacement	Yes, Code Class 3 Yes, Code Class 1 No, Code Class **

7. Description Of Work Performed: Replaced existing snubber for support RCC-964 (North). The replacement work was performed as follows:

1) Removed existing PSA-1/4 snubber, Serial No 20012.

2) Installed replacement PSA-1/4 snubber, Serial No 19884.

3) Installed replacement adapter assembly.

4) Torqued the fasteners to the required torque value.

5) Performed operability test on the replacement snubber. Operability test acceptable.

#### NOTES -

1) N= North snubber

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

3) \*\* ASME Section III, Code Class NF snubber.

4) The replacement PSA-1/4 snubber, Serial No 19884 is certified to comply with ASME Section III, Code Class NF, 1974 Edition with Winter 1976 Addenda requirements.

5) The existing ASME Code Stamped piping system in which the replacement snubber, Serial No 19884 was installed is Reactor Building Closed Cooling (RCC) piping system RCC(36)-1-P1. This piping system is certified to comply with ASME Section III, Code Class 3, 1971 Edition with Winter 1973 Addenda requirements.

Date: 07/09/01 Sheet: 1 Of 1 Unit: Not Applicable

	WOT No C EMERGY NORTHWEST	01007828 0
FO	RM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
	ed: Hydrostatic Pneumatic Nominal Operating Pressure None Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F	X
l <b>emarks:</b> None		
	CERTIFICATE OF COMPLIANCE	
to the rules of Type Code Syl Certificate Of J	t the statements made in this Owner's Report are correct and this replacement con the ASME Code, Section XI. mbol Stamp: Not Applicable Authorization No.: Not Applicable te: Not Applicable	forms
Prepared By _	Kuldip Singh - Program Lead Engineer (PLE) Signed By Kuldip Singh - Program Lead Engineer	er (PLE)
Date	<u>רקלט (</u> Date Date	- <i>a</i>
	CERTIFICATE OF INSERVICE INSPECTION	
Vessel Inspect Johnston, Rhod period Owner has per in accordance By signing this	ned, holding a valid commission issued by the National Board of Boiler and Pre- tors and the State of Washington and employed by Factory Mutual Insurance Compa e Island have inspected the components described in this Owner's Report during $\frac{1}{2}$ to $\frac{1}{2}$ and state to the best of my knowledge and being rformed examinations and taken corrective measures described in this Owner's with the requirements of the ASME Code, Section XI. is certificate neither the Inspector nor his employer makes any warranty, express	ny of g the ief, the Report sed or
implied, conce Furthermore, I	erning the examinations and corrective measures described in this Owner's Rep neither the Inspector nor his employer shall be liable in any manner for any pers erty damage or a loss of any kind arising from or connected with this inspection	oort. sonal
<u>IT</u> In:	spector's Signature Commissions	nents
Date 7/1/	101	

WOT No 01025424 01



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

## 1. Owner: Energy Northwest

- Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 2. Plant: Columbia Generating Station Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	A9550	N/A	N/A	1994		Yes, Code Class 1
CT&F	General Electric	A9550	N/A	N/A	1994	Replacement	Yes, Code Class 1
Piston Tube	General Electric	B0787	N/A	N/A	1992	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Assembled Control Rod Drive (CRD) assembly Serial No A9550. The Control Rod Drive (CRD) assembly Serial No A9550 was assembled from all new parts in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9550.
- 2) Installed new Piston Tube assembly Serial No B0787.
- 3) Installed new Ring Flange Serial No A5647.
- 4) Performed VT-1 visual examination on six (6) new Ring Flange Cap Screws Heat Code No NBD, Heat No 500564. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-006.
- 5) Installed six (6) new VT-1 visually examined Ring Flange Cap Screws Heat Code No NBD, Heat No 500564.

6) Performed VT-1 visual examination on new Piston Tube Nut Serial No 6150. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-005.

- 7) Installed new VT-1 visually examined Piston Tube Nut Serial No 6150.
- 8) Assembled parts and materials for Control Rod Drive (CRD) assembly Serial No A9550.

#### NOTES -

1) Cylinder Tube And Flange (CT&F) assembly Serial No A9550 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9550.

2) Piston Tube assembly Serial No B0787 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No B0787.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9550.

Date: 04/27/01 Sheet: 1 Of 1 Unit: Not Applicable

WOT No 01025424	<b>i</b> 01
ENERGY	
NORTHWEST	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X No Test Pressure: Psig Test Temperature: ° F Component Design Pressure: Psig Temperature: ° F	one
Remarks: See attached N-2 Code Data Reports for the following:	
Cylinder Tube And Flange (CT&F) assembly Serial No A9550. Piston Tube assembly Serial No B0787.	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Image: Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       42701	
CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 4-20-01 to 5/5/6/6/6/6/6/6/6/6/6/6/6/6/6/6/6/6/6/6	
Inspector's Signature National Board, State, and Endorsements	

	WOT NO. 01025424 4
	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
	4/21)01
۱.	Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE'NF & C.
	<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> ( Name and Address of NPT Certificate Bolder )
	(b) Manufactured for : <u>IVNP 2 Richland, Washington 99352</u> ( Name and Address of N Certificate Holder for completed nuclear component )
2.	Identification - Certificate Holder's S/N of Part : <u>A9550</u> Nat'l Bd. No. <u>N/A</u>
	(a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Dwg. Prepared by <u>D.L.Peterson</u>
	(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>
	(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W'75</u> , Case No. <u>1361-2</u> Class <u>1</u>
3.	REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (Brief description of service for which component was designed)
	Sheet 1 of 2
	conforms to the rules of construction of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The approache boundary of the ASME Lode Section III. ( The AsME L
	Certification of Design for Appurtenance
	Design information on file at <u>GE Company, San Jose, California</u>
	Stress analysis report on file at <u>GE Company, San Jose, California</u>
	DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
	DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
<b></b>	Certification of Shop Inspection
	and of Boiler and Pressure Inspectors and/or the
I I	I, the undersigned, holding a valid commission by the Mational Board of Borrel and State of North Carolina have State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on
	and state that to the best of my knowledge and berief, the wir certificate house here and the second and accordance with the ASME Code Section III.
	and state that to the best of my knowledge and berrer, the NFT certificate inside interaction expressed or implied, 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.
	and state that to the best of my knowledge and beller, the NFT certificate herder herder herder herder herder 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

provided (1) size is 8-1/2" x 11", (2) information in 1 2 on this second and Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

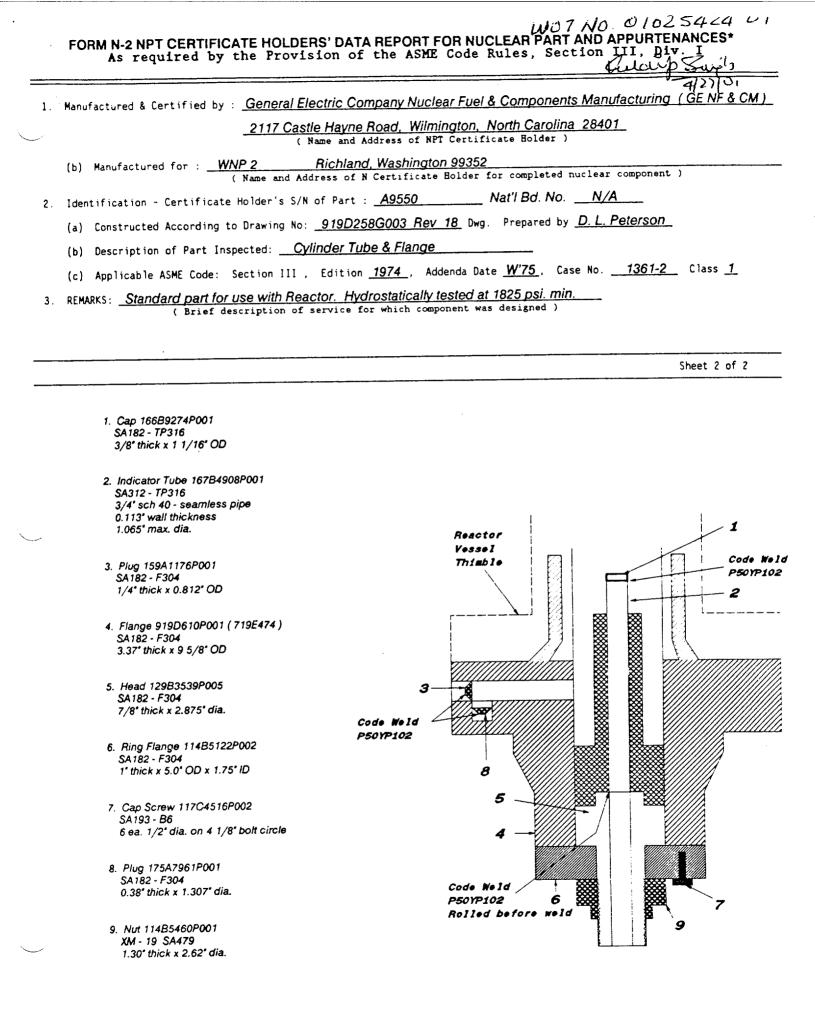
FORM N-2 ( bac	<b>)</b>
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Iter	ns 4-8 Incl. to be completed for sing	FORM N=2		exchangers.
	Shell: MaterialT.S {Kind & Spec. No.}(Min. of Bang	Nominal Cor Thickness in All	······	
5.	Seams: Long	и Н.Т		Efficiency
		1		No. of Courses
6.	Heads: (a) Material			
	Location (Top Crown		Concial Hemispherica	
(a)	Bottom, Ends ) Thickness Radius	Radius Ratio	Apex Angle Radius	
(b)	If removable, bolts used		Other fastening	
7.	Jacket Closure:	I, Spec. No., T.S. Size Number)		(Describe or attach sketch )
				weight ft-lb by Impact ft-lo o
8.	Design pressure <u>1250</u>	psi at	<u>    575                               </u>	emp ofF
	ms 9 and 10 to be completed for tube			
9.	Tube Sheets: Stationary. Material Floating. Material	(Kind & Spec. No.)	(Subject to pressure)	in. Attachment
10.	Tubes: Material	0.D in. Thick	ness inches or gage.	Number Type
Ite	ms 11 - 14 incl. to be completed for	inner chambers of jacket	ed vessels, or channels of	heat exchangers.
11.	Shell: Material T.S (Kind & Spec. No.) (Min. of Rang	Thickness in. All	rosion lowance in. Dia 1	ft in. Length ft in
12.	Seams: Long	н.т.	R.T	Efficiency
	Girth	H.T.	R.T	No. of Courses
13.	Heads: (a) Material	T.S	(b) Material	T.S
	Crown Location Thickness Radius Top,bottom,ends	Knuckle Elliptical Radius Ratio	Concial Hemispherica Apex Angle Radius	l Flat Side to Press. Diameter (conv. or conc.)
(0)	Channel If removable, bolts used (a)	(b)(c)	Other fastening	
				(Describe or attach sketch) Weightft-1b
14.	2 Design pressure	psi at	Fat te	emp ofF
	ms below to be completed for all ves			
15.			Loca	tion
16.	_	Dia. or Size Type	Material Thickness	Reinforcement Material How Atlached
17.	Inspection Manholes, No Openings: Handholes, No	Size Size	Location	
	Threaded, No.	Size	Location	······
18.	Supports: Skirt Lugs (Yes of No)	(Number)	Number) Other(Describ	Attached     (Where & How)

y

1 - If Postweid Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.



	() WOTNO 0102 5424 01
	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, Diy. I
	4/22/01
`-	Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GENF&amp;CM)</u>
	<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> ( Name and Address of NFT Certificate Holder )
	(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Holder for completed nuclear component )
2.	Identification - Certificate Holder's S/N of Part : <u>B0787</u> Nat'l Bd. No. <u>N/A</u>
	(a) Constructed According to Drawing No: _798D228G012_Rev 36_Dwg. Prepared by D.L. Peterson_
	(b) Description of Part Inspected: <u>Piston Tube Assembly</u>
	(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u>
3.	REMARKS: <u>Standard part for use with Reactor</u> , 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: <u>12/22/92</u> Signed <u>GE-NEBG-NF &amp; CM-QA</u> (NPT Certificate Holder) By SC QM Representive )
_	Certificate of Authorization Expires: <u>6/16/93</u> Certification of Authorization No. : <u>NPTN-1151</u>
<b></b>	
	Certification of Design for Appurtenance
	Design information on file at <u>GE Company, San Jose, California</u>
	Stress analysis report on file at GE Company. San Jose, California
	DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
	DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
	Certification of Shop Inspection
	I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>12//2</u> , <u>1992</u> , and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

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

12/22,1992	Jusme PEver	NC 1231, Ohio, WC 3686 PA
Date	V Inspector's Signature	National Board, State, Province And No.

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

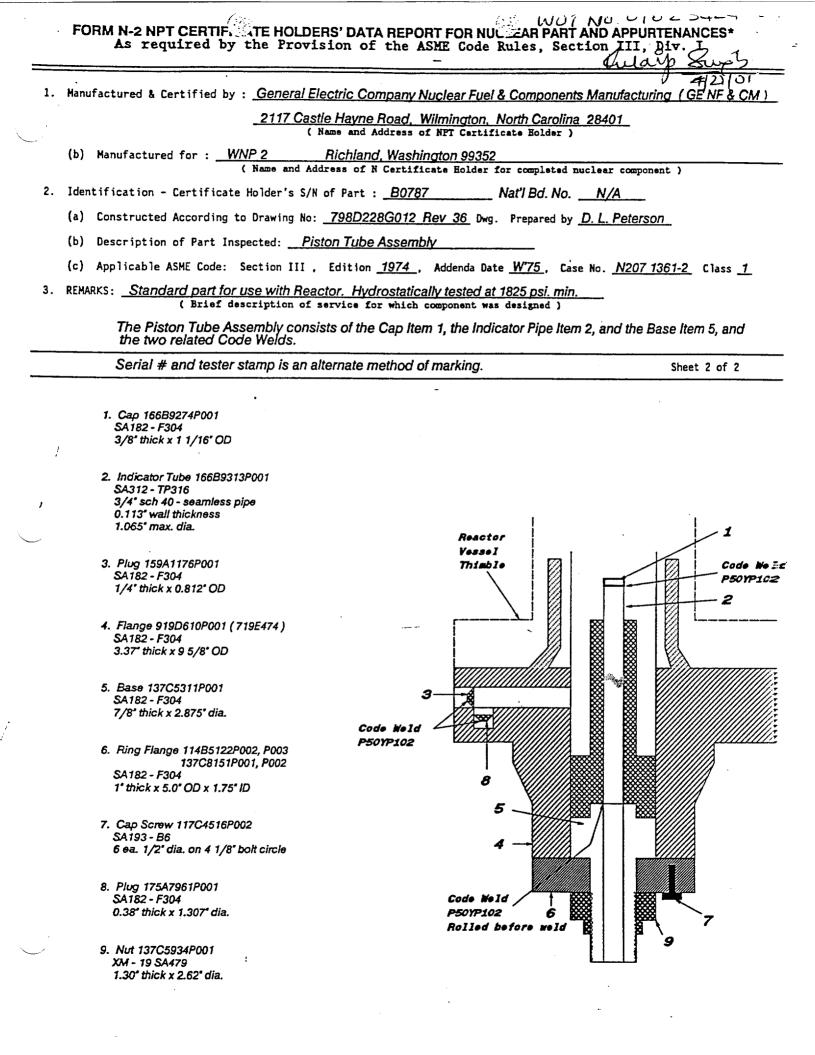
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		Girth				R.T.		No. of Cour	ses
6.	Heads:	(a) Materia	۱ <u> </u>	···	T.S	(b) H	aterial	T.S	
(a (b	Bottom	on ( Top , Ends ) Th	Crown ickness Radius	Knuck le Radius	Elliptical Ratio	Concial Apex Angle			e to Press. onv. or conc. )
•-		ovable, bolts				Other faster	ning		
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		_	(D	escribe as ogee a	nd weld, bar, etc. # t	sar give dimensions, i		h) eight Impact	ft-lb
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		Girth		н.т				Efficiency	
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Ite	ms below	to be comple	ted for all vess	els where a	applicable.				
5.	Safety	Valve Outlets	: Number		Size _		Locatio	n	
6.	Nozzles	Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Туре	Material	Thickness	Fisinforcement Material	How Attached
7.	Inspect: Openings	ion Manholes : Handhole: Threaded	s, No		Size	L	ULAL IUN	· · · · · · · · · · · · · · · · · · ·	
3.	Supports	: Skirt	Lugs _		Legs	<b>k</b>	her	Attached	
	1 - If Postw	eid Heat-Treated.	· · · · ·	(nonion)	. (r	umoer j	(Describe)	-	(Where & How)

2 - 1	lat other i	internal or exter	al pressure with coincider	int temperature when applicable
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WOT No 01025424 02



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

### 1. Owner: Energy Northwest

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

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

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (c) Type Code Symbol Stamp: Not Applicable
- (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	A9478	N/A	N/A	1994	***************	Yes, Code Class 1
CT&F	General Electric	A9478	N/A	N/A	1994	Replacement	Yes, Code Class 1
Piston Tube	General Electric	3147	N/A	N/A	1985	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Assembled Control Rod Drive (CRD) assembly Serial No A9478. The Control Rod Drive (CRD) assembly Serial No A9478 was assembled from all new parts in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

1) Installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9478.

2) Installed new Piston Tube assembly Serial No 3147.

3) Installed new Ring Flange Serial No 4163.

4) Performed VT-1 visual examination on six (6) new Ring Flange Cap Screws Heat Code No NBD, Heat No 500564. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-006.

5) Installed six (6) new VT-1 visually examined Ring Flange Cap Screws Heat Code No NBD, Heat No 500564.

6) Performed VT-1 visual examination on new Piston Tube Nut Serial No 6152. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-005.

7) Installed new VT-1 visually examined Piston Tube Nut Serial No 6152.

8) Assembled parts and materials for Control Rod Drive (CRD) assembly Serial No A9478.

#### NOTES -

1) Cylinder Tube And Flange (CT&F) assembly Serial No A9478 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9478.

2) Piston Tube assembly Serial No 3147 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No 3147.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9478.

Date: 04/27/01 Sheet: 1 Of 1 Unit: Not Applicable

	WOT No 01025424 02
	<b>ENERGY</b> NORTHWEST
	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
3 7	ests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other None Test Pressure: Psig Component Design Pressure: Psig Temperature: ° F
). F	Remarks: See attached N-2 Code Data Reports for the following:
	ylinder Tube And Flange (CT&F) assembly Serial No A9478. ston Tube assembly Serial No 3147.
ſ	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable
	Prepared By       Julity       Signed By       Julity       Surghty         Kuldip Singh - Program Lead Engineer (PLE)       Signed By       Kuldip Singh - Program Lead Engineer (PLE)         Date       4 27 01       Date       4 27 01
	CERTIFICATE OF INSERVICE INSPECTION
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $\frac{4/44}{6}$ to $\frac{478}{6}$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
	By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 74577456 NT II National Board, State, and Endorsements
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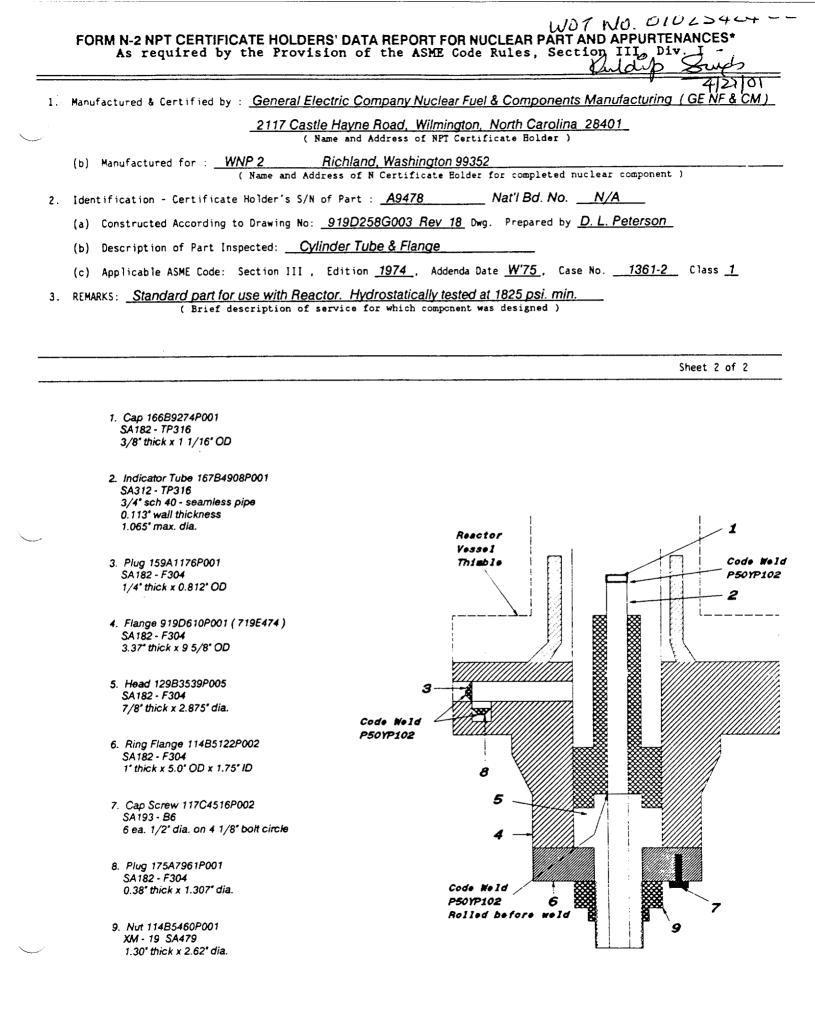
	WUT NO. 01025424 02 FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* As required by the Provision of the ASME Code Rules, Section III, Div. I Mudif
	Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GE NF &amp; CM)</u>
1.	( Name and Address of NPT Certificate Holder )
	(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Holder for completed nuclear component)
2	Identification - Certificate Holder's S/N of Part :
۷.	(a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Dwg. Prepared by <u>D.L.Peterson</u>
	<ul> <li>(a) Constructed According to orbitally a constructed according to orbitally ac</li></ul>
	(b) Description of Fait inspected
3.	Other dead and for use with Reactor Hydrostatically tested at 1825 psi, min.
<del></del>	Sheet 1 of 2
``	We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ). Date: <u>04/08/94</u> Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPT N - 1151</u>
	Certification of Design for Appurtenance
	Design information on file at GE Company, San Jose, California
	Stress analysis report on file at <u>GE Company, San Jose, California</u>
	DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
	DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
_	
	Certification of Shop Inspection
	I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>3/2</u> , <u>1999</u> , and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.
	4/81994Jurone P GuereNC 1231, Ohio, WC 3686 PADateInspector's SignatureNational 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". (97/90)

(07/90)

				F	ORM N-2	( back )			
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		Girth		н.т		R.T.		No. of Cours	es
6.	Heads :	(a) Material			T.S	(b) Ma	aterial	T.S	
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(b)	TE nomov	able, bolts use				Other faster	ning		
			(Materia	, Spec. No., T.S.	Size Number )		(	Describe or attach sketch )	
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13.	Heads :	(a) Material _			T.S	(b) M	aterial	T.S	
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(b)	Channel If remov	vable, bolts us	ed (a)	(b)	(c)	Othe	r fastening	· · · · · · · · · · · · · · · · ·	
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Ite	ms below	to be complete	d for all ves	sels where	applicable.				
15.	Safety \	Valve Outlets:	Number		Size		Locat	ion	
16.	Nozzles	: Purpose { iniet, Outlet, Drain }	Number	Dia. or Size	, Туре	Materia	Thickness	Reinforcement Material	How Attached
								·····	
17.					Size		Location		
	Open ing:	s: Handholes, Threaded,	No No		Size		Location	· · · · · · · · · · · · · · · · · · ·	
18.	Support	s: Skirt	Lugs		Legs	(	Other		
			s or No )	(Number)		(Number)	( Describ	•)	(Where & How)

1 - If Postweid Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

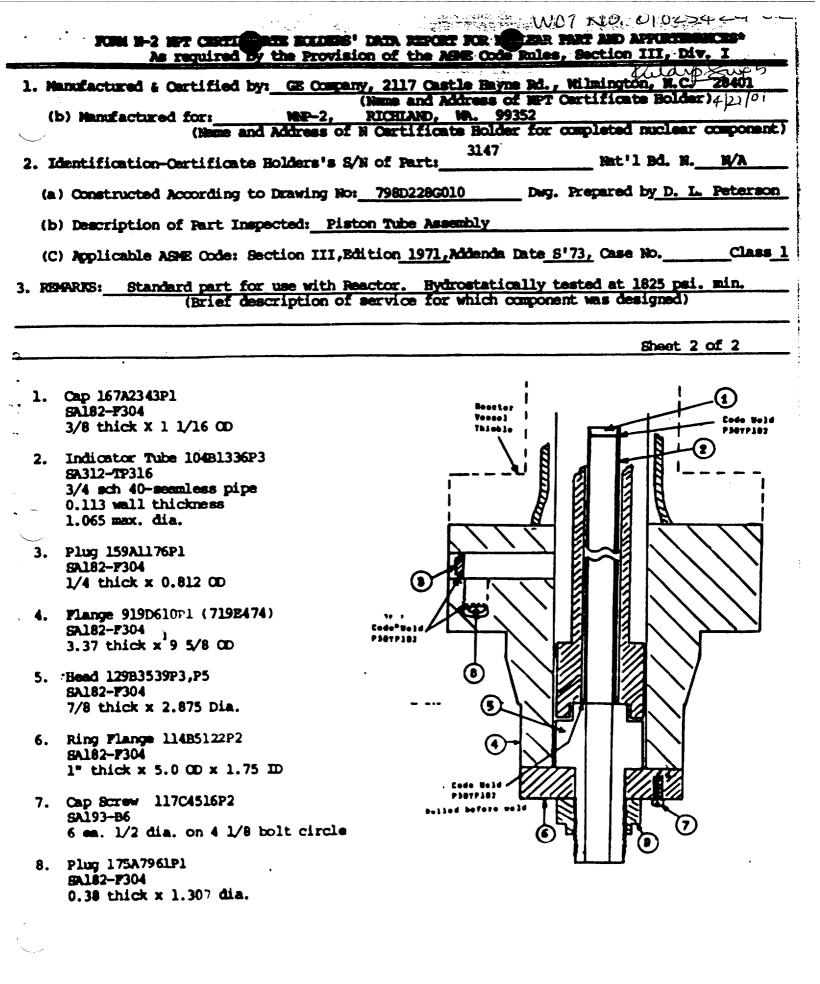


	As required by the Provision of the ASME Code Rules, Section III, Div. 1
	WUT NO.010254240
L	(a) Manufactured by General Electric Co., Castle Hayne Rd., Wilmington, N.C. (Name and address of NPT Certificate Holder) (b) Manufactured for STOCK_ UNP-2
X .	(b) Manufactured for UNP-2 (Name and address of N Certificate Holder for completed succear component)
2	Identification-Certificate Holder's Serial No. of Part 3147Nat'1 Bd. NoNA
	(a) Constructed According to Drawing No. 798D228G010 Drawing Prepared by D. L. Peterson
	(b) Description of Part Inspected Piston Tube Assembly
	(c) Applicable ASME Code: Section III, Edition 1971 , Addenda date S'73 , Case NoClass 1
3.	Remarks:Standard part for use with reactor.
	(Brief description of service for which component was designed) Hydrostatically tested at 1825 psi.
	* Number of Sheets - 2
inc! Dat	e applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for parts. An NPT Certificate is not in the component Design Specification and Stress Report.) the
:_'	nificate of Authorization Expires_June 16, 1987 Certificate of Authorization No. NPT N-1151
	CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)
,	Design information on file at GENERAL ELECTRIC CO., SAN JOSE, CALIF.
	Stress analysis report on file at GENERAL ELECTRIC CO., SAN JOSE, CALIF.
1	Design specifications certified by Vernon W. Pence Prof. Eng. State Calif. Reg. No. 14488
	Stress analysis report certified by Vernon W. Pence Prof. Eng. State 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 <u>North Carolina</u> and employed by <u>Department of Labor</u>
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	Partial Data Report on
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y be used provided (1) size is 2%" x 11", (2) information in items 3-2 on this of shorts to recorded to New 2. "Remarks". Data Report is included on each al beet, and (3) each sheet is

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

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			Н						-		
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		Location , bottom, ends)			Redius	Ratio		Hemispi Rodi		7 iai Dianotor	Side ( (Conv.
		vable, bolts u	and					ening	·····		
			(Metu	rial, Spec. N	ie., T.S., 815	e, Number)		•	(Dee	eribe er atta	ch skotch
7.	Jacket	Closure:		tweld, ber, e	te. If bar siv		if boited, desc	ribe or sket	ch)		
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_						_		-1		h	
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lies	ns 11-14	4 incl. to be c	ompleted for	inner cham	bers of jac	kesed vess	el affor-chann	els of beat	t exchan	8 Miles	
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WOT No 01025424 03



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

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

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

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (c) Type Code Symbol Stamp: Not Applicable
- (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Notes (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	A9482	N/A	N/A	1994		Yes, Code Class 1
CT&F	General Electric	A9482	N/A	N/A	1994	Replacement	Yes, Code Class 1
Piston Tube	General Electric	2927	N/A	. N/A	1985	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Assembled Control Rod Drive (CRD) assembly Serial No A9482. The Control Rod Drive (CRD) assembly Serial No A9482 was assembled from all new parts in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9482.
- 2) Installed new Piston Tube assembly Serial No 2927.

3) Installed new Ring Flange Serial No A5355.

4) Performed VT-1 visual examination on six (6) new Ring Flange Cap Screws Heat Code No NBD, Heat No 500564. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-006.

5) Installed six (6) new VT-1 visually examined Ring Flange Cap Screws Heat Code No NBD, Heat No 500564.

6) Performed VT-1 visual examination on new Piston Tube Nut Serial No 6051. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-005.

7) Installed new VT-1 visually examined Piston Tube Nut Serial No 6051.

8) Assembled parts and materials for Control Rod Drive (CRD) assembly Serial No A9482.

#### NOTES -

1) Cylinder Tube And Flange (CT&F) assembly Serial No A9482 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9482.

2) Piston Tube assembly Serial No 2927 is certified to comply with ASME Section III, Code Class 1, 1971 Edition with Summer 1973 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No 2927.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9482.

Date: 04/27/01 Sheet: 1 Of 1 Unit: Not Applicable

WOT No 01025424 03 ENERGY NORTHWEST
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       X       None         Test Pressure: Psig       Test Temperature: ° F       Component Design Pressure: Psig       Temperature: ° F
. Remarks: See attached N-2 Code Data Reports for the following:
) Cylinder Tube And Flange (CT&F) assembly Serial No A9482. ) Piston Tube assembly Serial No 2927.
CERTIFICATE OF COMPLIANCE
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Multip Singh - Program Lead Engineer (PLE)         Date       4270    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 Factory Mutual Insurance Company of         Johnston, Rhode Island have inspected the components described in this Owner's Report during the         period _1/20/01
Inspector's Signature National Board, State, and Endorsements Date 575767

1. Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing</u> <sup>2</sup> (GE NF & CM). <u>2117 Castle Hayna Road, Wilnington, North Carolina 28401</u> (Name and Maderss of NF Certificates Bolder) (b) Manufactured for: <u>WNP 2</u> <u>Richland, Washington 29352</u> (Name and Maderss of NF Certificates Bolder) (c) Manufactured According to Drawing No: <u>21902586003 Rev 18</u> Deg. Prepared by <u>D. L. Poterson</u> . (b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u> . (c) Applicable ASME Code: Section III. Edition <u>1974</u> . Addends Date <u>WT3</u> . Case No. <u>1361-2</u> Class <u>1</u> . 3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically lested at 1925 ns. <u>min</u>. (c) Applicable ASME Code: Section III. Edition <u>1974</u>. Addends Date <u>WT3</u>. Case No. <u>1361-2</u> Class <u>1</u>. 3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically lested at 1925 ns. <u>min</u>. (c) Exist description of service for Mich 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 Beigged Section Flag Description of appurtenance is not included in the component Beigged Sectification and Stress Report 1. Date: <u>04/08/34</u> Signed <u>GE - NEGE - NF &amp; CM - QA</u> by <u>Kay Representive ( NF Certificate Bolder</u>). <u>NFIN - 1151</u> Certification of Flag tiftetion <u>64/08/24</u>. Signed <u>GE Company</u>. San Jose, California Stress analysis report on file at <u>GE Company</u>. San Jose, California Stress analysis report on file at <u>GE Company</u>. San Jose, California Stress analysis report or thifted by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>. DCZ2825254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>. DCZ2825254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof.</u></u>		WOT NO. 0102 5424 03 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, Wildup Succ 4 22 01
<pre>(Name and Address of NFT Certificate Bolder ) (b) Manufactured for : WNP 2 Richland Washington 99352 (Name and Address of N Certificate Bolder for completed nuclear component ) 2. Identification - Certificate Nolder's S/N of Part : <u>A9482</u></pre>	1.	
(1) Number 1 (Name and Address of N Certificate Bolder for completed nuclear component.) 2. Identification - Certificate Holder's S/K of Part : <u>A9482</u> Natl Bd. No. <u>N/A</u> (a) Constructed According to Drawing No: <u>91902586003 Rev 18</u> Day. Prepared by <u>D. L. Peterson</u> . (b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u> (c) Applicable ASME Code: Section 111. Edition 1974. Addenda Date <u>W75</u> . Case No. <u>1361-2</u> . Class 1 3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> ( Brief description of service for which component was designed ) Sheet 1 of 2 We certify that the statements in this report are correct and this vesse) part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section 111. ( The applicable Designed Specification and Stress Report is not bar for appurtenances is not included in the Code conforms to the rules of construction of the ASME Code Section 111. ( The applicable Designed Specification and Stress Report 1). Date: <u>04/08/94</u> Signed <u>GE - NEBG - NE &amp; OM - OA</u> Date: <u>04/08/94</u> Signed <u>GE - NEBG - NE &amp; OM - OA</u> Design information on file at <u>GE Company. San Jose. California</u> Stress analysis report on file at <u>GE Company. San Jose. California</u> DC22A6253 Rev 1 Stress analysis report certified by <u>Biorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u> DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</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>15570</u> DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</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> Insected the part of a pressure vessel described in the stre	/	<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> (Name and Address of NFT Certificate Bolder)
<ul> <li>(a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Deg. Prepared by <u>D.L.Peterson</u>.</li> <li>(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>.</li> <li>(c) Applicable ASME Code: Section III. Edition <u>1974</u>. Addenda Date <u>W75</u>. Case No. <u>1361-2</u>. Class <u>1</u></li> <li>3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi min.</u> (Bilef description of service for which component was designed)</li> <li>Sheet 1 of 2</li> <li>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 MPI Certificate Holder for parts. An NPI Certification Holder for appurtenance is not included in the component Design Specification and Stress Report if the applicable Designed Specification and Stress responsible for furnishing a spearate Design Specification of Author with No. <u>NPIN-1151</u></li> <li>Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. <u>NPIN-1151</u></li> <li>Certification of fle at <u>GE Company. San Jose</u>. California</li> <li>Stress analysis report on file at <u>GE Company. San Jose</u>. California</li> <li>Stress analysis report on file at <u>GE Company</u>. San Jose. California</li> <li>Diggin specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>.</li> <li>DC226253 Rev. 1</li> <li>Design specification certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>MOIB646</u></li> <li>Certificate hold beiler, and Pressure Inspectors and/or the State or Province of <u>North Carolina</u> and employed by <u>Department of Labor on <u>State Conforna</u> Age. <u>7257</u>.</u></li> <li>mastel hat to the Section III.</li> <li>or the state or fragment vessel descripted in the Partial Data Meent on <u>Tag. 7257</u>.</li> <li>mastel hat to the section Pile description in the state or Province of Morth Carolina and thore with the Report on </li></ul>		(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Holder for completed nuclear component)
<ul> <li>(a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Deg. Prepared by <u>D.L.Peterson</u>.</li> <li>(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>.</li> <li>(c) Applicable ASME Code: Section III. Edition <u>1974</u>. Addenda Date <u>W75</u>. Case No. <u>1361-2</u>. Class <u>1</u></li> <li>3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi min.</u> (Bilef description of service for which component was designed)</li> <li>Sheet 1 of 2</li> <li>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 MPI Certificate Holder for parts. An NPI Certification Holder for appurtenance is not included in the component Design Specification and Stress Report if the applicable Designed Specification and Stress responsible for furnishing a spearate Design Specification of Author with No. <u>NPIN-1151</u></li> <li>Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. <u>NPIN-1151</u></li> <li>Certification of fle at <u>GE Company. San Jose</u>. California</li> <li>Stress analysis report on file at <u>GE Company. San Jose</u>. California</li> <li>Stress analysis report on file at <u>GE Company</u>. San Jose. California</li> <li>Diggin specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>.</li> <li>DC226253 Rev. 1</li> <li>Design specification certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>MOIB646</u></li> <li>Certificate hold beiler, and Pressure Inspectors and/or the State or Province of <u>North Carolina</u> and employed by <u>Department of Labor on <u>State Conforna</u> Age. <u>7257</u>.</u></li> <li>mastel hat to the Section III.</li> <li>or the state or fragment vessel descripted in the Partial Data Meent on <u>Tag. 7257</u>.</li> <li>mastel hat to the section Pile description in the state or Province of Morth Carolina and thore with the Report on </li></ul>	2.	Identification - Certificate Holder's S/N of Part : <u>A9482</u> Nat'l Bd. No. <u>N/A</u>
<ul> <li>(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u></li> <li>(c) Applicable ASME Code: Section III. Edition <u>1974</u>, Addends Date <u>W75</u>, Case No. <u>1361-2</u> Class <u>1</u></li> <li>3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi.min.</u> (brief description of service for which component was designed)</li> <li>Sheet 1 of 2</li> <li>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 NT Certificate folder for parts. An NPI Certification hold for a pourtenance is not included in the code not provide pseudo the Specification and Stress Report J.</li> <li>Date: <u>04/08/94</u> Signed <u>GE-NEBG-NF &amp; CM-OA</u> By <u>Control to Note The Specification of the Stress Report J.</u></li> <li>Certificate of Authorization Expires: <u>6/16/96</u> Certificate To Authorization No.: <u>NPT N- 1151</u></li> <li>Certification on file at <u>GE Company. San Jose</u>, California</li> <li>Stress analysis report on file at <u>GE Company. San Jose</u>, California</li> <li>DC22A253 Rev 1</li> <li>DEsign specification certified by <u>Elvard Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u></li> <li>DC22A252 Rev 1</li> <li>Stress analysis report certified by <u>Elvard Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u></li> <li>DC22A252 Rev 1</li> <li>Stress analysis report certified by <u>Elvard Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15270</u></li> <li>MC22A252 Rev 1</li> <li>Stress analysis report certified by <u>Elvard Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15270</u></li> <li>MC22A252 Rev 1</li> <li>Stress analysis report certified by <u>Elvard Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15270</u></li> <li>MC22A252 Rev 1</li> <li>Stress analysis report certified by <u>Elvard Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15270</u></li> <li>MC22A252 Rev 1</li> <li>Stress analysis report certified by <u>Elvard Yoshio</u> Prof. Eng. S</li></ul>		(a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Dwg. Prepared by <u>D.L.Peterson</u>
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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 111. (The applicable Designed Specification and Stress Report are not the responsibility of the MPI Certificate Holder for parts. An MPI 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>04/08/94</u> Signed <u>GE - NEBG - NF &amp; CM - OA</u> (NPT Certificate Bolder) Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPT N - 1151</u> <u>Certification of Design for Appurtenance</u> Design information on file at <u>GE Company</u> . San Jose, California Stress analysis report on file at <u>GE Company</u> . San Jose, California DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u> <u>OC22A6254 Rev 1</u> Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u> <u>1</u> , the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of <u>Morth Carolina</u> and employed by <u>Deportment of Labor</u> of <u>State ON MO18646</u> <u>1</u> , the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of Morth Carolina and employed by <u>Deportment of Labor</u> of <u>State ON MO18646</u> <u>1</u> , <u>1727</u> and state that to the best of my knowledge and beilef, the MPI Certificate Holder has constructed this part in accordance with the ASME Code Section 111. 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. or 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.	3.	PENNERS Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
conforms to the rules of construction of the ASME Code Section 111. (The applicable Designable for apportant are not the responsibility of the NPT Certificate holder for apportances 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>04/08/94</u> Signed <u>GE-NEBG-NF &amp; CM-QA</u> By <u>Stress Representive</u> ) Certificate of Authorization Expires: <u>6/16/96</u> Certificate Bolder) Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No.: <u>NPT N - 1151</u> <u>Certification of Design for Appurtenance</u> Design information on file at <u>GE Company</u> , <u>San Jose</u> , <u>California</u> Stress analysis report on file at <u>GE Company</u> , <u>San Jose</u> , <u>California</u> DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u> DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u> 1. the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of <u>Morif Carolina</u> and employed by <u>Department of Labor</u> or <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>32</u> , <u>7999</u> and state that to the best of my knowledge and belief, the NPI 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 defaction of in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.	•	Sheet 1 of 2
Design information on file at		the component Design Specification and Stress Report ). Date: 04/08/94 Signed <u>GE-NEBG-NF &amp; CM-QA</u> By Sc & Representive )
Stress analysis report on file at		Certification of Design for Appurtenance
Stress analysis report on file at		Design information on file at GE Company, San Jose, California
DC22A6253 Rev. 1         Design specification certified by		
Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Call</u> . Reg. No. <u>MU18040</u> <b>Certification of Shop Inspection</b> I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>3/2</u> , <u>1799</u> , and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied. concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.		DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>3/2</u> , <u>7997</u> , and state that to the best of my knowledge and belief, the NPI 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.		DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>3/2</u> , <u>7997</u> , and state that to the best of my knowledge and belief, the NPI 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.		
State or Province of <u>NORTH CarOIINA</u> and employed by <u>Department of Labor</u> of <u>State of Vorth Carointa</u> 79.7 inspected the part of a pressure vessel described in this Partial Data Report on <u>3/2</u> , <u>7/97</u> , and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.		
4/81994JumePErureNC 1231, Ohio, WC 3686 PADateInspector's SignatureNational Board, State, Province And No.		State or Province of <u>NORIN CarOIINA</u> and employed by <u>Department of Labor</u> of <u>State of Norin CarOIINA</u> , and employed by <u>Department of Labor</u> of <u>State of Norin CarOIINA</u> , and sinspected the part of a pressure vessel described in this Partial Data Report on <u>APA</u> , <u>1794</u> , and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.
Date / Inspector's Signature National Board, State, Province And No.		4/8 1994 Auom PEnne NC 1231, Ohio, WC 3686 PA
		Date Inspector's Signature National Board, State, Province And No.

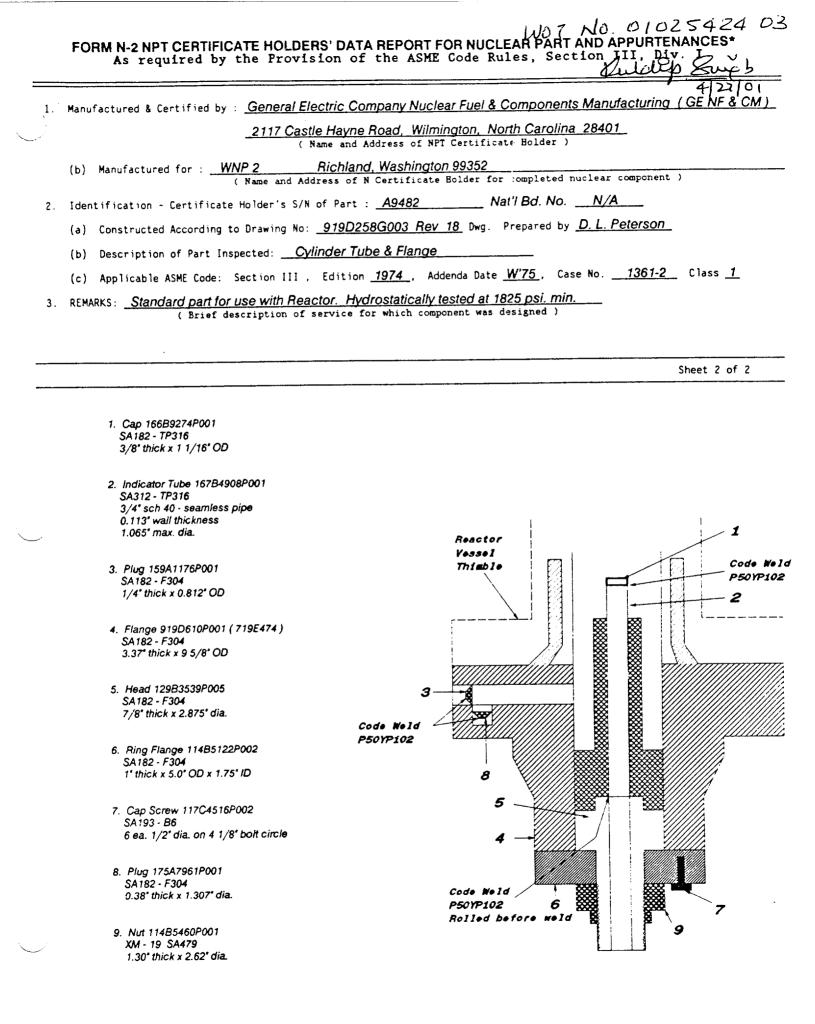
\*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

(07/90)

			FO	RM N-2	( back )			
Ite	ns 4-8 Incl. to be comple	ted for single	e wall ves	sels, jackets	vessels, or s	shells of heat	exchangers.	
4.	Shell: Material	T.S No. ) { Min. of Range S	Nominal Thickness Specified)	Cor in. All	rosion owance in	n. Dia ft	in. Length	ft 1n.
5.	Seams: Long	н	.T		R.T		Efficiency	
	Girth		.T		R.T		No. of Course	s
6.	Heads: (a) Material			T.S	(b) Ma	terial	T.S	<u> </u>
(2)	Location ( Top Bottom, Ends ) Thickne	Crown ess Radius		Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Side Diameter (cor	to Press. w. or conc. )
(b)					Other fasten	ing		
7	Jacket Closure:	(Material, S	Spec. No., T.S. S	Size Number)		(1	Describe or attach sketch )	
1.	Jacket Closufe	(Desc	ribe as ogee an	d weld, bar, etc. If b	ar give dimensions, if		n) /eight / Impact	ft-lb
8.	2 Design pressure	1250	psi	at	575	F atten	np of	F
Ite	ms 9 and 10 to be comple	ted for tube s	ections	<u></u>				
9.	Tube Sheets: Stationar Floating.		( Kind & Spe	Dia. Dia.	(Subject to pressure	Thickness Thickness	in. Attachmain. Attachma	ent(Welded, Boned) ent
10.	Tubes: Material	<u> </u>	0.0.	in. Thick	iness	inches or gage.	lumber	(Str. or U)
	ms 11 - 14 incl. to be c		inner chamh	ers of jacket	ed vessels o	r channels of l	neat exchangers.	
11.	Shell: Material	T.S. No.) (Min. of Bange	Nominal Thickness Specified)	Con in. Al	rrosion lowance i	n. Dia f	t in. Length	ft in.
12.	Seams: Long		•				Efficiency _	
	Girth	ł	н.т.' <u></u>		R.T		No. of Cours	es
13.	Heads: (a) Material			T.S	(b) Ma	iterial	T.S	
	Location Thickn Top,bottom,ends	Crown ness Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Side Diameter (co	to Press. nv. or conc. )
(6	) Channel If removable, bolts use	ed (a)	(b)	(c)	Other	fastening	(Describe or att	
							Weight y Impact	*
	2			psi at		enarp e Fatte	•	• F
14.	Design pressure ems below to be completed							
						Locat	ion	
15.	_			0.20			Reinforcement	
16.	Nozzles: Purpose (Iniet, Outlet, Drain) 	Number	Dia. or Size	Туре	Material	Thickness	Material	How Attached
17.	Inspection Manholes, Openings: Handholes, Threaded,	No No No		Size Size Size		Location		
18.	Supports: Skirt	·	(Number)	Legs		ther(Describe	Attached	(Where & How)

1 - # Postweid Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.



FORM N-2 NPT CERTIFIC As require	CATE HOLDERS' DATA REPORT F	OR NUCLEAR PART AND APP	URTENANCES.
		WOT NO.	01025424
L (a) Manufactured by	eral Electric Co., Castle	Hayne Rd., Wilmingto	n, N.C.
•	(Name and address	of NPT Certificate Holder>	Childref Su
	(Name and address of N Certificat	a Holder for completed nuclear compone	at) (
2. Identification-Certificate Holder's Se	rial No. of Part2927	Nar'l Bd. No	A
(a) Constructed According to Draw	wing No. 798D228G010 Draw	ing Prepared by D. L. P	eterson
	Piston Tube Assemb		
(c) Applicable ASME Code: Section	a III, Edition 1971, Addenda da	xe_S'73_, Case No	Class1
	for use with reactor.		
The Product of a 11	(Brief description of service for w	hich component was designed)	
	y tested at 1825 psi.		•
·			
* Number of Sh	eets - 2		
We certify that the statements made			
Date2/18/19_85	SignedGE-NEPD-WMD	B. a. Ettoude	
Date2/18/19_85_s		By A. Estrude	NPT N-1151
	Signed <u>GE-NEPD-WMD</u> (NPT Certificate Holder) June 16, 1987 Certificate Holder)		
	Signed <u>GE-NEPD-WMD</u> (NPT Certificate Holder) June 16, 1987 Co NON OF DESIGN FOR APPURT	ENANCE (when applicable)	
CERTIFICAT	Signed <u>GE-NEPD-WMD</u> (NPT Certificate Holder) June 16, 1987 Co NON OF DESIGN FOR APPURT NERAL ELECTRIC CO., SAN J	ENANCE (when applicable)	
CERTIFICAT Design information on file atGE	Signed <u>GE-NEPD-WMD</u> (NPT Certificate Holder) June 16, 1987 Co NON OF DESIGN FOR APPURT NERAL ELECTRIC CO., SAN J ENERAL ELECTRIC CO., SAN	ENANCE (when applicable)	
CERTIFICAT Design information on file atGE Stress analysis report on file at	Signed <u>GE-NEPD-WMD</u> (NPT Certificate Holder) June 16, 1987 <u>Co</u> NON OF DESIGN FOR APPURT NERAL ELECTRIC CO., SAN J ENERAL ELECTRIC CO., SAN Vernon W. Pence	ENANCE (when applicable) TOSE, CALIF. JOSE, CALIF.	<u>f.</u> Reg. No. <u>14488</u>
CERTIFICAT Design information on file atGE Stress analysis report on file at Design specifications certified by	Signed <u>GE-NEPD-WMD</u> (NPT Certificate Holder) June 16, 1987 <u>Co</u> NON OF DESIGN FOR APPURT NERAL ELECTRIC CO., SAN J ENERAL ELECTRIC CO., SAN Vernon W. Pence	ENANCE (when applicable) IOSE, CALIF. JOSE, CALIF. Prof. Eng. State Cali Prof. Eng. State Cali	<u>f.</u> Reg. No. <u>14488</u>
CERTIFICAT Design information on file at Stress analysis report on file at Design specifications certified by Stress analysis report certified by I, the undersigned, holding a val and/or the State or Province of Non	GE-NEPD-WMD (NPT Certificate Holder) June 16, 1987 Control C	ENANCE (when applicable, IOSE, CALIF. JOSE, CALIF. Prof. Eng. State Cali Prof. Eng. State Cali ISPECTION	<u>f.</u> Reg. No. <u>14488</u> <u>f.</u> Reg. No. <u>14488</u>
CERTIFICAT Design information on file at Stress analysis report on file at Design specifications certified by Stress analysis report certified by I, the undersigned, holding a val and/or the State or Province of <u>Nor</u> of State of North Carc	GE-NEPD-WMD (NPT Certificate Holder) June 16, 1987 CON OF DESIGN FOR APPURT NERAL ELECTRIC CO., SAN J ENERAL ELECTRIC CO., SAN Vernon W. Pence Vernon W. Pence CERTIFICATE OF SHOP IN Id commission issued by the Nation th Carolina_ and employed	ENANCE (when applicable) IOSE, CALIF. JOSE, CALIF. Prof. Eng. State Cali Prof. Eng. State Cali ISPECTION al Board of Boiler and Pressure by Department of Labo	<u>f.</u> Reg. No. <u>14488</u> <u>f.</u> Reg. No. <u>14488</u> re Vessel Inspectors
CERTIFICAT Design information on file at Stress analysis report on file at Design specifications certified by Stress analysis report certified by I, the undersigned, holding a val and/or the State or Province of <u>Nor</u> of State of North Carc Partial Data Report on and bellef, the NFT Certificate Holder	GE-NEPD-WMD         UNPT Certificate Holder:         June 16, 1987         Control 17, 200         Control 17, 200         Control 18, 200	ENANCE (when applicable) IOSE, CALIF. JOSE, CALIF. Prof. Eng. State Cali Prof. Eng. State Cali Prof. Eng. State Cali ISPECTION al Board of Boiler and Pressue by Department of Labo I the part of a pressure vess I the part of a pressure vess I the ASME Code Section III makes any warranty, expressed	f. Reg. No. 14488 f. Reg. No. 14488 re Vessel Inspectors r el described in this best of my knowledge or implied, concern-
CERTIFICAT Design information on file at Stress analysis report on file at Design specifications certified by Stress analysis report certified by Stress analysis report certified by I, the undersigned, holding a val and/or the State or Province of Non of State of North Carro Partial Data Report on and bellef, the NFT Certificate Holder By signing this certificate, next ing the part described in this shall be liable in any manner for with this inspection.	GE-NEPD-WMD (NPT Certificate Holder) June 16, 1987 Co TION OF DESIGN FOR APPURT NERAL ELECTRIC CO., SAN J ENERAL ELECTRIC CO., SAN J ENERAL ELECTRIC CO., SAN VERTION W. PENCE VERTION W. PENCE CERTIFICATE OF SHOP IN Nid commission issued by the Nation CERTIFICATE OF SHOP IN Nation CERTIFICATE OF SHOP IN Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nati	ENANCE (when applicable) IOSE, CALIF. JOSE, CALIF. Prof. Eng. State Cali Prof. Eng. State Cali Prof. Eng. State Cali ISPECTION al Board of Boiler and Pressue by Department of Labo I the part of a pressure vess I the part of a pressure vess I the ASME Code Section III makes any warranty, expressed	f. Reg. No. 14488 f. Reg. No. 14488 re Vessel Inspectors r el described in this best of my knowledge or implied, concern-
CERTIFICAT Design information on file at Stress analysis report on file at Design specifications certified by Stress analysis report certified by Stress analysis report certified by I, the undersigned, holding a val and/or the State or Province of Non of State of North Carro Partial Data Report on and bellef, the NFT Certificate Holder By signing this certificate, next ing the part described in this shall be liable in any manner for with this inspection.	GE-NEPD-WMD         UNPT Certificate Holder:         June 16, 1987         Control 17, 200         Control 17, 200         Control 18, 200	ENANCE (when applicable) IOSE, CALIF. JOSE, CALIF. Prof. Eng. State Cali Prof. Eng. State Cali Prof. Eng. State Cali ISPECTION al Board of Boiler and Pressue by Department of Labo I the part of a pressure vess I the part of a pressure vess I the ASME Code Section III makes any warranty, expressed	f. Reg. No. <u>14488</u> f. Reg. No. <u>14488</u> f. Reg. No. <u>14488</u> re Vessel Inspectors r el described in this best of my knowledge or implied, concern- nor his employer ng from or connected
Design information on file at Stress analysis report on file at Design specifications certified by Stress analysis report certified by I, the undersigned, holding a val and/or the State or Province of Nor of State of North Carco Partial Data Report on and belief, the NPT Certificate Holder By signing this certificate, neithing the part described in this shall be liable in any manner for with this inspection.	GE-NEPD-WMD (NPT Certificate Holder) June 16, 1987 Co TION OF DESIGN FOR APPURT NERAL ELECTRIC CO., SAN J ENERAL ELECTRIC CO., SAN J ENERAL ELECTRIC CO., SAN VERTION W. PENCE VERTION W. PENCE CERTIFICATE OF SHOP IN Nid commission issued by the Nation CERTIFICATE OF SHOP IN Nation CERTIFICATE OF SHOP IN Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nation Nati	ENANCE (when applicable) IOSE, CALIF. JOSE, CALIF. Prof. Eng. State Cali Prof. Eng. State Cali Prof. Eng. State Cali Prof. Eng. State Cali ISPECTION al Board of Boiler and Pressue by Department of Labo I the part of a pressure vess I the part of a pressure vess I the part of a pressure vess I the ASME Code Section III makes any warranty, expressed hore. neither the inspector age or a loss of any kind arisin N.C. 723, PA.WC1	f. Reg. No. 14488 f. Reg. No. 14488 f. Reg. No. 14488 re Vessel Inspectors r el described in this best of my knowledge or implied, concern- nor his employer ag from or connected 766, OHIO

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

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	hell:	Material (Kind & S	T.S.	No Till Se of Range S	ominal hickness lpecified)	Corro in. Allov	sion vanceia.	Dia	ft ir	a. Length_	(t
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					-	-	- · ·		Drop We		
8. D	esiga j	pressure <sup>2</sup>	1250	•	psi s	575		_°F			
ems 🤉	9 and	10 to be comp	leted for tub	e sections							
0 7.			h#					-1			
<b>7.</b> 11	104 Ju	eets: 3(2(100)	iry, material_	(Kind & Sp		Subject to	pressure)	CKB633	_ IB. At	tachaeat	Welded, Bolted
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ems l	11-14	incl. to be co	mpleted for	inner cham	abers of jac	cketed vess	els, or channe	is of hea	t exchan	gers.	
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List other internal or external pressure with coincident temperature when applicable

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	•	WOT NO. 0102 5424
	As required by the Pro	wision of the ASME Code Rules, Section III, Div. I
	Manufactured & Certified by: <u>GB Co</u>	mpany, 2117 Castle Hayne Rd., Wilmington, N.C. 284( (Name and Address of NFT Certificate Holder) 4/2
	(b) Manufactured for: MP-2,	RICHLAND, WA. 99352 of N Certificate Holder for completed nuclear compo
		2927
	Identification-Certificate Holders's	
		No: 798D228G010 Dwg. Prepared by D. L. Pete
	b) Description of Part Inspected:	
((	C) Applicable ASME Code: Section III	I,Edition 1971, Addenda Date S'73, Case NoCl
R	EMARKS: Standard part for use with	h Reactor. Bydrostatically tested at 1825 psi. min. of service for which component was designed)
	·	Sheet 2 of 2
_		,
1.	Cap 167A2343P1	
	SA182-F304	Resetor Vessoj
	3/8 thick X 1 1/16 00	Thinkle Code
2	Tudinahan Mila 10 mil 00000	
∡.	Indicator Tube 10481336P3 SA312-TP316	
	3/4 sch 40-semless pipe	
	0.113 wall thickness	
	1.065 max. dia.	
	arves man, with	
з.	Plug 159A1176P1	
	SA182-F304	
	1/4 thick x 0.812 00	
4.	Flange 919D610P1 (719E474)	
	SA182-F304	
	3.37 thick x'9 5/8 00	Play Play
5.	Bend 129B3539P3,P5	
	SA182-P304	
	7/8 thick x 2.875 Dia.	
•	Dine Wasses 13 April 1995	
<b>D</b> .	Ring Flange 114B5122P2 SA182-F304	
	1" thick x 5.0 00 x 1.75 10	
		XTTTA DITE
	Cap Screw 117C4516P2	· Code Veld · · · · · · · · · · · · · · · · · · ·
7	SA193-B6	Ballad bafara sale
7.		
7.	6 ea. 1/2 dia. on 4 1/8 bolt circle	
	6 ea. $1/2$ dia. on 4 $1/8$ bolt circle	
	6 ea. 1/2 dia. on 4 1/8 bolt circl Plug 175A7961P1	
	6 ea. $1/2$ dia. on 4 $1/8$ bolt circle	

WOT No 01025424 04



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

#### 1. Owner: Energy Northwest

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

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

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

(c) Type Code Symbol Stamp: Not Applicable

(d) Certificate Of Authorization No.: Not Applicable

(e) Expiration Date: Not Applicable

4. Identification Of System: Control Rod Drive (CRD)

5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Notes (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	A9531	N/A	N/A	1994		Yes, Code Class 1
CT&F	General Electric	A9531	N/A	N/A	1994	Replacement	Yes, Code Class 1
Piston Tube	General Electric	B0792	N/A	N/A	1992	Replacement	Yes, Code Class

7. Description Of Work Performed: Assembled Control Rod Drive (CRD) assembly Serial No A9531. The Control Rod Drive (CRD) assembly Serial No A9531 was assembled from all new parts in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

1) installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9531.

2) Installed new Piston Tube assembly Serial No B0792.

3) Installed new Ring Flange Serial No A5430.

4) Performed VT-1 visual examination on six (6) new Ring Flange Cap Screws Heat Code No AT, Heat No 531057. VT-1 visual examination results acceptable. VT-1 visual examination Report No 4-01-2-1.

5) Installed six (6) new VT-1 visually examined Ring Flange Cap Screws Heat Code No AT, Heat No 531057.

6) Performed VT-1 visual examination on new Piston Tube Nut Serial No 5964. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-005.

7) Installed new VT-1 visually examined Piston Tube Nut Serial No 5964.

8) Assembled parts and materials for Control Rod Drive (CRD) assembly Serial No A9531.

#### NOTES -

1) Cylinder Tube And Flange (CT&F) assembly Serial No A9531 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9531.

2) Piston Tube assembly Serial No B0792 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No B0792.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9531.

Date: 04/27/01 Sheet: 1 Of 1 Unit: Not Applicable

WOT No 01025424	04
<b>ENERGY</b> NORTHWEST	
FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
Tests Conducted: Hydrostatic       Pneumatic       Nominal Operating Pressure       Other       X       No         Test Pressure: Psig       Test Temperature: ° F       Component Design Pressure: Psig       Temperature: ° F	ne
Remarks: See attached N-2 Code Data Reports for the following:	
Cylinder Tube And Flange (CT&F) assembly Serial No A9531. Piston Tube assembly Serial No B0792.	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in this Owner's Report are correct and this replacement conforms	
to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable	
Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable	
NION ONI MIRAONI	
Prepared By       Kuldup       Supply       Signed By       Ludup       Supply         Kuldip Singh - Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)	
Date 4/27/01 Date 4/27/01	
CERTIFICATE OF INSERVICE INSPECTION	]
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period $4/2/2/2/2$ to $3/2/2/2/2/2$ and state to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report.	
Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	
Inspector's Signature  Commissions 748440/74186 T W IS National Board, State, and Endorsements	
Date 5-8-01	

•	WOT NO 01025424 04 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 As required by the Provision of the ASME Code Rules, Section III, Div. I Audup Ruch
1.	Manufactured & 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 : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Holder for completed nuclear component)
٢.	Identification - Certificate Holder's S/N of Part : <u>A9531</u> <u>Nat'l Bd. No. N/A</u>
	(a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Dwg. Prepared by <u>D. L. Peterson</u>
	(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>
	(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W'75</u> , Case No. <u>1361-2</u> Class <u>1</u>
3.	REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (Brief description of service for which component was designed)
<u></u>	Sheet 1 of 2
"	We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ). Date: <u>03/15/94</u> Signed <u>GE-NEBG-NF &amp; CM-QA</u> By SC & Representive ) Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : <u>NPT N-1151</u>
Γ	Certification of Design for Appurtenance
	Design information on file at GE Company, San Jose, California
	Stress analysis report on file at GE Company, San Jose, California
	DC22A6253 Rev. 1 Design specification certified by <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>
L	
Γ	Certification of Shop Inspection
	I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>4/17</u> . <u>1999</u> , and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied. concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.
	3/15, 1999 Greene Cover NC 1231, Ohio, WC 3686 PA Dave 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 Dat Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS". ( 07/90 )

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		*		· · · · · · · · · · · · · · · · · · ·	( back )	······		
tems 4-8	Incl. to be com	pleted for sin	gle wall ve	ssels, jacket	s vessels, or	shells of heat	exchangers.	
. Shell:	Material (Kind&Sp	T.S ec. No. ) ( Min. of Planc	Nominal _ Thickness geSpecified)	Cc in. Al	prrosion Nowance	in. Dia f	t in. L	ength ft, in
. Seams:	Long		H.T.		R.T.		Efficie	ncyX
	Girth		•		R.T.		No. of	Courses
. Heads:	(a) Material			T.S	(b) M	lateriai	T.	S
Bottom a)	on ( Top a, Ends ) Thic		Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	-	Side to Press. ( conv. or conc. )
) Ifrem	ovable, bolts u	sed			Other faste	ening	·	
	Closure:	(11/2011/2	2, open 110., 110.	Size Number)			Describe or attach sl	ketch )
	_	(De	iscribe as ogee a	nd weld, bar, etc. #	bar give dimensions,	, # bolts, describe or skel Drop Charp	Veight	ft-16
Design	pressure	1250	ps	i at	575	¢	mp of	0
ems 9 an	d 10 to be comp	leted for tube	sections					
	Floatin	g. Material	( Kind & Sp	ec.No.) Dia	( Subject to pressu	ure) Thickness	in. At	tachment
/Tubes:	Material	·	0.D	in. Thic	kness	inches or gage i	Number	Туре
								[Str.orU)
tems 11 -	14 incl. to be		inner chamb	bers of jacke	ted vessels,	or channels of	heat exchanger	(Str. or U) TS.
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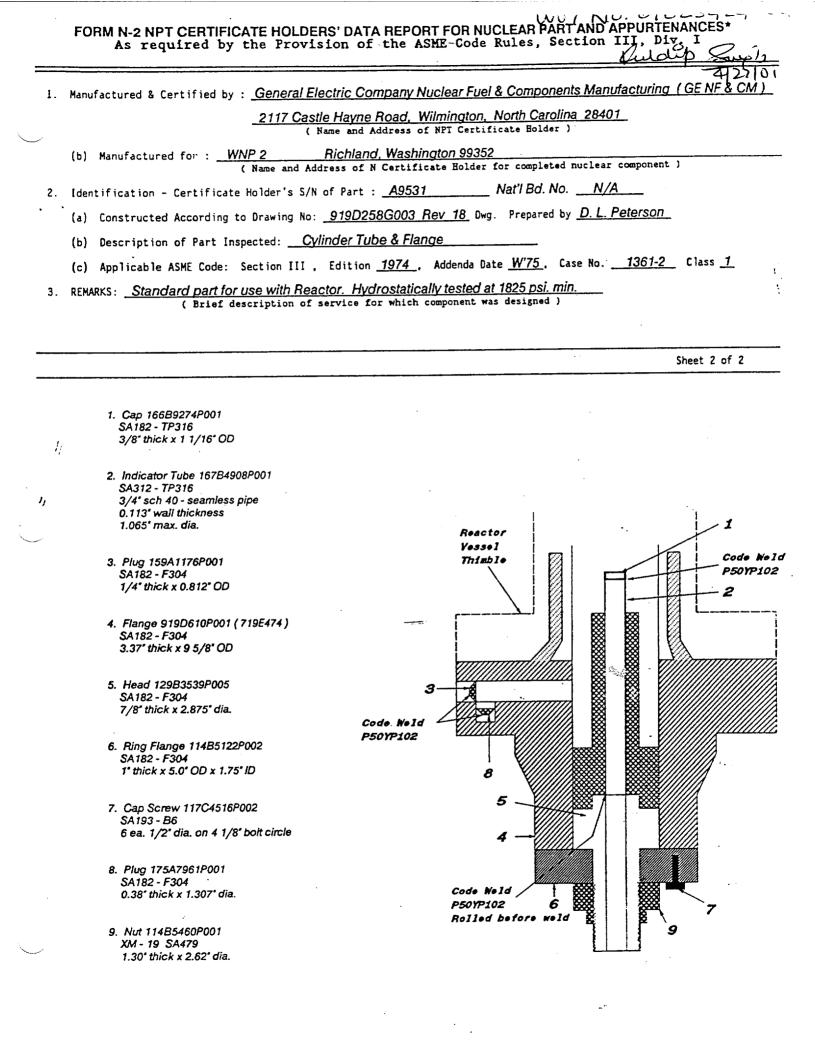
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1 - # Postweld Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.

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·	WOT NO. 0102 5424 04
FORM N-2 NPT CERTIFICATE HOLDERS'D	ATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
	Putchip Supp
1. Manufactured & Certified by : General Electric (	طا27) کار 2 Company Nuclear Fuel & Components Manufacturing (GE NF & CM
	e Road, Wilmington, North Carolina 28401
( Name and	Address of NPT Certificate Holder )
(b) Manufactured for : <u>WNP 2 Richlan</u>	nd, Washington 99352 N Certificate Holder for completed nuclear component )
2. Identification - Certificate Holder's S/N of Part	•
	228G012 Rev 36 Dwg. Prepared by <u>D. L. Peterson</u>
(b) Description of Part Inspected: <u>Piston Tub</u>	
	n <u>1974</u> , Addenda Date <u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u>
3. REMARKS: <u>Standard part for use with Reactor.</u> H	
( Brief description of service	for which component was designed )
•	
	۸ 
	Sheet 1 of 2
Report are not the responsibility of the NPT Certing is responsible for furnishing a separate Design Sp the component Design Specification and Stress Repo Date: <u>12/22/92</u> Signed <u>GE-NE</u>	Code Section III. ( The applicable Designed Specification and Stress ficate Holder for parts. An NPT Certification Holder for appurtenance ecification and Stress Report if the appurtenance is not included in rt ). <u>BG-NF &amp; CM-QA</u> ertificate Holder ) By SC & Representive )
	Certification of Authorization No. : <u>NPTN - 1151</u>
Certification o	f Design for Appurtenance
Design information on file at <u>GE Compan</u>	
Stress analysis report on file atGE Compar	
DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haabe</u>	
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yo</u>	<u>shio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>
Certificat:	ion of Shop Inspection
I, the undersigned, holding a valid commission by State or Province of <u>North Carolina</u> and employ inspected the part of a pressure vessel described	
	the National Board of Boiler and Pressure Inspectors and/or the ed by <u>Department of Labor</u> of <u>State of North Carolina</u> have in this Partial Data Report on

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

12/22,1992	Juome P Evens	NC 1231, Ohio, WC 3686 PA
Date	(/ Inspector's Signature	National Board, State, Province And No.

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

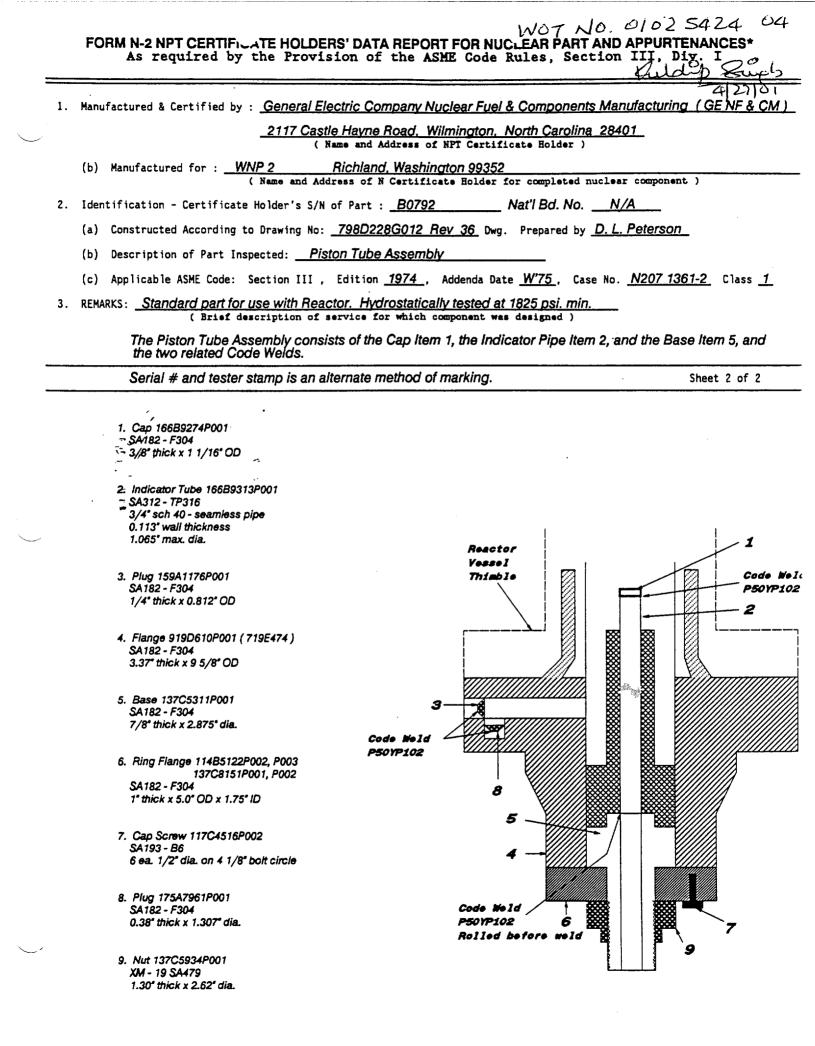
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1 - If Postweid Heat-Tree

2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 ( back )



WOT No 01025424 05



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

#### 1. Owner: Energy Northwest

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

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

3. (a) Work Performed By: Energy Northwest

- (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
- (c) Type Code Symbol Stamp: Not Applicable
- (d) Certificate Of Authorization No.: Not Applicable
- (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	A9552	N/A	N/A	1994		Yes, Code Class 1
CT&F	General Electric	A9552	N/A	N/A	1994	Replacement	Yes, Code Class 1
Piston Tube	General Electric	B0758	N/A	N/A	1992	Replacement	Yes, Code Class

7. Description Of Work Performed: Assembled Control Rod Drive (CRD) assembly Serial No A9552. The Control Rod Drive (CRD) assembly Serial No A9552 was assembled from all new parts in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

1) Installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9552.

2) Installed new Piston Tube assembly Serial No B0758.

3) Installed new Ring Flange Serial No A5420.

4) Performed VT-1 visual examination on six (6) new Ring Flange Cap Screws Heat Code No AT, Heat No 531057. VT-1 visual

examination results acceptable. VT-1 visual examination Report No 4-01-2-1.

5) Installed six (6) new VT-1 visually examined Ring Flange Cap Screws Heat Code No AT, Heat No 531057.

6) Performed VT-1 visual examination on new Piston Tube Nut Serial No 6146. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-005.

7) Installed new VT-1 visually examined Piston Tube Nut Serial No 6146.

8) Assembled parts and materials for Control Rod Drive (CRD) assembly Serial No A9552.

### NOTES -

1) Cylinder Tube And Flange (CT&F) assembly Serial No A9552 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9552.

2) Piston Tube assembly Serial No B0758 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No B0758.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9552.

Date: 04/27/01 Sheet: 1 Of 1 Unit: Not Applicable

NOR THINEST         FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)         Test Seconducted: Hydrostatic Play Pressure: Pag         Test Temperature: ° F         Temperature: ° F         Component Design Pressure: Pag         Temperature: ° F         Temperature: ° F         Component Design Pressure: Pag         Temperature: ° F         Temperature: ° F         Component Design Pressure: Pag         Temperature: ° F         Component Design Pressure: Pag         CERTIFICATE OF COMPLIANCE         We cortly that the statements made In this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Expiration Date: Not Applicable         Prepared By       Lucle Singh - Program Lead Enginbeer (PLE)         <	WOT No 01025424	)5
rests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other X       Nome         Test Pressure: Paig       Test Temperature: ° F         Component Design Pressure: Paig       Temperature: ° F         Remarks: See attached N-2 Code Data Reports for the following:       Test Temperature: ° F         Splinder Tube And Flange (CT&F) assembly Serial No ASS52.       Test Temperature: ° F         Remarks: See attached N-2 Code Data Reports for the following:       Nominal Operative: ° F         Vinder Tube And Flange (CT&F) assembly Serial No ASS52.       Test Temperature: ° F         Remarks: See attached N-2 Code Data Reports for the following:       Nominal Operative: Section XI.         Type Code Symbol Stamp: Not Applicable       Expiration Not. Not Applicable         Certificate Of Authorization Not. Not Applicable       Signed By       Mudup Singh- Program Lead Engineer (PLE)         Date       4 21 (0 1       Date       4 22 (0 1         CERTIFICATE OF INSERVICE INSPECTION         I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure         Values Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of and state to the best of my knowledge and belief, the Owner As period uning the and state to the best of my knowledge and belief, the Owner As period in this Owner's Report in accordance with the requirements of the ASE Code, Section XI.         By signing this certificate neith	<b>EMERGY</b> NORTHWEST	
Test Pressure: Paig       Test Temperature: ° F         Component Design Pressure: Paig       Temperature: ° F         Remarks: See attached N-2 Code Data Reports for the following:       Yinder Tube And Flange (CT&F) assembly Serial No A9552.         Iston Tube assembly Serial No B0758.       CERTIFICATE OF COMPLIANCE         CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable       Signed By       Mudup & & & & & & & & & & & & & & & & & & &	FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)	
Vinder Tube And Fiange (CT&F) assembly Serial No A9552. iston Tube assembly Serial No B0758.	Test Pressure: Psig Test Temperature: ° F	e
CERTIFICATE OF COMPLIANCE         We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI.         Type Code Symbol Stamp: Not Applicable         Expiration Date: Not Applicable         Prepared By       Standy Build         Kuldip Singh - Program Lead Engineer (PLE)         Date       4 21 0 1         CERTIFICATE OF INSERVICE INSPECTION         Kuldip singh - Program Lead Engineer (PLE)         Date       4 21 0 1         Date         CERTIFICATE OF INSERVICE INSPECTION         Kuldip singh - Program Lead Engineer (PLE)         Date         Mathematical State of Washington and employed by Factory Mutual Insurance Company of Normal Astate of Washington and employed by Factory Mutual Insurance Company of Normal State of Washington and employed by Factory Mutual Insurance Company of Normal State of Washington and employed by Factory Mutual Insurance Company of Normal State of Machines and taken corrective measures described in this Owner's Report for accordance with the requirements of the ASME Code, Section XI.         Date       10         Mathematican entities the Inspector nor his employer shall be liable in any manner for any personal ninury or property damage or a loss of any kind arising from or connected with this inspection.	emarks: See attached N-2 Code Data Reports for the following:	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp: Not Applicable Certificate Of Authorization No.: Not Applicable Expiration Date: Not Applicable Prepared By	inder Tube And Flange (CT&F) assembly Serial No A9552. ton Tube assembly Serial No B0758.	
We certify that the statements made in this Owner's Report are correct and this replacement conforms to the rules 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	CERTIFICATE OF COMPLIANCE	
Type Code Symbol Stamp: Not Applicable         Certificate Of Authorization No.: Not Applicable         Expiration Date: Not Applicable         Prepared By       Guild Stamp: Signed By         Kuldip Singh - Program Lead Engineer (PLE)         Date       4 27 0 1         Date       4 27 0 1         CERTIFICATE OF INSERVICE INSPECTION         It the undersigned, holding a valid commission issued by the National Board of Boiller and Pressure         Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of         Johnston, Rhode Island have inspected the components described in this Owner's Report during the         Deriod       1 2 1 1         and state to the best of my knowledge and belief, the         Dwner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal and injury or property damage or a loss of any kind arising from or connected with this inspection.         Multiduation       Commissions 10000 7000 7000 7000 7000 7000 7000 70	Ve certify that the statements made in this Owner's Report are correct and this replacement conforms	
Expiration Date: Not Applicable         Prepared By       July       Sugh       Signed By       July       Sugh         Kuldip Singh - Program Lead Engineer (PLE)       Nuldip Singh - Program Lead Engineer (PLE)       Nuldip Singh - Program Lead Engineer (PLE)         Date       42701       Date       42701         CERTIFICATE OF INSERVICE INSPECTION         Result of Mashington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period         Downer has performed examinations and taken corrective measures described in this Owner's Report and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in an accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer shall be liable in any manner for any personal mury or property damage or a loss of any kind arising from or connected with this inspection.         Min. Toucht       Commissions       MibW, TW, TW, TW, TW, TW, TW, TW, TW, TW, T	ype Code Symbol Stamp: Not Applicable	
Kuldip Singh - Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)         Date       42101         Date       42101         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         Components described in this Ow		
Kuldip Singh - Program Lead Engineer (PLE)       Kuldip Singh - Program Lead Engineer (PLE)         Date       4 21 01         Date       4 21 01         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         CERTIFICATE OF INSERVICE INSPECTION         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Program Lead Engineer (PLE)         Kuldip Singh - Progr	renered By Ruldin Single Stand By Mulain Rule M	
CERTIFICATE OF INSERVICE INSPECTION The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Wessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Wessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Wessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Wessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Wessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Wessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Wessel Inspector examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Min Tauton Commissions Min Time Time Time Time Time Time Time Time		
<i>I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure</i> <i>Vessel Inspectors and the State of</i> Washington <i>and employed by</i> Factory Mutual Insurance Company of Johnston, Rhode Island <i>have inspected the components described in this Owner's Report during the</i> <i>Deriod</i> <u>4/10/01</u> to <u>5/10/01</u> to <u>6/10/01</u> <i>and state to the best of my knowledge and belief, the</i> <i>Downer has performed examinations and taken corrective measures described in this Owner's Report</i> <i>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 <i>mplied, concerning the examinations and corrective measures described in this Owner's Report.</i> <i>Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal</i> <i>njury or property damage or a loss of any kind arising from or connected with this inspection.</i>	ate 4 27 01 Date 427 01	
<i>I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure</i> <i>Vessel Inspectors and the State of</i> Washington <i>and employed by</i> Factory Mutual Insurance Company of Johnston, Rhode Island <i>have inspected the components described in this Owner's Report during the</i> <i>Deriod</i> <u>4/10/01</u> to <u>5/10/01</u> to <u>6/10/01</u> <i>and state to the best of my knowledge and belief, the</i> <i>Downer has performed examinations and taken corrective measures described in this Owner's Report</i> <i>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 <i>mplied, concerning the examinations and corrective measures described in this Owner's Report.</i> <i>Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal</i> <i>njury or property damage or a loss of any kind arising from or connected with this inspection.</i>		
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Vessel Inspectors and the State of Washington and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>4/2020</u> to <u>5/2020</u> and state to the best of my knowledge and belief, the Dwner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal njury or property damage or a loss of any kind arising from or connected with this inspection. <u>1000</u> Commissions <u>74560</u> 7466 T.M.T.	CERTIFICATE OF INSERVICE INSPECTION	
Johnston, Rhode Island have inspected the components described in this Owner's Report during the period <u>1000000000000000000000000000000000000</u>	the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure	
Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.         By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal njury or property damage or a loss of any kind arising from or connected with this inspection.         Image: Image	phnston, Rhode Island have inspected the components described in this Owner's Report during the	
In accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or mplied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal njury or property damage or a loss of any kind arising from or connected with this inspection.		
Implied, concerning the examinations and corrective measures described in this Owner's Report.         Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal njury or property damage or a loss of any kind arising from or connected with this inspection.         Image: Commissions 14560/74186 Test TS	accordance with the requirements of the ASME Code, Section XI.	
Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal njury or property damage or a loss of any kind arising from or connected with this inspection.	y signing this certificate neither the inspector nor his employer makes any warranty, expressed or nplied, concerning the examinations and corrective measures described in this Owner's Report	
1. M. East Commissions 7486W/74186 TRUTS	urthermore, neither the Inspector nor his employer shall be liable in any manner for any personal	
1. 111. Emplos Commissions 7486W/74186 THUTS		
	1. 111. Eagl Commissions 7486W/74186 THUTS	
Inspector's Signature National Board, State, and Endorsements		
Date 5/5/11	ate <u>5/5/01</u>	

WOT NO 01025424 05 FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES As required by the Provision of the ASME Code Rules, Section III, Div. I 01 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 ) Richland, Washington 99352 ( Name and Address of N Certificate Holder for completed nuclear component ) (b) Manufactured for : WNF 2 Nat'l Bd. No. N/A (a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Dwg. Prepared by <u>D. L. Peterson</u> (b) Description of Part Inspected: \_\_\_\_\_\_ Cylinder Tube & Flange (c) Applicable ASME Code: Section III, Edition <u>1974</u>, Addenda Date <u>W75</u>, Case No. <u>1361-2</u> Class <u>1</u> 3. REMARKS: <u>Standard part for use with Reactor</u>. 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 ). Signed <u>GE - NEBG - NF & CM - QA</u> CA Representive ) Date: 03/15/94 ( NPT Certificate Holder ) 1, Certificate of Authorization Expires: 6/16/96 Certification of Authorization No. : NPTN-1151 Certification of Design for Appurtenance GE Company, San Jose, California Design information on file at \_\_\_\_ Stress analysis report on file at \_\_\_\_\_ GE Company, San Jose, California 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 I, the undersigned, holding a valid commission by the National Board of Boller and Plessure Angles and Plessure Angles have State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Carolina</u> have <u>2/17</u>. <u>194</u>. inspected the part of a pressure vessel described in this Partial Data Report on 2/17. 1794and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, accordance with the ASME Code Section III. 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. Jume P Erun NC 1231, Ohio, WC 3686 PA 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".

FORM N-2 ( back )

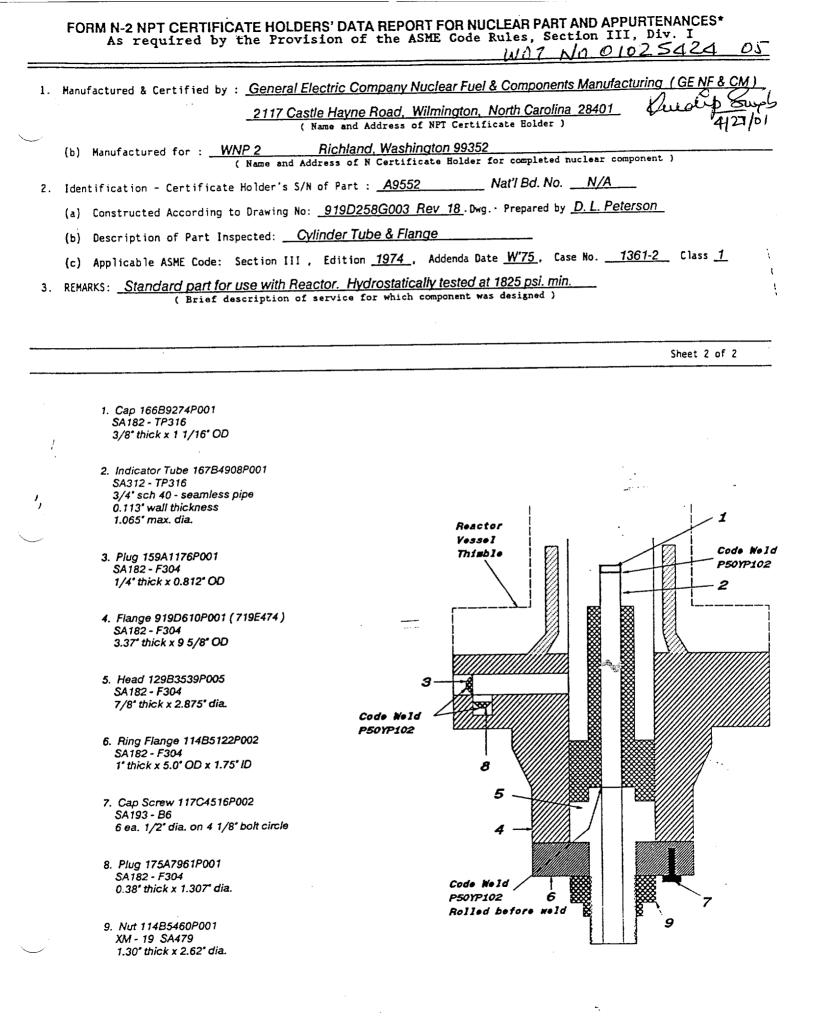
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• 78 -

Ite	ms 4-8 Incl. to be completed for sing	le wall vessels, jackets	vessels, or shells of heat	exchangers.
	Shell: Material T.S (Kind & Spec. No.) (Min. of Rang	Nominal Con Thickness in. Al	rosion	
5.	Sears: Long		R.T	EfficiencyX
	Girth	1 H.T.	R.T	No. of Courses
6.	Heads: (a) Material			T.S
(a)	Location (-Top Crown Bottom, Ends ) Thickness Radius	Knuckle Elliptical	Concial Hemispherical Apex Angle Radius	Flat Side to Press. Diameter ( conv. or conc. )
(b)	If removable, bolts used		Other fastening	
7.	Jacket Closure: (Materia	I, Spec. No., T.S. Size Number)	•	Describe or attach sketch )
	(D4	scribe as ogee and weld, bar, etc. If b	ar give dimensions, if bolts, describe or state Drop Charpy	ch) Weightft-lb
8.	Design pressure1250	psi at	<u> </u>	np of F
	ms 9 and 10 to be completed for tube		······································	
9.	Tube Sheets: Stationary. Material Floating. Material	Dia (Kind & Spec. No.) Dia	(Subject to pressure) , Thickness	in. Attachment(Welded, Bolled : in. Attachment
10.	/Tubes: Material			
Ite	ms 11 - 14 incl. to be completed for	inner chambers of jacke	ted vessels, or channels of l	heat exchangers.
<i>י,</i> 11.	Shell: Material T.S (Kind & Spec. No.) (Min. of Rang	_ Thickness in. Al	rrosion lowance in. Dia f	t in. Length ft '
12.	Seams: Long	и н.т	R.T	Efficiency X
	Girth	1 H.T.	R.T	No. of Courses
13.	Heads: (a) Material	T.S	(b) Material	T.S
(a)	Crown Location Thickness Radius Top,bottom,ends	Knuckle Elliptical	Concial Hemispherical Apex Angle Radius	Flat Side to Press.
(b)	Channel If removable, bolts used (a)	(b)(c)	Other fastening	
			Drop Charp	(Describe or attach sketch) We ightftb y Impactftb
14.	2 Design pressure	psi at	F at te	nap ofF
	ms below to be completed for all ves			
15.	Safety Valve Outlets: Number	Size	Locat	ion
16.	Nozz les : Purpose (Iniet, Outlet, Drain ) Number	Dia. or Size Type	Material Thickness	Reinforcement Malerial How Attached 
17.	Openings: Handholes, No.	Size Size Size	Location	
18.	Supports: Skirt Lugs	Legs		Attached

1 - If Postweid Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.



$C_{A}$	WOT NO. 01025424 05
FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NU	WOT NO. OT OZ DATE
As required by the Provision of the ASHE Code 1	Rules, Section III, Div. L
	Ruldip Such
	4/21/01
<ol> <li>Manufactured &amp; Certified by : <u>General Electric Company Nuclear Fuel</u></li> </ol>	& Components Manufacturing (GE NF & CM )
2117 Castle Hayne Road, Wilmington, I	North Carolina 28401
( Name and Address of NPT Certifi	
(b) Manufactured for : WNP 2 Richland, Washington 99352	
( Name and Address of N Certificate Holder f	or completed nuclear component )
. Identification - Certificate Holder's S/N of Part :	_ Nat'l Bd. No <u>N/A</u>
(a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg.	Prepared by D. L. Peterson
	······
(b) Description of Part Inspected: <u>Piston Tube Assembly</u>	·
(c) Applicable ASME Code: Section III , Edition <u>1974</u> , Addenda Dat	e <u>W75</u> , Case No. <u>N207 1361-2</u> Class <u>1</u>
. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at</u>	1825 psi. min.
( Brief description of service for which component was	
	Sheet 1 of 2
Date: <u>12/22/92</u> Signed <u>GE - NEBG - NF &amp; CM - QA</u> (NPT Certificate Holder)	By SC QA Representive )
Certificate of Authorization Expires: <u>6/16/93</u> Certification of Author	ization No. : <u>NPTN-1151</u>
Certification of Design for A	ppurtenance
Design information on file at <u>GE Company, San Jose, Californ</u>	
Stress analysis report on file at <u>GE Company, San Jose, Californ</u>	nia
DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State	
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State	<u>Calif.</u> Reg. No. <u>15570</u>
	e <u>Calif.</u> Reg. No. <u>M018646</u>
Certification of Shop In	e <u>Calif.</u> Reg. No. <u>M018646</u>
I, the undersigned, holding a valid commission by the National Board of State or Province of <u>North Carolina</u> and employed by <u>Department of L</u> inspected the part of a pressure vessel described in this Partial Data R and state that to the best of my knowledge and belief, the NPT Certifica accordance with the ASME Code Section III. By signing this certificate, neither the Inspector nor his employer mak	e <u>Calif.</u> Reg. No. <u>M018646</u> <b>spection</b> Boiler and Pressure Inspectors and/or the <u>abor</u> of <u>State of North Carolina</u> have teport on <u>12/16</u> , <u>1992</u> , the Holder has constructed this part in

12/22.1992	grome PEvere	NC 1231, Ohio, WC 3686 PA
Date	Inspector's Signature	National Board, State, Province And No.

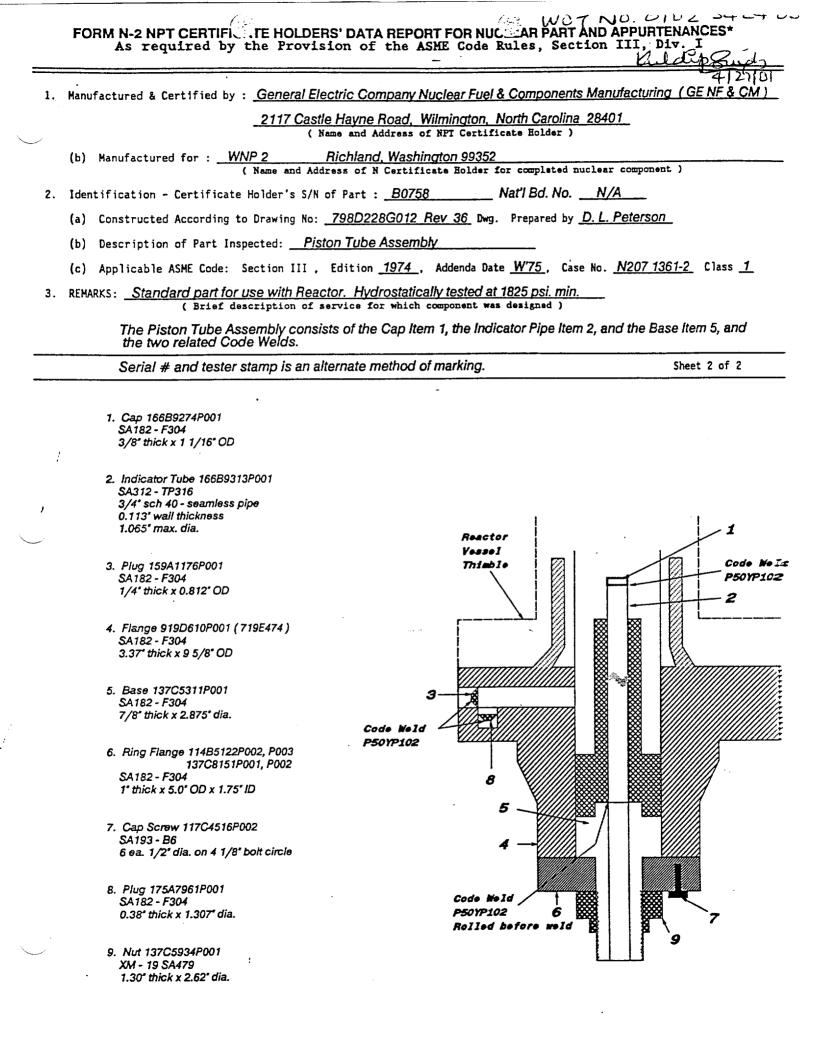
\*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS".

Ite	ms 4-8 I	Incl. to	be complete	d for sin	gle wall ve	essels, jacket	s vessels. or	shells of heat	exchangers.	
	•	Materia		.s	Nominal Thickness					ength ft
5.	Seams:	Long			н.т. <sup>1</sup>		R.T.		Efficier	ю
					1		•			Courses
6.	Heads:									5
		on ( Top		Crown		Elliptical		Hemispherical		Side to Press.
(a)	Bottom,	Ends )	Thickness	Radius	Radius		Apex Angle	Radius		( conv. or conc. )
(b)	If remo	vable, b	olts used				Other factor			
7.				(Materia	J, Spec. No., T.S.	Size Number)	Uther faster	ning(1	Describe or attach sk	etch)
	Uderet	ciusure.	<u></u>		escribe as ogee a	und weld, bar, etc. If I	bar give dimensions, i	r bolts, describe or sketc Drop & Charpy	leight	ft-1b
8.	Design	; pressure	2 	1250	ps	i at	575	• F at tem		
			e completed						r - ·	I
		eets: S	tationary.	Materia]	(Kind & So	MAC. NO. 1	1 Subject to preserve	(m)		achment
J.	Tubes:							Inches or gage. N		
			e*					_ mones or gage. It		type (Str. or U
lter	ns 11 - 1	14 incl.	to be comp	leted for	inner cham	bers of jacke	ted vessels, c	or channels of h	eat exchanger	s.
	Shell:	Materia (K	T. Ind & Spec. No. )	.S (Min. of Rang	Nominal _ Thickness e Specified)	Con in. A1	rrosion lowancei	n. Dia ft	in. Le	ngth ft
	Shell:	Materia (K Long	IT. ind & Spec. No. )	S. (Min. of Rang	Nominal _ Thickness e Specified)	Con in. A1	rrosion lowancei	n. Dia ft	in. Le	ngth ft
	Shell:	Materia (K Long	T. Ind & Spec. No. )	.S (Min. of Rang	Nominal _ Thickness = Specified) 1 H.T	Con in. A1	rrosion lowance i R.T	in. Dia ft	in. Le Efficien	ngth ft
	Shell: Seams:	Materia (K Long Girth	T.	S. (Min. of Rang	Nominal Thickness e Specified) H.T. H.T. H.T.	Co in. Al	rrosion lowancei R.T R.T	n. Dia ft	in. Le Efficien No. of C	ngth ft cy ourses
	Shell: Seams: Heads: Locat Top,boti	Materia (K Long Girth (a) Mate tion	T.	S. (Min. of Rang	Nominal Thickness e Specified) H.T. H.T. H.T.	Co in. Al	rrosion lowancei R.T R.T	n. Dia ft	in. Le Efficien No. of C T.S Flat	ngth ft cy ourses
	Shell: Seams: Heads: Locat Top,bott Channel	Materia (K Long Girth (a) Mate tion	T. Ind & Spec. No. ) Prial Thickness	S (Min. of Rang  Crown Radius	Nominal Thickness (* Specified) H.T. H.T. Knuckle Radius	in. Al T.S Elliptical	rrosion lowancei R.T R.T (b) Ma Concial Apex Angle	n. Dia ft terial Hemispherical	in. Le Efficien No. of C T.S Flat Diameter	ngth ft cy ourses  Side to Press. ( conv. or conc. )
(a) (b)	Shell: Seams: Heads: Locat Top.bott Channel If remov	Materia (K Long Girth (a) Mate tion tom, ends vable, bo	Thickness	S (Min. of Bang Crown Radius 	Nominal Thickness Pocified) H.T H.T H.T Knuck le Radius  (b)	in. Al	rrosion lowancei R.T (b) Ma Concial Apex Angle  Other	n. Dia ft terial Hemispherical Radius fastening Drop Wa Charpy	in. Le Efficien No. of C T.S Flat Diameter  (Describe	ngth ft cy ourses Side to Press. ( conv. or conc. ) or attach sketch)
a) b)	Shell: Seams: Heads: Locat Top,bott Channel If remov Design p	Materia (K Long Girth (a) Mate tion tom,ends vable, bc vable, bc	Thickness	S (Min. of Rang Crown Radius .)	Nominal Thickness Pocified) H.T H.T H.T Knuck le Radius  (b)	in. Al  T.S Elliptical Ratio  (c) psi at	rrosion lowancei R.T R.T (b) Ma Concial Apex Angle	n. Dia ft terial Hemispherical Radius fastening Drop Wa Charpy	in. Le Efficien No. of C T.S Flat Diameter  (Describe sight Impact	ngth ft cy ourses  Side to Press. ( conv. or conc. )
(a) (b)	Shell: Seams: Heads: Locat Top,bott Channel If remov Design p s below	Materia (K Long Girth (a) Mate tion tom,ends vable, bc pressure to be co	Thickness Thickness	S (Min. of Rang Crown Radius  )	Nominal Thickness e Specified) H.T H.T H.T Knuck le Radius  (b) tels where a	in. Al T.S Elliptical Ratio  (c) psi at applicable.	rrosion lowancei R.T (b) Ma Concial Apex Angle  Other	n. Dia ft terial Hemispherical Radius fastening Drop Wa Charpy	in. Le Efficien No. of C T.S Flat Diameter  (Describe sight Impact	ngth ft cy ourses  Side to Press. ( conv. or conc. ) cor attach sketch) ft-lb
(a) (b)	Shell: Seams: Heads: Locat Top,bott Channel If remov Design p s below	Materia (K Long Girth (a) Mate tion tom,ends vable, bc pressure to be co	Thickness	S (Min. of Rang Crown Radius  )	Nominal Thickness e Specified) H.T H.T H.T Knuck le Radius  (b) tels where a	in. Al	rrosion lowancei R.T (b) Ma Concial Apex Angle  Other	n. Dia ft terial Hemispherical Radius fastening Drop W Charpy F at tem	in. Le Efficien No. of C T.S Flat Diameter  (Describe eight Impact o of	ngth ft cy ourses  Side to Press. ( conv. or conc. ) corettech sketch) ft-lb
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(a) (b)	Shell: Seams: Heads: Locat Top.bott Channel If remov Design p s below Safety V Nozzles: Inspecti	Materia (K Long Girth (a) Mate tion tom, ends vable, bo vable, bo pressure to be co /alve Out : Purpose (I Outlet, Dra  ion Manh :: Hand	Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness Thickness	S (Min. of Rang Crown Radius  ) all vess er mber	Nominal Thickness Pescified) H.T. H.T. Knuckle Radius (b) (b) tels where a Dia. or Size	in. Al in. Al T.S Elliptical Ratio (c) psi at psi at applicable. Size Type  Size	rrosion lowance i R.T (b) Ma Concial Apex Angle Other Other	in. Dia ft terial Hemispherical Radius fastening fastening Fat tem Locatio Thickness cocation cocation	in. LeEfficienNo. of CT.S Flat Diameter eight Impact o of Reinforceme Maderial	ngth ft cy ourses Side to Press. ( conv. or conc. ) or attach sketch) ft-1b F

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2 - List other internal or external pressure with coincident temperature when applicable.



WOT No 01025424 06



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

# 1. Owner: Energy Northwest

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

- 2. Plant: Columbia Generating Station Address: Columbia Generating Station, North Power Plant Loop, Richland, Washington, 99352
- 3. (a) Work Performed By: Energy Northwest
  - (b) Repair Organization P.O. No, Job No, etc.: Energy Northwest
  - (c) Type Code Symbol Stamp: Not Applicable
  - (d) Certificate Of Authorization No.: Not Applicable
  - (e) Expiration Date: Not Applicable
- 4. Identification Of System: Control Rod Drive (CRD)
- 5. (a) Applicable Construction Code: ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda, Code Case: Notes
   (b) Applicable Edition Of ASME Section XI Utilized For Repairs Or Replacements: 1989 Edition with no Addenda, Code Case: None

6. Identification Of Components Repaired Or Replaced And Replacement Components

Name Of Component	Name Of Manufacturer	Manufacturer's Serial No	National Board No	Other I.D.	Year Built	Repaired, Replaced Or Replacement	ASME Code Stamped (Yes Or No) Code Class
CRD	General Electric	A9541	N/A	N/A	1994	***************	Yes, Code Class 1
CT&F	General Electric	A9541	N/A	N/A	1994	Replacement	Yes, Code Class 1
Piston Tube	General Electric	B0757	N/A	N/A	1992	Replacement	Yes, Code Class 1

7. Description Of Work Performed: Assembled Control Rod Drive (CRD) assembly Serial No A9541. The Control Rod Drive (CRD) assembly Serial No A9541 was assembled from all new parts in accordance with plant procedure PPM No 10.5.4 "Control Rod Drive Overhaul" as follows:

- 1) Installed new Cylinder Tube And Flange (CT&F) assembly Serial No A9541.
- 2) Installed new Piston Tube assembly Serial No B0757.
- 3) Installed new Ring Flange Serial No A5665.
- 4) Performed VT-1 visual examination on six (6) new Ring Flange Cap Screws Heat Code No NBD, Heat No 500564. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-006.
- 5) Installed six (6) new VT-1 visually examined Ring Flange Cap Screws Heat Code No NBD, Heat No 500564.

6) Performed VT-1 visual examination on new Piston Tube Nut Serial No 6169. VT-1 visual examination results acceptable. VT-1 visual examination Report No 2CRD-005.

- 7) Installed new VT-1 visually examined Piston Tube Nut Serial No 6169.
- 8) Assembled parts and materials for Control Rod Drive (CRD) assembly Serial No A9541.

#### NOTES -

1) Cylinder Tube And Flange (CT&F) assembly Serial No A9541 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Cylinder Tube And Flange (CT&F) assembly Serial No A9541.

2) Piston Tube assembly Serial No B0757 is certified to comply with ASME Section III, Code Class 1, 1974 Edition with Winter 1975 Addenda. ASME Section III Code Cases are as listed on the attached N-2 Code Data Report for the Piston Tube assembly Serial No B0757.

3) The entire Control Rod Drive (CRD) assembly is identified by the Cylinder Tube And Flange (CT&F) Serial No A9541.

Date: 04/27/01 Sheet: 1 Of 1 Unit: Not Applicable

	WOT No 01025424 06
	ENERGY
	NORTHWEST
FORM NIS-2 OV	VNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)
sts Conducted: Hydrostatic	c Pneumatic Nominal Operating Pressure Other X None
Test Pressul	
emarks: See attached N-2 Code I	Data Reports for the following:
inder Tube And Flange (CT&F) ass ton Tube assembly Serial No B075	
	CERTIFICATE OF COMPLIANCE
	ts made in this Owner's Report are correct and this replacement conforms
o the rules of the ASME Coo ype Code Symbol Stamp: N	
ertificate Of Authorization	No.: Not Applicable
<b>xpiration Date:</b> Not Applicable	
repared By Kuldin Singh - Pr	bgram Lead Engineer (PLE) Signed By 4 Euclo p Surp 17 Kuldip Singh - Program Lead Engineer (PLE)
Date 4121	
	,,,,,,, _
	CERTIFICATE OF INSERVICE INSPECTION
the undersianed. holdina ε	a valid commission issued by the National Board of Boiler and Pressure
essel inspectors and the S	tate of Washington and employed by Factory Mutual Insurance Company of
ohnston, Rhode Island have ii eriod	inspected the components described in this Owner's Report during the and state to the best of my knowledge and belief, the
•	inations and taken corrective measures described in this Owner's Report
	irements of the ASME Code, Section XI. either the Inspector nor his employer makes any warranty, expressed or
nplied, concerning the exa	minations and corrective measures described in this Owner's Report.
	spector nor his employer shall be liable in any manner for any personal or a loss of any kind arising from or connected with this inspection.
,, pp,	
11. M. Fall	Commissions 74564, 74186 NII
Inspector's Signature	
<i>.</i>	
Date 5/8/101	
Date <u>5/5/1</u>	

	W07 NO 0102 FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURT As required by the Provision of the ASME Code Rules, Section III, Di Culour	V. I
_ 1.	Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing	
	<u>2117 Castle Hayne Road, Wilmington, North Carolina 28401</u> (Name and Address of NPT Certificate Bolder)	
	(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> (Name and Address of N Certificate Bolder for completed nuclear component	)
2.	Identification - Certificate Holder's S/N of Part : <u>A9541</u> Nat'l Bd. No. <u>N/A</u>	
	(a) Constructed According to Drawing No: <u>919D258G003 Rev 18</u> Dwg. Prepared by <u>D.L.Peterson</u>	
	(b) Description of Part Inspected: <u>Cylinder Tube &amp; Flange</u>	
	(c) Applicable ASME Code: Section III, Edition <u>1974</u> , Addenda Date <u>W'75</u> , Case No. <u>1361-2</u>	Class <u>1</u>
3.	. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u> (Brief description of service for which component was designed)	
. <u> </u>		Sheet 1 of 2
	We certify that the statements in this report are correct and this vessel part or appurtenance as define conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specific. Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is the component Design Specification and Stress Report ). Date: <u>04/08/94</u> Signed <u>GE-NEBG-NF&amp;CM-QA</u> (NPT Certificate Holder) By SC of Representive	for appurtenances not included in
~	Certificate of Authorization Expires: $6/16/96$ Certification of Authorization No. : <u>NPTN - 1151</u>	-
Г	Certification of Design for Appurtenance	
	Design information on file at GE Company, San Jose, California	-
	Stress analysis report on file at GE Company, San Jose, California	-
	DC22A6253 Rev. 1 Design specification certified by <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>M01864</u>	<u>6_</u>
Γ	Certification of Shop Inspection	
	I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspector State or Province of <u>North Carolina</u> and employed by <u>Department of Labor</u> of <u>State of North Car</u> inspected the part of a pressure vessel described in this Partial Data Report on <u>3/2</u> and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed th	. 1994

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.

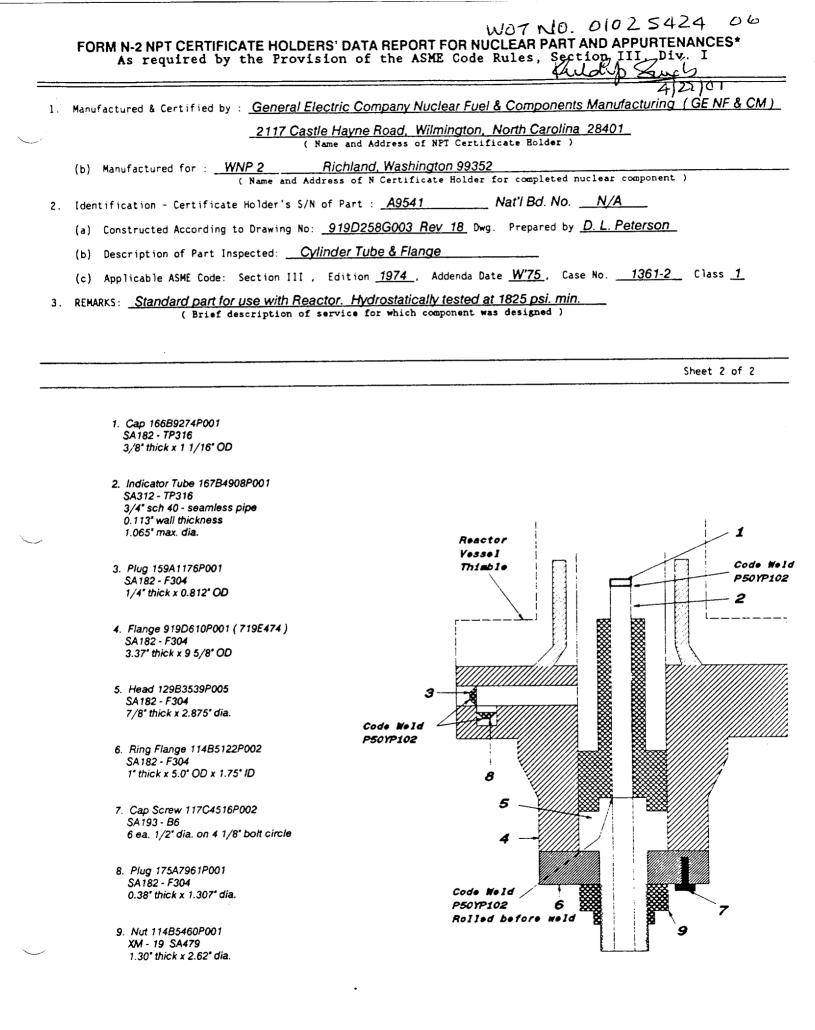
4/8 1994	Amore P Evera	NC 1231, Ohio, WC 3686 PA
Date	Inspector's Signature	National Board, State, Province And No.

\*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".

. <u></u>					F	ORM N-2	( back )	)		
lte	ms 4-8 1	incl. to b	e completed	I for sing	jie wall ve	ssels, jacket	s vessels, or	shells of heat	exchangers.	
4.	Shell:		T. nd & Spec. No. )				rrosion lowance	in. Dia f	<b>t.</b> in. L	ength ft in
5.	Seams:	Long			н.т		R.T.		Efficie	ncy
		Girth			1 Н.Т		R.T.		No. of	Courses
6.	Heads:	(a) Mate	rial			T.S				S
(2)			Thickness	Crown Radius		Elliptical Ratio		Hemispherical Radius		Side to Press. ( conv. or conc. )
(в) (b)			lts used				Other facto	ning		
7				(Material	, Spec. No., T.S.	Size Number)	other raste	n ing (	Describe or attach s	ketch )
,.	ULOROP	5,55 <b>u</b> .c.		( De:	scribe as ogee ai	nd weld, bar, etc. If t	bar give dimensions,	if bolts, describe or sket Drop Charp	leight	ft-1b
8.	Design	pressure		1250	ps	i at	575	F atter	mp of	°F
Ite	ms 9 and	i 10 to be	completed	for tube	sections					
		Fl	oating.	Material	( Kind & Sp	ec.No.) Dia	(Subject to pressu	Thickness	in. At	tachment
10.	Tubes :	Material			0.0.	in. Thic	kness	_ inches or gage.	lumber	Type (Str. or U)
Ite	ms 11 -	14 incl.	to be compl	eted for	inner cham	pers of jacke	ted vessels.	or channels of I	neat exchange	
11.	Shell:		T. nd & Spec. No. )			Co in. Al	rrosion lowance	in. Dia f	t in. L	ength ft in.
12.	Seams:	Long			н.т.		R.T.	••••••••••••••••••••••••••••••••••••••	Efficie	ncy
		Girth	,,,,,,				R.T.		No. of	Courses
13.	Heads:	(a) Mate	rial			T.S	(b) M	aterial	T.	S
	Top,bot	ition tom,ends	Thickness	Crown Radius	Knuck le Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. ( conv. or conc. )
(0)	Channel If remo		lts used (a	)	(b)	(c)	Othe	r fastening	····	
									leight	be or attach sketch )
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		pressure				osi at		Fat ter	np of	F
<u> </u>						applicable.				
	-		lets: Numb	er		Size		Locat	ion	
16.	Nozzles	Cutiet, Dra		mber	Dia. or Size	Туре	Material	Thickness	Reinforcen Material	How Attached
17.	Inspect Opening	s: Hand	oles, No. holes, No. aded, No.			Size Size Size		Location Location Location		
18.	Support	s: Skir	t{Yes or No )		(Number)			ther(Describe)	Attac	

1 - If Postweid Heat-Treated.

2 - List other internal or external pressure with coincident temperature when applicable.



FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* As required by the Provision of the ASME Code Rules, Section III, Div. I Wurding Sur 1
1. Manufactured & Certified by : <u>General Electric Company Nuclear Fuel &amp; Components Manufacturing (GENF &amp; CM)</u>
2117 Castle Hayne Road, Wilmington, North Carolina 28401 (Name and Address of NPT Certificate Holder)
(b) Manufactured for : <u>WNP 2</u> <u>Richland, Washington 99352</u> ( Name and Address of N Certificate Holder for completed nuclear component )
<ol> <li>Identification - Certificate Holder's S/N of Part : <u>B0757</u> Nat'l Bd. No. <u>N/A</u></li> </ol>
(a) Constructed According to Drawing No: <u>798D228G012 Rev 36</u> Dwg. Prepared by <u>D. L. Peterson</u>
(b) Description of Part Inspected: <u>Piston Tube Assembly</u>
<ul> <li>(c) Applicable ASME Code: Section III, Edition <u>1974</u>, Addenda Date <u>W75</u>, Case No. <u>N207 1361-2</u> Class <u>1</u></li> <li>3. REMARKS: <u>Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.</u></li> <li>(Brief description of service for which component was designed)</li> </ul>
Sheet 1 of 2
We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ). Date: <u>12/22/92</u> Signed <u>GE-NEBG-NF &amp; CM-QA</u> (NPT Certificate Holder ) By Sc AR Representive )
Certificate of Authorization Expires: <u>6/16/93</u> Certification of Authorization No. : <u>NPT N - 1151</u>
Certification of Design for Appurtenance
Design information on file at GE Company, San Jose, California
Stress analysis report on file at GE Company. San Jose. California
DC22A6253 Rev. 1 Design specification certified by <u>Bjorn Haaberg</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>15570</u>
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calii</u> Reg. No. M018646
DC22A6254 Rev 1 Stress analysis report certified by <u>Edward Yoshio</u> Prof. Eng. State <u>Calif.</u> Reg. No. <u>M018646</u>

 12/22,1992	Jerome PErren	NC 1231, Ohio, WC 3686 PA	•
 Date	Inspector's Signature	National Board, State, Province And No.	

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

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								ength ft
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. Heads:	(a) Material	•	* <u>***************</u>	T.S	(b) H	laterial	T.	s
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b) If remo	ovable, bolts u	ised	<u></u>			ning		
. Jacket	Closure:			<b>a</b> t <b>b b b b b b b b b b</b>			Describe or attach s	ketch )
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WOT NO. 01025424 06 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 dih Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GENF & CM) 1. 2117 Castle Havne Road, Wilmington, North Carolina 28401 ( Name and Address of NPT Certificate Holder ) (b) Manufactured for : \_ WNP 2 Richland, Washington 99352 ( Name and Address of N Certificate Holder for completed nuclear component ) 2. Identification - Certificate Holder's S/N of Part : <u>B0757</u> Nat'l Bd. No. N/A (a) Constructed According to Drawing No: 798D228G012 Rev 36 Dwg. Prepared by D. L. Peterson (c) Applicable ASME Code: Section III, Edition <u>1974</u>, Addenda Date <u>W75</u>, Case No. <u>N207 1361-2</u> Class <u>1</u> 3. REMARKS: <u>Standard part for use with Reactor</u>. Hydrostatically tested at 1825 psi. min. ( Brief description of service for which component was designed ) The Piston Tube Assembly consists of the Cap Item 1, the Indicator Pipe Item 2, and the Base Item 5, and the two related Code Welds. Serial # and tester stamp is an alternate method of marking. Sheet 2 of 2 1. Cap 166B9274P001 SA182 - F304 3/8" thick x 1 1/16" OD 2. Indicator Tube 166B9313P001 4 SA312 - TP316 3/4" sch 40 - seamless pipe 0.113" wall thickness 1.065" max. dia. 1 Reactor Vosso I 3. Plug 159A1176P001 Thimble Code No IE SA182 - F304 PSOYP1C2 1/4" thick x 0.812" OD 2 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. Code Nold P50YP102 6. Ring Flange 114B5122P002, P003 137C8151P001, P002 SA182 - F304 8 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 Code NoId SA182 - F304 P50YP102 0.38" thick x 1.307" dia. 6 Rolled before weld 9. Nut 137C5934P001 XM - 19 SA479 1.30" thick x 2.62" dia.